

Transformational Leadership, Organizational Culture, Career Development, and Work Motivation as Determinants of Lecturer Performance in Private Universities

Zulfikar^{1*}, Tien Rafida², and Muhammad Fadhli³

¹⁻³ Islamic Management Education, Universitas Islam Negeri Sumatera Utara Medan, Indonesia

Abstract

This study examined the effects of transformational leadership, organizational culture, and career development on lecturer performance and tested work motivation as a mediating mechanism. A quantitative ex post facto survey design was applied to 227 lecturers drawn proportionally from a population of 526 lecturers at three private universities in Bireuen Regency, Aceh. Data were collected using five-point Likert questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with reflective-reflective higher-order constructs. The results show that transformational leadership significantly predicted work motivation ($\beta = 0.349$, $t = 6.306$, $p < 0.001$), followed by organizational culture ($\beta = 0.251$, $t = 4.082$, $p < 0.001$) and career development ($\beta = 0.239$, $t = 4.123$, $p < 0.001$). All three organizational factors also had significant direct effects on lecturer performance, while work motivation was the strongest direct predictor ($\beta = 0.318$, $t = 4.838$, $p < 0.001$). Work motivation partially mediated the effects of transformational leadership ($\beta = 0.111$), organizational culture ($\beta = 0.080$), and career development ($\beta = 0.076$). The model explained 42.9% of the variance in work motivation and 50.7% of the variance in lecturer performance. The findings imply that sustainable lecturer performance requires an integrated strategy combining inspirational leadership, supportive organizational culture, structured career development, and deliberate strengthening of work motivation.

ARTICLE HISTORY

Received : 21 May 2026

Revised : 27 August 2026

Accepted : 21 September 2026

KEYWORDS

Career Development; Lecturer Performance; Organizational Culture; Transformational Leadership; Work Motivation.

PUBLISHER'S NOTE

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY 4.0) license.



CORRESPONDING AUTHOR

*Zulfikar, Islamic Management Education, Universitas Islam Negeri Sumatera Utara Medan, Indonesia. Email: zulfikar0334243016@uinsu.ac.id

Introduction

Lecturer performance is a central institutional capability through which universities translate strategic objectives into teaching quality, research productivity, community engagement, and academic service. Contemporary higher education increasingly requires academic staff to operate across multiple and interconnected roles rather than perform teaching in isolation. Performance therefore encompasses the quality and timeliness of academic work, scholarly and professional contribution, collaboration, innovation, and sustained engagement with institutional goals. This broader conception is consistent with performance research showing that work outcomes are shaped by both individual capability and contextual conditions, while higher-education scholarship emphasizes the importance of leadership, institutional structures, and academic working conditions in sustaining faculty effectiveness (Campbell, 1990; Wang et al., 2011; Wu et al., 2024). In Indonesia, these pressures are particularly salient for private universities, which must maintain academic quality while responding to accreditation requirements, competition for students and faculty, research expectations, and resource constraints. Recent Indonesian evidence likewise indicates that leadership, organizational culture, motivation, and institutional performance mechanisms are closely

connected to lecturer and academic-staff performance (Atikah & Qomariah, 2020; Siahaan et al., 2020; Rosalina & Jusoh, 2024).

Transformational leadership provides one important organizational mechanism because it connects institutional direction with employees' meaning, autonomy, and willingness to pursue demanding goals. Transformational leaders mobilize followers through an attractive vision, inspirational motivation, intellectual stimulation, and individualized consideration, thereby encouraging followers to transcend narrowly defined self-interest and contribute to collective objectives. Meta-analytic evidence has consistently associated transformational leadership with follower performance across task, contextual, team, and organizational criteria, while recent higher-education studies show that transformational academic leadership is associated with faculty commitment, empowerment, positive working attitudes, and performance-related outcomes (Wang et al., 2011; Siangchokyoo et al., 2020; Huang et al., 2021; Khan et al., 2023). The mechanism is not merely hierarchical influence: leadership can provide psychological resources, clarify expectations, reduce uncertainty, and strengthen the perceived value of academic work. Consequently, transformational leadership may affect lecturer performance directly while also operating indirectly through motivational processes (Eliyana & Ma'arif, 2019; Eaton et al., 2024; Wu et al., 2024).

Organizational culture represents a second contextual mechanism because it establishes shared expectations about how members cooperate, communicate, solve problems, and pursue institutional objectives. A supportive culture can create psychological and social resources that facilitate commitment, collaboration, innovation, and disciplined performance, whereas inconsistent norms or weak institutional identification can undermine otherwise capable employees. Research on organizational culture and performance demonstrates that culture is not a peripheral organizational characteristic but an important contextual resource associated with individual and collective outcomes; meta-analytic evidence further suggests that different culture profiles have differential effects on individual and firm performance (Warrick, 2017; Büyükaslan & Aşıkoğlu, 2022; Wang & Li, 2023). In higher education, organizational culture is particularly consequential because academic work relies heavily on collegial relationships, professional autonomy, trust, and shared institutional purpose. Indonesian studies have similarly reported relationships between organizational culture, motivation, commitment, and lecturer performance (Atikah & Qomariah, 2020; Dirwan et al., 2024; Maha Putra & Nasution, 2024).

Career development constitutes a third organizational resource. For academic staff, career development extends beyond promotion and includes opportunities to build competencies, access training and further study, receive mentoring, participate in research and publication, and obtain transparent pathways toward academic advancement. Sustainable-career scholarship emphasizes that employability and career sustainability emerge from interactions among individual agency, organizational support, and opportunities for continuing development, while recent meta-analytic evidence shows that employer-sponsored career development is associated with employee performance through perceived organizational support and organizational attachment (De Vos et al., 2020; Akkermans et al., 2024; Ng et al., 2024). Empirical studies also show that career development and work motivation can contribute to employee performance, although the strength of these relationships varies by institutional context (Wau & Purwanto, 2021; Ariati et al., 2023; Hosen et al., 2024). For universities, the implication is that career systems should be understood as strategic

human-capital investments rather than administrative procedures alone (Marginson, 2019; Hall et al., 2018; Dachner et al., 2021).

Work motivation is theoretically important because organizational resources do not automatically become performance. Motivation concerns the direction, intensity, and persistence of effort, and contemporary evidence indicates that motivational states are meaningfully related to job performance. Self-determination perspectives emphasize the role of autonomy, competence, and relatedness, whereas job-demands–resources and psychological-capital perspectives explain how contextual resources and positive psychological states can sustain effort and engagement (Bakker & Demerouti, 2007; Luthans & Youssef-Morgan, 2017; Deci & Ryan, 2012). More recent longitudinal meta-analytic evidence strengthens the causal interpretation by showing that earlier work motivation predicts subsequent job performance even after prior performance is controlled (Wang et al., 2024). Meta-analytic work also indicates that ability and motivation make additive contributions to performance, reinforcing the importance of motivational conditions alongside competence (Van Iddekinge et al., 2018). In higher education, motivation can therefore be conceptualized as a psychological pathway through which leadership, culture, and career opportunities are translated into sustained academic performance.

Although the literature supports positive relationships among leadership, culture, career development, motivation, and performance, important gaps remain. First, existing studies often examine these determinants separately or in partial combinations, making it difficult to determine their relative contributions within a single lecturer-performance model. Second, higher-education studies frequently focus on public universities, large research universities, or single predictors, whereas evidence from regional private universities in Indonesia remains comparatively limited (Huang et al., 2021; Khan et al., 2023; Wu et al., 2024). Third, the mediating role of work motivation has not been sufficiently integrated with transformational leadership, organizational culture, and career development in a multidimensional model of lecturer performance. Fourth, prior applications of SEM do not always make explicit how multidimensional constructs are represented and validated, even though higher-order modeling can provide a more theoretically coherent representation of complex organizational constructs (Hair et al., 2019; Sarstedt et al., 2019; Henseler et al., 2015).

This study addresses these gaps by developing and testing an integrated model in which transformational leadership, organizational culture, and career development are positioned as organizational antecedents of lecturer performance and work motivation is specified as a mediating mechanism. The empirical setting comprises three private universities in Bireuen Regency, Aceh, providing evidence from a regional higher-education context that is less visible in the international literature. The methodological contribution lies in the use of PLS-SEM with reflective–reflective higher-order constructs to examine both structural relationships and the multidimensional nature of the focal variables. The study aims to determine whether transformational leadership, organizational culture, and career development significantly influence work motivation and lecturer performance; to establish whether work motivation significantly predicts lecturer performance; and to test whether work motivation partially mediates the relationships between each organizational antecedent and lecturer performance. The study consequently contributes a context-sensitive explanation of how institutional resources and psychological motivation jointly shape academic performance in private higher education.

Method

This study employed a quantitative, non-experimental ex post facto survey design because the variables were observed in their existing organizational setting without experimental manipulation. The study was conducted from January to March 2026 in three private universities in Bireuen Regency, Aceh, namely Universitas Almuslim, Universitas Islam Kebangsaan Indonesia, and Universitas Muhammadiyah Mahakarya Aceh. The target population comprised 526 lecturers holding NIDN and functional academic ranks, distributed across the three institutions as 297, 154, and 75 lecturers, respectively. Using the Taro Yamane/Slovin approach at a 5% error level, the required sample was 227 respondents. Proportional random sampling was then applied to preserve institutional representation, resulting in 128 respondents from Universitas Almuslim, 66 from Universitas Islam Kebangsaan Indonesia, and 33 from Universitas Muhammadiyah Mahakarya Aceh. This sampling procedure follows the original study design and preserves the reported population and sample composition.

Data were collected using a structured five-point Likert questionnaire developed from the conceptual dimensions of the five constructs. Lecturer performance was operationalized through education and teaching, research and scientific publication, community service, and supporting academic activities. Transformational leadership was represented by idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Organizational culture was represented by family orientation, mutual respect, caring, and discipline. Career development covered capability, opportunity, career planning, competency development, and promotion. Work motivation comprised risk-taking, responsibility, achievement drive, work orientation, and recognition. The instrument was constructed through a construct–dimension–indicator specification process, followed by pilot testing. Initial item validity was assessed using Pearson product–moment correlations, while internal consistency was assessed using Cronbach’s alpha. The measurement strategy is consistent with established PLS-SEM reporting principles, which emphasize explicit construct specification, measurement quality, and transparent reporting of reliability and validity evidence (Hair et al., 2019; Henseler et al., 2015; Sarstedt et al., 2019).

The structural model was estimated using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4. Because the focal variables were conceptualized as multidimensional constructs, the study used a reflective–reflective higher-order specification. The measurement model was evaluated through outer loadings, average variance extracted (AVE), composite reliability, Cronbach’s alpha, and the heterotrait–monotrait ratio (HTMT). The structural model was assessed through standardized path coefficients, explained variance (R^2), and nonparametric bootstrapping. Hypotheses were evaluated at the 5% significance level, with t-statistics greater than 1.96 and p-values below .05 treated as evidence of statistical significance. Direct effects were tested for the paths from transformational leadership, organizational culture, and career development to work motivation and lecturer performance, as well as from work motivation to lecturer performance. Indirect effects were estimated through bootstrapping to determine the mediating role of work motivation. The analytical logic follows current recommendations for PLS-SEM and higher-order construct assessment (Hair et al., 2019; Sarstedt et al., 2019; Shmueli et al., 2019).

Ethically, participation was voluntary and questionnaire responses were treated as research data rather than individual performance records. The analysis was conducted at the aggregate level, and the interpretation of relationships was restricted to the sampled institutional context. Because

the design is cross-sectional and ex post facto, the findings are interpreted as statistically supported associations and mediation relationships rather than definitive experimental causal effects. This qualification is important when translating the findings into institutional policy.

Result and Discussion

Descriptive profile and measurement quality

The descriptive results indicate that transformational leadership, organizational culture, career development, work motivation, and lecturer performance were generally perceived at high levels. The four transformational-leadership dimensions were closely balanced, with mean scores ranging from 4.162 to 4.165. Organizational culture was strongest in caring ($M = 4.095$), family orientation ($M = 4.086$), discipline ($M = 4.081$), and mutual respect ($M = 4.054$). Career development reached its highest dimension score on capability ($M = 4.084$), while work motivation was highest on risk-taking ($M = 4.206$). These descriptive patterns suggest that the sampled private universities already possessed relatively favorable organizational and motivational conditions, providing an important baseline for interpreting the structural relationships.

The measurement results reported in the original manuscript indicate acceptable construct quality. For work motivation, indicator loadings ranged from 0.728 to 0.850, with AVE values ranging from 0.584 to 0.713. For lecturer performance, loadings ranged from 0.618 to 0.854 and AVE values from 0.559 to 0.700. The KIN7 indicator, despite a loading of 0.618, was retained because the construct-level evidence remained within the reported acceptance criteria. Cronbach's alpha and composite reliability were reported as meeting the ≥ 0.70 criterion. These results support the use of the constructs in the subsequent structural analysis.

Direct structural relationships

The direct-effect model was evaluated using bootstrapped standardized path coefficients. A relationship was considered statistically supported when the t statistic exceeded 1.96 and the p value was below .05. Table 1 reports the magnitude, direction, and significance of the seven hypothesized direct paths.

Table 1. Direct structural relationships

Relationship	β	t	p	Decision
Transformational leadership $\rightarrow$ Work motivation	0.349	6.306	< .001	Supported
Organizational culture $\rightarrow$ Work motivation	0.251	4.082	< .001	Supported
Career development $\rightarrow$ Work motivation	0.239	4.123	< .001	Supported
Transformational leadership $\rightarrow$ Lecturer performance	0.232	3.671	< .001	Supported
Organizational culture $\rightarrow$ Lecturer performance	0.227	3.745	< .001	Supported
Career development $\rightarrow$ Lecturer performance	0.137	2.276	.023	Supported
Work motivation $\rightarrow$ Lecturer performance	0.318	4.838	< .001	Supported

As shown in Table 1, all seven direct hypotheses were supported. Transformational leadership had the strongest association with work motivation ($\beta = 0.349$, $t = 6.306$, $p < .001$), followed by organizational culture ($\beta = 0.251$, $t = 4.082$, $p < .001$) and career development ($\beta = 0.239$, $t = 4.123$, $p < .001$). For lecturer performance, work motivation produced the largest direct coefficient ($\beta = 0.318$, $t = 4.838$, $p < .001$). Transformational leadership ($\beta = 0.232$), organizational culture ($\beta = 0.227$), and career development ($\beta = 0.137$) also showed significant positive effects. The model explained 43.7% of the variance in work motivation ($R^2 = 0.437$; adjusted $R^2 = 0.429$) and 51.6% of

the variance in lecturer performance ($R^2 = 0.516$; adjusted $R^2 = 0.507$), indicating moderate explanatory power for both endogenous constructs.

Indirect structural relationships and mediation

The mediating role of work motivation was examined from the bootstrapped specific indirect effects. Mediation was established when the indirect coefficient was significant; its form was then determined by considering whether the corresponding direct path remained significant after work motivation was included in the model. The estimates are summarized in Table 2.

Table 2. Indirect effects and mediation results

Indirect relationship	Indirect β	t	p	Mediation
Transformational leadership → Work motivation → Lecturer performance	0.111	3.818	< .001	Partial
Organizational culture → Work motivation → Lecturer performance	0.080	2.923	.003	Partial
Career development → Work motivation → Lecturer performance	0.076	2.951	.003	Partial

Table 2 shows that work motivation significantly transmitted the effects of all three organizational antecedents to lecturer performance. The largest indirect effect originated from transformational leadership ($\beta = 0.111$, $t = 3.818$, $p < .001$), followed by organizational culture ($\beta = 0.080$, $t = 2.923$, $p = .003$) and career development ($\beta = 0.076$, $t = 2.951$, $p = .003$). Because each indirect effect and its corresponding direct effect were significant and pointed in the same positive direction, the results indicate complementary partial mediation. Thus, leadership, culture, and career development contribute to lecturer performance both independently and by strengthening lecturers' work motivation. Figure 1 subsequently integrates these significant paths and positions work motivation as the intervening construct between the three organizational antecedents and lecturer performance.

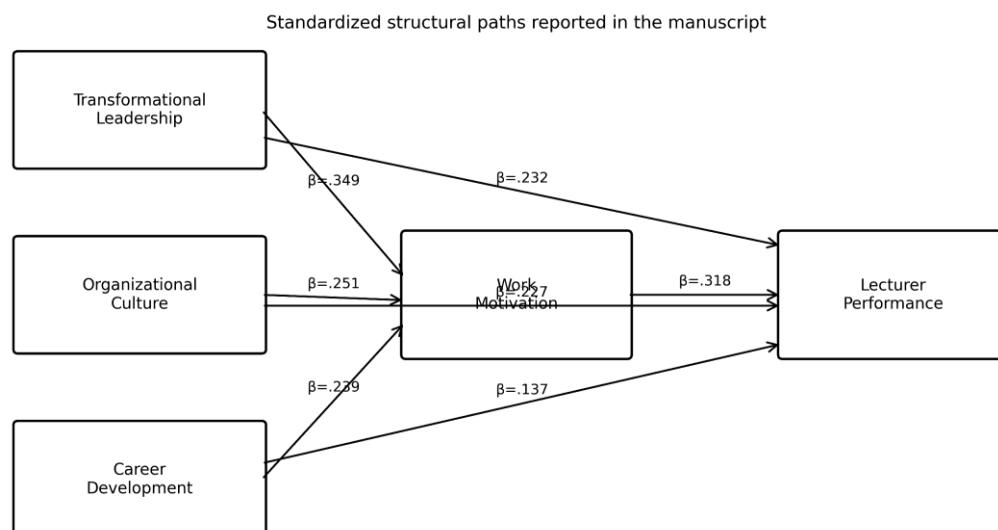


Figure 1. Standardized direct effects in the structural model

The visual pattern confirms that work motivation occupies a central position in the model. Its direct path to lecturer performance is stronger than any single direct organizational path, while transformational leadership is the strongest antecedent of motivation. At the same time, the retained

direct arrows from all three organizational factors to performance visually support the conclusion of partial, rather than full, mediation.

Discussion

The strongest pathway to work motivation was transformational leadership ($\beta = 0.349$). This finding is theoretically consistent with transformational leadership theory, which views leaders as agents who mobilize followers through vision, inspiration, intellectual stimulation, and individualized consideration. It also extends prior higher-education evidence showing that transformational academic leadership is associated with faculty empowerment, commitment, and positive work attitudes (Wang et al., 2011; Huang et al., 2021; Wu et al., 2024). The present result is particularly important because transformational leadership was not only associated with lecturer performance directly ($\beta = 0.232$) but also generated the strongest indirect effect through work motivation ($\beta = 0.111$). This suggests that leadership influence is partly psychological: academic leaders appear to strengthen performance by creating conditions in which lecturers are more willing to invest effort in institutional and professional goals. The finding also accords with evidence that transformational leadership can shape follower transformation and performance beyond simple supervisory control (Siangchokyoo et al., 2020; Eaton et al., 2024).

Organizational culture also significantly predicted work motivation ($\beta = 0.251$) and lecturer performance ($\beta = 0.227$), indicating that performance is embedded in a broader social environment rather than produced solely by individual capability. The descriptive results reinforce this interpretation because caring, family orientation, discipline, and mutual respect were among the strongest cultural dimensions. The pattern is consistent with research showing that shared norms and institutional values can support commitment, collaboration, and performance (Warrick, 2017; Büyükaslan & Aşıkoğlu, 2022; Zhang et al., 2023). It also corresponds with Indonesian evidence linking organizational culture with motivation and lecturer performance (Atikah & Qomariah, 2020; Dirwan et al., 2024; Maha Putra & Nasution, 2024). The partial mediation effect ($\beta = 0.080$) further indicates that culture operates both as a direct performance context and as a motivational resource. In practical terms, a collegial culture may reduce social friction, strengthen institutional identification, and make performance expectations more meaningful.

Career development produced the smallest direct effect on lecturer performance ($\beta = 0.137$), but it remained statistically significant and also significantly predicted work motivation ($\beta = 0.239$). This combination is theoretically meaningful rather than disappointing. Career development may first enhance perceived opportunity, competence, and organizational support before these resources become observable performance. The result is consistent with sustainable-career and employability perspectives, which emphasize the interaction between employee agency and organizational development opportunities (De Vos et al., 2020; Akkermans et al., 2024; Hall et al., 2018). It is also supported by meta-analytic evidence that employer-sponsored career development is related to job performance through organizational support and attachment (Ng et al., 2024). Indonesian studies likewise report positive relationships among career development, motivation, and performance (Wau & Purwanto, 2021; Ariati et al., 2023; Hosen et al., 2024). The relatively smaller coefficient in the present study therefore suggests that career programs should not be treated as promotion mechanisms alone; their performance value depends on whether development opportunities are converted into motivation and work behaviors.

Work motivation emerged as the strongest direct predictor of lecturer performance ($\beta = 0.318$), providing the clearest empirical signal in the model. This finding is consistent with motivational theories that conceptualize effort, persistence, and engagement as proximal mechanisms connecting work conditions with performance (Bakker & Demerouti, 2007; Luthans & Youssef-Morgan, 2017; Van Iddekinge et al., 2018). More recent cross-lagged meta-analytic evidence is particularly relevant because it indicates that work motivation is more likely to precede job performance than the reverse, strengthening the interpretation of motivation as an antecedent rather than merely a consequence of good performance (Wang et al., 2024). In the present study, recognition was the strongest motivational dimension, with recognition by leaders showing the highest indicator loading (0.850). This suggests that institutional acknowledgment may be especially salient for lecturers, whose work includes activities such as teaching, research, publication, service, and academic administration that are not always immediately visible or rewarded.

The mediation findings provide the central integrative contribution of the study. Transformational leadership, organizational culture, and career development each retained significant direct effects on lecturer performance while also operating through work motivation. This pattern indicates complementary rather than substitutive mechanisms: improving organizational conditions is necessary, but the conditions become more consequential when they stimulate lecturers' willingness to invest effort. The result aligns with lecturer-specific Indonesian studies showing that leadership, culture, and motivation are jointly associated with performance (Atikah & Qomariah, 2020; Siahaan et al., 2020; Suyitno, 2024), while also extending that literature by estimating all three organizational antecedents and motivation within one higher-order PLS-SEM framework. The finding therefore shifts the interpretation of lecturer performance from a simple "leadership causes performance" model toward an integrated organizational-psychological mechanism.

The study also contributes a methodological perspective through the reflective-reflective higher-order specification. Complex constructs such as transformational leadership and organizational culture contain multiple theoretically meaningful dimensions, and collapsing them into single first-order measures can obscure the structure through which they operate. Higher-order PLS-SEM provides a way to model an abstract construct while retaining its lower-order dimensions, provided that specification and validation are carried out transparently (Sarstedt et al., 2019). The use of HTMT, AVE, reliability estimates, path coefficients, R^2 , and bootstrapped indirect effects is consistent with recommended PLS-SEM reporting practices (Hair et al., 2019; Henseler et al., 2015; Shmueli et al., 2019). The novelty is therefore not merely the combination of variables, but the integration of multidimensional organizational antecedents with a motivational mechanism in the specific setting of private universities in Bireuen.

The practical implications are substantial for private-university governance. First, leaders should move beyond administrative supervision toward inspirational, developmental, and intellectually stimulating leadership practices. Second, organizational culture interventions should prioritize collegiality, mutual respect, caring, institutional identification, and disciplined academic routines because these conditions can simultaneously support motivation and performance. Third, career development should be connected to concrete academic opportunities such as training, further study, research support, publication mentoring, certification, and transparent academic promotion. Fourth, recognition systems should be designed to make lecturers' contributions visible

and valued. The combined evidence suggests that isolated interventions are less likely to maximize performance than a coordinated human-resource strategy that aligns leadership, culture, career development, and motivation.

The main novelty of this study is the identification of work motivation as an integrative psychological bridge between three organizational resources—transformational leadership, organizational culture, and career development and lecturer performance in regional private higher education. The model demonstrates that the strongest route is transformational leadership through work motivation, while career development, despite having the smallest direct coefficient, remains strategically important because it contributes to motivation and thereby performance. This provides a more differentiated explanation than studies that report only direct effects. The contribution is contextually significant because evidence from private universities in Aceh remains underrepresented in international higher-education management research.

Several limitations should be considered. The cross-sectional *ex post facto* design prevents strong causal claims, even though the structural and mediation estimates are statistically significant. The sample was restricted to 227 lecturers from three private universities in one regency, which limits generalizability to other Indonesian regions, public universities, and research-intensive institutions. The use of self-report questionnaires may also introduce common-method and social-desirability bias, particularly for constructs such as leadership, culture, motivation, and performance. In addition, the model explains 50.7% of adjusted variance in lecturer performance, leaving substantial variation attributable to other factors such as workload, psychological empowerment, research self-efficacy, job satisfaction, digital capability, organizational justice, compensation, and institutional resources. Future studies should therefore use longitudinal or multi-source designs, include objective performance indicators, compare public and private universities, and test whether the mediation mechanism remains stable across institutional types and academic disciplines.

Conclusion

This study demonstrates that transformational leadership, organizational culture, career development, and work motivation are significant components of lecturer performance in private universities in Bireuen Regency. Transformational leadership was the strongest predictor of work motivation ($\beta = 0.349$), whereas work motivation was the strongest direct predictor of lecturer performance ($\beta = 0.318$). Organizational culture and career development also significantly contributed to motivation and performance, although career development had the smallest direct effect on performance ($\beta = 0.137$). Importantly, work motivation partially mediated the effects of transformational leadership, organizational culture, and career development on lecturer performance, with indirect effects of $\beta = 0.111$, $\beta = 0.080$, and $\beta = 0.076$, respectively. The model explained 42.9% of adjusted variance in work motivation and 50.7% of adjusted variance in lecturer performance. Overall, the findings support an integrated organizational–psychological perspective in which leadership, culture, and career development create enabling conditions that become performance-enhancing when translated into strong work motivation. For private universities, sustainable lecturer performance therefore requires coordinated investment in inspirational leadership, supportive academic culture, transparent career development, and recognition-oriented motivational practices.

References

- Akkermans, J., Le Blanc, P., van der Heijden, B., & De Vos, A. (2024). Toward a contextualized perspective of employability development. *European Journal of Work and Organizational Psychology*, 33(1), 1–10. <https://doi.org/10.1080/1359432X.2023.2291763>
- Ariati, D., Hamid, N., & Kusumawati, A. (2023). Non-physical work environment, career development, and work motivation on employee performance. *Ilomata International Journal of Management*, 4(3), 356–367. <https://doi.org/10.52728/ijjm.v4i3.806>
- Atikah, K., & Qomariah, N. (2020). The effect of leadership style and organizational culture and work motivation on lecturer performance. *Jurnal Manajemen dan Bisnis Indonesia*, 6(2), 216–227. <https://doi.org/10.32528/jmbi.v6i2.4088>
- Bakker, A. B., & Demerouti, E. (2007). The job demands–resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Böyükaslan, A., & Aşıkoğlu, H. (2022). Does organizational culture impact on firm performance: Evidence from Turkey. *Istanbul Business Research*, 51(1), 149–174. <https://doi.org/10.26650/ibr.2022.51.861397>
- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 687–732). Consulting Psychologists Press.
- Dachner, A. M., Ellingson, J. E., Noe, R. A., & Saxton, B. M. (2021). The future of employee development. *Human Resource Management Review*, 31(2), Article 100732. <https://doi.org/10.1016/j.hrmr.2019.100732>
- De Vos, A., van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117, Article 103196. <https://doi.org/10.1016/j.jvb.2018.06.011>
- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 416–437). SAGE Publications. <https://doi.org/10.4135/9781446249215.n21>
- Dirwan, D., Rajindra, R., Farid, F., Mande, H., Nursiah, N., & Supriadi, A. (2024). The influence of organizational culture, organizational commitment, on motivation and job satisfaction of employees and lecturers at Muhammadiyah University of Palu. *International Journal of Health, Economics, and Social Sciences*, 6(3), 904–918. <https://doi.org/10.56338/ijhess.v6i3.5867>
- Eaton, L., Bridgman, T., & Cummings, S. (2024). Advancing the democratization of work: A new intellectual history of transformational leadership theory. *Leadership*, 20(3), 125–143. <https://doi.org/10.1177/17427150241232705>
- Eliyana, A., & Ma'arif, S. (2019). Job satisfaction and organizational commitment effect in the transformational leadership towards employee performance. *European Research on Management and Business Economics*, 25(3), 144–150. <https://doi.org/10.1016/j.iiedeen.2019.05.001>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hall, D. T., Yip, J., & Doiron, K. (2018). Protean careers at work: Self-direction and values orientation in psychological success. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 129–156. <https://doi.org/10.1146/annurev-orgpsych-032117-104631>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hosen, S., Hamzah, S. R., Ismail, I. A., Alias, S. N., Abd Aziz, M. F., & Rahman, M. M. (2024). Training & development, career development, and organizational commitment as the predictor of work performance. *Heliyon*, 10(1), Article e23903. <https://doi.org/10.1016/j.heliyon.2023.e23903>
- Huang, Y.-T., Liu, H., & Huang, L. (2021). How transformational and contingent reward leaderships influence university faculty's organizational commitment: The mediating effect of psychological empowerment. *Studies in Higher Education*, 46(11), 2473–2490. <https://doi.org/10.1080/03075079.2020.1723534>
- Khan, I. U., Idris, M., & Amin, R. U. (2023). Leadership style and performance in higher education: The role of organizational justice. *International Journal of Leadership in Education*, 26(6), 1111–1125. <https://doi.org/10.1080/13603124.2020.1854868>
- Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 339–366. <https://doi.org/10.1146/annurev-orgpsych-032516-113324>

- Maha Putra, D., & Nasution. (2024). The role of organizational culture on employee performance through job satisfaction and work motivation. *Journal of Entrepreneurship & Business*, 5(1), 55–68. <https://doi.org/10.24123/jeb.v5i1.6099>
- Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education*, 44(2), 287–301. <https://doi.org/10.1080/03075079.2017.1359823>
- Ng, T. W. H., Yim, F. H. K., Chen, H., & Zou, Y. (2024). Employer-sponsored career development practices and employee performance and turnover: A meta-analysis. *Journal of Management*, 50(2), 685–721. <https://doi.org/10.1177/01492063221125143>
- Rosalina, K., & Jusoh, R. (2024). Levers of control, counterproductive work behavior, and work performance: Evidence from Indonesian higher education institutions. *SAGE Open*, 14(3), Article 21582440241278455. <https://doi.org/10.1177/21582440241278455>
- Sarstedt, M., Hair, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197–211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322–2347. <https://doi.org/10.1108/EJM-02-2019-0189>
- Siahaan, A., Rafida, T., & Batubara, K. (2020). Influence of madrasah head leadership, motivation and madrasah culture on teacher performance in Madrasah Aliyah Model 2 Medan. *Budapest International Research and Critics Institute-Journal*, 3(3), 2174–2182. <https://doi.org/10.33258/birci.v3i3.1150>
- Siangchokyo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as the linchpin of transformational leadership theory: A systematic review and future research agenda. *The Leadership Quarterly*, 31(1), Article 101341. <https://doi.org/10.1016/j.leaqua.2019.101341>
- Suyitno. (2024). Lecturer's performance: The effect of leadership communication, organizational culture and achievement motivation by mediating variables. *Ilomata International Journal of Social Science*, 5(1), 33–59. <https://doi.org/10.52728/ijss.v5i1.1055>
- Van Iddekinge, C. H., Aguinis, H., Mackey, J. D., & DeOrtentiis, P. S. (2018). A meta-analysis of the interactive, additive, and relative effects of cognitive ability and motivation on performance. *Journal of Management*, 44(1), 249–279. <https://doi.org/10.1177/0149206317702220>
- Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2011). Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, 36(2), 223–270. <https://doi.org/10.1177/1059601111401017>
- Wang, H., & Li, J. (2023). The different effects of organizational culture on firm and individual performance: A meta-analysis. *Academy of Management Proceedings*, 2023(1), Article 14276. <https://doi.org/10.5465/AMPROC.2023.14276abstract>
- Wang, N., Luan, Y., & Ma, R. (2024). Detecting causal relationships between work motivation and job performance: A meta-analytic review of cross-lagged studies. *Humanities and Social Sciences Communications*, 11, Article 595. <https://doi.org/10.1057/s41599-024-03038-w>
- Warrick, D. D. (2017). What leaders need to know about organizational culture. *Business Horizons*, 60(3), 395–404. <https://doi.org/10.1016/j.bushor.2017.01.011>
- Wau, J., & Purwanto. (2021). The effect of career development, work motivation, and job satisfaction on employee performance. *Jurnal Aplikasi Bisnis dan Manajemen*, 7(2), 262. <https://doi.org/10.17358/jabm.7.2.262>
- Wu, J., Huang, Y., & Zhou, X. (2024). Leading to enhance university faculty members' positive working attitudes: The mediating roles of research self-efficacy and job stress. *Asia Pacific Journal of Education*, 44(2), 444–459. <https://doi.org/10.1080/02188791.2022.2113762>
- Zhang, W., Zeng, X., Liang, H., Xue, Y., & Cao, X. (2023). Understanding how organizational culture affects innovation performance: A management context perspective. *Sustainability*, 15(8), Article 6644. <https://doi.org/10.3390/su15086644>