

# The Influence of Organizational Culture, Principal Leadership, Digital Literacy, and Work Motivation on Teacher Integrity

Dinda Putri Rezeki<sup>1\*</sup>, Mesiono<sup>2</sup>, Khadijah<sup>3</sup>

Islamic Educational Management Department, Universitas Islam Negeri Sumatera Utara,  
Medan, Indonesia

Email: dinda0334243006@uinsu.ac.id<sup>1</sup>, mesiono@uinsu.ac.id<sup>2</sup>, khadijah@uinsu.ac.id<sup>3</sup>

DOI: <http://doi.org/10.33650/al-tanzim.v10i3.13793>

Received: 20 December 2025

Revised: 07 April 2026

Accepted: 02 June 2026

## Abstract:

Teacher integrity has become an essential foundation of educational professionalism in responding to ethical and technological challenges in the digital era. This study aimed to analyze the direct and indirect effects of organizational culture, principal leadership, digital literacy, and work motivation on teacher integrity. The study employed a quantitative survey approach involving 209 public senior high school teachers selected through multistage sampling. Data were collected using validated and reliable questionnaires and analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS). The findings revealed that organizational culture directly affected teacher integrity ( $\beta = 0.530$ ) and work motivation ( $\beta = 0.386$ ), while digital literacy directly influenced teacher integrity ( $\beta = 0.304$ ) and work motivation ( $\beta = 0.788$ ). Principal leadership significantly affected work motivation ( $\beta = 0.319$ ), and work motivation directly influenced teacher integrity ( $\beta = 0.795$ ). Furthermore, work motivation mediated the effects of organizational culture, principal leadership, and digital literacy on teacher integrity. This study contributes to the development of an integrated teacher integrity model and recommends strengthening ethical organizational culture, leadership quality, digital competence, and teacher motivation to improve educational professionalism.

**Keywords:** *Organizational Culture, Leadership, Digital Literacy, Work Motivation, Teacher Integrity*

## Abstrak:

Integritas guru menjadi fondasi penting profesionalisme pendidikan dalam menghadapi tantangan etika dan perkembangan teknologi di era digital. Penelitian ini bertujuan untuk menganalisis pengaruh langsung dan tidak langsung budaya organisasi, kepemimpinan kepala sekolah, literasi digital, dan motivasi kerja terhadap integritas guru. Penelitian menggunakan pendekatan kuantitatif dengan metode survei yang melibatkan 209 guru SMA Negeri yang dipilih melalui teknik multistage sampling. Data dikumpulkan menggunakan angket yang telah diuji validitas dan reliabilitasnya, kemudian dianalisis menggunakan Structural Equation Modeling-Partial Least Squares (SEM-PLS). Hasil penelitian menunjukkan bahwa budaya organisasi berpengaruh langsung terhadap integritas guru ( $\beta = 0,530$ ) dan motivasi kerja ( $\beta = 0,386$ ), sedangkan literasi digital berpengaruh langsung terhadap integritas guru ( $\beta = 0,304$ ) dan motivasi kerja ( $\beta = 0,788$ ). Kepemimpinan kepala sekolah berpengaruh signifikan terhadap motivasi kerja ( $\beta = 0,319$ ) dan motivasi kerja berpengaruh langsung terhadap integritas guru ( $\beta = 0,795$ ). Selain itu, motivasi kerja memediasi pengaruh budaya organisasi, kepemimpinan kepala sekolah, dan literasi digital terhadap integritas guru. Penelitian ini berkontribusi dalam pengembangan model integritas guru berbasis faktor organisasi, kepemimpinan, dan

teknologi, serta merekomendasikan penguatan budaya organisasi yang etis, kualitas kepemimpinan, kompetensi digital, dan motivasi kerja guru untuk meningkatkan profesionalisme pendidikan.

**Kunci:** *Budaya Organisasi, Kepemimpinan, Literasi Digital, Motivasi Kerja, Integritas Guru*

*Please cite this article in APA style as:*

Rezeki, D. P., Mesiono, & Khadijah. (2026). The Influence of Organizational Culture, Principal Leadership, Digital Literacy, and Work Motivation on Teacher Integrity. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 10(3), 919-934.

## INTRODUCTION

Education is widely recognized as a fundamental instrument for improving the quality of human resources and supporting national development. In modern educational systems, schools are not only responsible for transferring knowledge but also for developing students' character, ethics, and social responsibility (Burdina et al., 2022; Shofwani et al., 2025; Tobroni et al., 2024). Teachers, therefore, hold a central role in achieving educational goals because they function as educators, role models, and moral agents within the learning process. In the Indonesian educational context, teachers are expected to demonstrate professionalism, honesty, responsibility, and ethical behavior in carrying out their duties (Isa et al., 2024; Kerdnaimongkol, 2025; Nisa et al., 2024). Consequently, teacher integrity has become an essential component in strengthening educational quality and public trust in educational institutions.

In the era of globalization and Society 5.0, educational institutions face increasingly complex challenges due to the rapid development of digital technology, artificial intelligence, and online learning systems. Teachers are required not only to master pedagogical competencies but also to demonstrate ethical professionalism and responsible technology use in educational practices (Kotlyarova et al., 2022; Morgado et al., 2024; Romanova et al., 2022). These changes indicate that teacher integrity is no longer viewed solely as an individual moral characteristic, but also as a multidimensional construct influenced by organizational, leadership, motivational, and technological factors within schools.

Teacher integrity refers to the consistency between values, words, and professional actions in carrying out educational responsibilities honestly, fairly, and responsibly (Han et al., 2020; Lindfors et al., 2021). Teachers with strong integrity demonstrate discipline, objectivity in assessment, compliance with professional ethics, and consistency between moral values and professional behavior. According to Bukhori (2021) and Jacobson (2023) say that effective teaching is closely related to the integrity and identity of teachers because professional behavior emerges from moral awareness and personal responsibility. In addition, Lee et al. (2022), Ghashghaeizadeh (2020), and Fornaia et al. (2022) explains that integrity is strongly influenced by organizational systems, leadership, and ethical environments that shape individual behavior within institutions. Therefore, strengthening teacher integrity requires not only personal awareness but also institutional support through positive organizational culture, effective leadership, and ethical professional environments.

One important factor influencing teacher integrity is organizational culture. Organizational culture refers to shared values, norms, beliefs, and behavioral

patterns that guide interactions within educational institutions. Saleem (2021) and Gosselin et al. (2024) explain that organizational culture shapes how organizational members respond to problems and maintain collective values. In schools, positive organizational cultures characterized by collaboration, transparency, ethical commitment, and professionalism can encourage teachers to maintain responsible and ethical behavior. Conversely, weak organizational cultures may reduce professional commitment and weaken integrity among teachers (King et al., 2020; Palacios-Rodríguez et al., 2023).

Work motivation also plays an important role in strengthening teacher integrity. Motivation reflects internal and external drives that influence teachers' commitment, persistence, and responsibility in carrying out professional duties. According to Rais et al. (2022), Haxhihyseni et al. (2023), and Even et al. (2021) Work motivation determines the direction, intensity, and persistence of work behavior. Teachers with high intrinsic motivation tend to demonstrate greater responsibility, honesty, discipline, and professional dedication. Consequently, work motivation is assumed to function as an important mediating variable linking organizational culture, leadership, and digital literacy with teacher integrity strengthening (Héreginé et al., 2024; Mahmud et al., 2024).

Previous studies have generally examined organizational culture, leadership, or digital literacy separately in relation to teacher performance, professionalism, or organizational commitment. However, limited studies have integrated these variables simultaneously in explaining teacher integrity strengthening through the mediating role of work motivation, particularly within the context of public senior high schools in Indonesia. Most previous studies also focused more on teacher performance outcomes rather than integrity as a multidimensional construct involving ethical, professional, and digital responsibility dimensions. Therefore, this study offers novelty by integrating organizational culture, principal leadership, digital literacy, and work motivation into a comprehensive structural model to explain teacher integrity strengthening.

Based on the background above, this study aims to analyze the direct and indirect effects of organizational culture, principal leadership, digital literacy, and work motivation on teacher integrity strengthening. This study is expected to contribute theoretically to the development of educational management and organizational behavior theories related to teacher integrity. Practically, the findings are expected to provide recommendations for educational institutions and policymakers in developing strategies to strengthen teacher professionalism and integrity in the digital era.

This study proposes that organizational culture, principal leadership, and digital literacy influence teacher integrity, strengthening both directly and indirectly through work motivation as a mediating variable. Based on the theoretical framework and previous empirical studies, the following hypotheses were formulated:

- H1: Organizational Culture positively affects Teacher Integrity Strengthening.
- H2: Organizational Culture positively affects Work Motivation.
- H3: Principal Leadership positively affects Work Motivation.

- H4: Digital Literacy positively affects Teacher Integrity Strengthening.
- H5: Digital Literacy positively affects Work Motivation.
- H6: Work Motivation positively affects Teacher Integrity Strengthening.
- H7: Organizational Culture positively affects Teacher Integrity Strengthening through Work Motivation.
- H8: Principal Leadership positively affects Teacher Integrity Strengthening through Work Motivation.
- H9: Digital Literacy positively affects Teacher Integrity Strengthening through Work Motivation.

## RESEARCH METHODS

This study employed a quantitative approach using a correlational and confirmatory research design to examine the direct and indirect relationships among organizational culture, principal leadership, digital literacy, work motivation, and teacher integrity strengthening. A quantitative approach was considered appropriate because the study investigated latent variables that required numerical measurement and statistical testing to analyze causal relationships among constructs (Ghanad, 2023). In addition, this study applied Structural Equation Modeling-Partial Least Squares (SEM-PLS) to test the structural relationships and mediation effects proposed in the conceptual framework.

The research was conducted from January to February 2026 in public senior high schools in Langkat Regency, Indonesia. The population consisted of 855 teachers from 21 public senior high schools. Considering the large and geographically dispersed population, this study employed a multistage sampling technique. According to Cheng et al. (2024) and Ogbuanya et al. (2022) Multistage sampling is suitable for heterogeneous populations because sampling procedures are conducted in several stages to obtain representative samples efficiently.

In the first stage, purposive sampling was used to select schools based on several criteria, including regional representation, organizational culture variation, digital readiness, accessibility, and relevance to teacher integrity issues. Based on these criteria, three schools were selected, namely SMA Negeri 1 Stabat, SMA Negeri 1 Secanggang, and SMA Negeri 1 Wampu. In the second stage, census sampling was applied by involving all teachers from the selected schools as respondents. The final sample consisted of 209 teachers. This sample size met the recommended requirements for SEM-PLS analysis, which generally requires samples ranging from 100 to 300 respondents, depending on model complexity.

This study examined five variables, namely organizational culture ( $X_1$ ), principal leadership ( $X_2$ ), digital literacy ( $X_3$ ), work motivation ( $X_4$ ), and teacher integrity strengthening ( $Y$ ). Organizational culture, principal leadership, and digital literacy served as exogenous variables, while work motivation functioned as a mediating variable, and teacher integrity strengthening acted as the endogenous variable. The research model was developed based on organizational behavior theory proposed by Colquitt et al. (2010), supported by Palmer's theory of teacher integrity and Huberts' theory of public ethics.

Data were collected through observation, documentation, literature review, and questionnaires. The questionnaire used a five-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree.” The instrument items were developed based on theoretical indicators for each variable. Organizational culture was measured through indicators of shared values, organizational norms, communication, collaborative relationships, and ethical commitment. Principal leadership included moral example, inspirational motivation, intellectual stimulation, fairness, and performance facilitation. Digital literacy consisted of digital access, information evaluation, digital content production, technology use, digital ethics, and responsibility in technology utilization. Work motivation included goal clarity, persistence, intensity of effort, intrinsic motivation, responsibility, and self-development. Teacher integrity strengthening was measured through indicators of honesty, moral consistency, professional ethics compliance, responsibility, and ethical digital behavior.

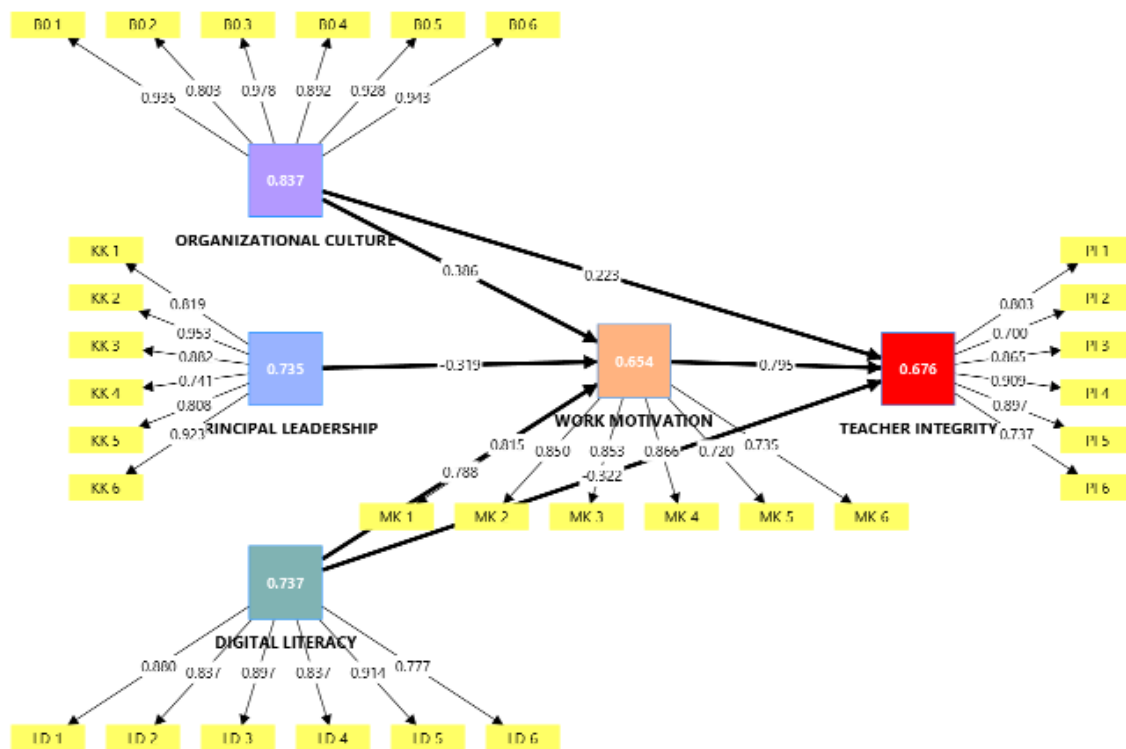
Before the main data collection, a pilot test involving 30 teachers with characteristics similar to the research population was conducted to evaluate the validity and reliability of the research instruments. Instrument validity was tested using Corrected Item–Total Correlation, while reliability was assessed using Cronbach’s Alpha. According to Dogan et al. (2023) an instrument is considered valid if the correlation coefficient exceeds 0.30 and reliable if Cronbach’s Alpha is greater than 0.70. The pilot test results confirmed that all instrument items met the validity and reliability criteria; therefore, the questionnaires were distributed to the main respondents.

The collected data were analyzed using SEM–PLS with the assistance of SmartPLS software. The analysis procedure consisted of descriptive statistical analysis, measurement model evaluation (outer model), and structural model evaluation (inner model). Convergent validity was assessed through outer loading values and Average Variance Extracted (AVE), with acceptable thresholds above 0.70 for loading factors and above 0.50 for AVE. Discriminant validity was evaluated using the Fornell–Larcker Criterion and Heterotrait–Monotrait Ratio (HTMT). Reliability was examined through Composite Reliability and Cronbach’s Alpha coefficients. Furthermore, the structural model was tested using bootstrapping with 5,000 subsamples to analyze direct effects, indirect effects, and mediation effects among variables. Hypotheses were considered statistically significant when the t-statistic exceeded 1.96, and the p-value was below 0.05.

## RESULTS AND DISCUSSION

### Results

This study employed Structural Equation Modeling–Partial Least Squares (SEM–PLS) to analyze the relationships among Organizational Culture, Principal Leadership, Digital Literacy, Work Motivation, and Teacher Integrity Strengthening. The analysis was conducted to evaluate the validity and reliability of the measurement model as well as to examine the direct and indirect effects among latent variables. A total of 30 indicators representing five research variables were included in the model analysis.



**Figure 1. Structural Model Result**

The evaluation of the outer model showed that all indicator loading values exceeded the minimum threshold of 0.70, indicating that all indicators were valid in measuring their respective latent constructs. In addition, all Average Variance Extracted (AVE) values were above 0.50, confirming adequate convergent validity for all variables.

**Table 1. Research Effects**

Variables	Work Motivation	Teacher Integrity Strengthening
Organizational Culture	0.386	0.530
Principal Leadership	0.319	0.253
Digital Literacy	0.788	0.304
Work Motivation	-	0.795

Based on Table 1. Organizational Culture positively affected Work Motivation with a path coefficient value of 0.386 and positively influenced Teacher Integrity Strengthening with a coefficient value of 0.530. Principal Leadership positively affected Work Motivation with a coefficient value of 0.319 and Teacher Integrity Strengthening with a coefficient value of 0.253.

Furthermore, Digital Literacy positively influenced Work Motivation with a coefficient value of 0.788 and Teacher Integrity Strengthening with a coefficient value of 0.304. Work Motivation also positively affected Teacher Integrity Strengthening with a coefficient value of 0.795. These findings indicate that all exogenous variables had positive direct effects on the endogenous variables.

### Indirect Effect Analysis

The mediation analysis aimed to examine the indirect effects of Organizational Culture, Principal Leadership, and Digital Literacy on Teacher Integrity Strengthening through Work Motivation. This analysis was conducted to determine whether Work Motivation functioned as a significant mediating variable in strengthening teacher integrity. The findings provided additional evidence regarding the importance of motivational factors in supporting organizational and educational practices.

The results demonstrated that Principal Leadership positively influenced Teacher Integrity Strengthening through Work Motivation, with a path coefficient of 0.123 and a p-value of 0.030. Digital Literacy also positively affected Teacher Integrity Strengthening through Work Motivation, with a coefficient of 0.131 and a p-value of 0.021. These findings confirmed the significant indirect effects of both variables on strengthening teacher integrity.

Meanwhile, Organizational Culture positively influenced Teacher Integrity Strengthening through Work Motivation, with a coefficient value of 0.128 and a p-value of 0.020. Overall, the findings indicated that Work Motivation significantly mediated the relationships between Organizational Culture, Principal Leadership, Digital Literacy, and Teacher Integrity Strengthening. This demonstrated the essential role of motivation in supporting integrity development among teachers within educational institutions.

**Table 2. Coefficient of Determination (R-Square)**

Variables	R-square	R-square Adjusted
Work Motivation	0.711	0.707
Teacher Integrity Strengthening	0.515	0.508

Based on Table 2, the R-square value for Work Motivation was 0.711, indicating that Organizational Culture, Principal Leadership, and Digital Literacy collectively explained 71.1% of the variance in Work Motivation. Furthermore, the R-square value for Teacher Integrity Strengthening was 0.515, indicating that Organizational Culture, Principal Leadership, Digital Literacy, and Work Motivation jointly explained 51.5% of the variance in Teacher Integrity Strengthening.

**Table 3. Model Fit Evaluation**

Criteria	Saturated Model	Estimated Model
SRMR	0.103	0.103
d_uls	4.957	4.953
d_g	6.532	6.536
Chi-square	4378.639	4383.984
NFI	0.571	0.570

The model fit evaluation demonstrated that the structural model achieved an acceptable level of fit. The Standardized Root Mean Square Residual (SRMR) value of 0.103 indicated that the model was adequately fitted to the observed data. In addition, the overall outer loading values exceeded 0.70, confirming that the indicators appropriately represented their respective constructs.

**Table 4. Outer Loading Values**

Indicators	Organizational Culture	Principal Leadership	Digital Literacy	Work Motivation	Teacher Integrity Strengthening
BO1	0.935				
BO2	0.803				
BO3	0.978				
BO4	0.892				
BO5	0.928				
BO6	0.943				
KK1		0.819			
KK2		0.953			
KK3		0.882			
KK4		0.741			
KK5		0.808			
KK6		0.923			
LD1			0.880		
LD2			0.837		
LD3			0.897		
LD4			0.837		
LD5			0.914		
LD6			0.777		
MK1				0.815	
MK2				0.850	
MK3				0.853	
MK4				0.866	
MK5				0.720	
MK6				0.735	
PI1					0.803
PI2					0.700
PI3					0.865
PI4					0.909
PI5					0.897
PI6					0.737

The results presented in Table 4 indicate that all indicators obtained outer loading values above the recommended threshold of 0.70. The Organizational Culture indicators ranged from 0.803 to 0.978, Principal Leadership indicators ranged from 0.741 to 0.953, and Digital Literacy indicators ranged from 0.777 to 0.914. These findings confirmed that all indicators were valid in measuring their respective latent constructs effectively.

Furthermore, the Work Motivation indicators showed loading values ranging from 0.720 to 0.866, while Teacher Integrity Strengthening indicators ranged from 0.700 to 0.909. Since all indicator values exceeded the acceptable criterion, the measurement model demonstrated satisfactory convergent validity and reliability. Therefore, all indicators were considered appropriate and reliable for representing the latent variables within the structural equation model analysis conducted in this study.

**Table 5. Dominant Indicators of Organizational Culture**

No	Indicators	Code	Estimation Value
1	Harmonious and collaborative working relationships	BO3	0.978
2	School commitment to ethics and integrity	BO6	0.943

3	Shared school values and beliefs	BO1	0.935
4	Conducive and supportive work climate	BO5	0.928
5	Open and effective internal communication	BO4	0.892
6	Shared work norms and regulations	BO2	0.803

The findings presented in Table 5 indicate that harmonious and collaborative working relationships (BO3) emerged as the most dominant indicator in reflecting Organizational Culture, with the highest loading value of 0.978. This was followed by school commitment to ethics and integrity (BO6) with a loading value of 0.943, and shared school values and beliefs (BO1) with 0.935. These results demonstrate the strong contribution of interpersonal relationships and ethical commitment in shaping organizational culture within schools.

**Table 6. Dominant Indicators of Principal Leadership**

No	Indicators	Code	Estimation Value
1	Inspiration and motivation provided by the principal	KK2	0.953
2	Ability to direct and facilitate teacher performance	KK6	0.923
3	Intellectual stimulation	KK3	0.882
4	Moral and ethical role modeling	KK1	0.819
5	Fairness and objectivity in decision-making	KK5	0.808
6	Individualized consideration toward teachers	KK4	0.741

The results presented in Table 6 indicate that the principal's (KK2) inspiration and motivation was the most dominant indicator of Principal Leadership, with the highest loading value of 0.953. This finding demonstrates that the principal's ability to inspire and motivate teachers played a central role in strengthening leadership effectiveness within educational institutions. In addition, the ability to direct and facilitate teacher performance (KK6) and intellectual stimulation (KK3) also showed high loading values of 0.923 and 0.882, while the remaining indicators remained above the acceptable threshold, confirming that all indicators significantly contributed to the Principal Leadership construct.

**Table 7. Dominant Indicators of Digital Literacy**

No	Indicators	Code	Estimation Value
1	Digital ethics	LD5	0.914
2	Digital content production	LD3	0.897
3	Access to digital information	LD1	0.880
4	Use of digital devices and applications	LD4	0.837
5	Evaluation and validation of digital information	LD2	0.837
6	Responsibility in technology use	LD6	0.777

The findings presented in Table 7 show that digital ethics (LD5) became the most dominant indicator in reflecting Digital Literacy, with the highest loading value of 0.914. This result indicates that ethical awareness in using digital technology played an essential role in shaping teachers' digital literacy. In addition, digital content production and access to digital information also showed strong contributions to the Digital Literacy construct.

**Table 8. Dominant Indicators of Work Motivation**

No	Indicators	Code	Estimation Value
1	Intrinsic motivation	MK4	0.866
2	Persistence	MK3	0.853
3	Intensity of effort	MK2	0.850
4	Clarity of work goals	MK1	0.815
5	Self-development investment	MK6	0.735
6	Responsibility and commitment in completing tasks	MK5	0.720

The results presented in Table 8 indicate that intrinsic motivation (MK4) became the most dominant indicator in reflecting Work Motivation, with the highest loading value of 0.866. This finding shows that internal encouragement and personal satisfaction strongly influenced teachers' work motivation. In addition, persistence and intensity of effort also demonstrated high loading values, confirming their important contributions to the Work Motivation construct.

**Table 9. Dominant Indicators of Teacher Integrity Strengthening**

No	Indicators	Code	Estimation Value
1	Compliance with the professional code of ethics	PI4	0.909
2	Responsibility for teaching duties	PI5	0.897
3	Consistency between words and actions	PI3	0.865
4	Honesty in carrying out professional duties	PI1	0.803
5	Avoiding digital ethical misconduct	PI6	0.737
6	Clarity of moral values in teachers' actions	PI2	0.700

Based on Table 9, compliance with the professional code of ethics (PI4) emerged as the most dominant indicator in strengthening Teacher Integrity, with the highest loading value of 0.909. This finding indicates that adherence to ethical standards played a crucial role in reinforcing teacher integrity. In addition, responsibility toward teaching duties and consistency between words and actions also showed strong contributions to the Teacher Integrity construct.

Overall, all variables achieved Average Variance Extracted (AVE) values above the recommended threshold of 0.50 and loading factor values above 0.70. These findings indicate that all indicators demonstrated satisfactory convergent validity and reliability in measuring their respective latent variables. Therefore, the measurement model was considered statistically acceptable and appropriate for supporting further structural model analysis in this study.

## Discussion

The findings of this study demonstrated that Organizational Culture, Principal Leadership, Digital Literacy, and Work Motivation significantly contributed to strengthening Teacher Integrity in public senior high schools in Langkat Regency. Among all variables, Work Motivation emerged as the strongest predictor of Teacher Integrity Strengthening, indicating that teachers with stronger intrinsic drive, persistence, and professional commitment tended to demonstrate higher levels of ethical behavior and professional responsibility. In addition, Organizational Culture and Digital Literacy also showed substantial direct effects on teacher integrity, while all exogenous variables simultaneously

influenced Work Motivation (Kraiwanit et al., 2024; Veglianti et al., 2024). These findings indicate that teacher integrity is shaped not only by individual internal factors but also by organizational climate, leadership quality, and teachers' digital competencies.

The high R-square values further confirmed that the structural model possessed strong explanatory power in explaining variations in Work Motivation and Teacher Integrity Strengthening. The positive influence of Organizational Culture on both Work Motivation and Teacher Integrity Strengthening supports organizational behavior theory, which emphasizes that shared values, ethical norms, and collaborative environments strongly affect employee behavior and professional commitment (Ouyang et al., 2022; Widodo et al., 2024). The dominant indicator of Organizational Culture was harmonious and collaborative working relationships, indicating that positive interpersonal interactions within schools played an essential role in fostering ethical behavior among teachers.

Those findings are consistent with the views of Schein and Robbins and Judge, who argue that organizational culture functions as a behavioral control system that shapes responsibility, professionalism, and commitment within organizations. The findings also align with previous empirical studies reporting that supportive organizational cultures improve teacher discipline, ethical awareness, and organizational commitment (Fawaid et al., 2025; Yakubu et al., 2025; Zamroni et al., 2025). In the educational context, schools with strong ethical cultures encourage teachers to internalize institutional values such as honesty, accountability, and professionalism, thereby strengthening integrity in carrying out educational responsibilities.

The findings also revealed that Principal Leadership significantly affected both Work Motivation and Teacher Integrity Strengthening. The most dominant leadership indicator was the principal's ability to inspire and motivate teachers, demonstrating that leadership effectiveness is strongly associated with motivational and interpersonal dimensions rather than merely administrative functions. This finding supports leadership theories proposed by Alluhaybi et al. (2023), and Yasir et al. (2023), which emphasizes that effective leaders create positive work environments through inspiration, support, and professional recognition. Principals who communicate clear visions, facilitate teacher performance, and provide moral role modeling tend to encourage stronger professional commitment among teachers.

Furthermore, Digital Literacy showed a substantial effect on both Work Motivation and Teacher Integrity Strengthening, with Digital Literacy demonstrating the strongest effect on Work Motivation among all exogenous variables. This finding indicates that teachers with strong digital competencies tend to feel more confident, adaptive, and productive in carrying out educational activities. The dominant role of digital ethics also demonstrates that digital literacy is not merely technical competence but includes ethical awareness and responsible technology use. These findings support previous studies stating that digital competence contributes significantly to teacher professionalism, adaptability, and ethical behavior in modern educational environments.

Another important finding of this study was the significant mediating role of work motivation in the relationships between organizational culture, principal leadership, digital literacy, and teacher integrity strengthening (Achruh et al., 2024; Nurbayan et al., 2025; Tonich, 2021). The mediation analysis confirmed that organizational and technological factors strengthened teacher integrity indirectly through increased work motivation. This finding supports the self-determination theory proposed by Hartnell et al. (2023) and Puzzo et al. (2024), which explains that supportive environments enhance intrinsic motivation and eventually influence ethical behavior and professional responsibility. Teachers who work in supportive organizational environments, receive motivational leadership, and possess adequate digital competencies tend to demonstrate stronger enthusiasm, persistence, and commitment in carrying out their professional duties. As a result, motivated teachers are more likely to maintain ethical standards, discipline, and consistency between professional values and actions. The mediation findings also indicate that integrity strengthening cannot rely solely on structural or technological improvements but must involve psychological reinforcement through sustained work motivation.

The findings of this study provide several important theoretical and practical implications. Theoretically, this study contributes to the development of educational management and organizational behavior literature by confirming the integrated relationships among organizational culture, leadership, digital literacy, motivation, and teacher integrity within a single SEM-PLS model. This study also extends previous research by demonstrating the strategic role of Work Motivation as a mediating variable linking organizational and technological factors to teacher integrity.

Practically, the findings imply that schools should adopt holistic strategies to strengthen teacher integrity through organizational culture development, leadership improvement, digital literacy enhancement, and motivational support programs. Schools should encourage collaborative work climates, strengthen ethical communication, improve principals' transformational leadership competencies, and provide continuous digital literacy training emphasizing ethical technology use. In addition, educational institutions should create policies that support teacher motivation through professional development opportunities, recognition systems, and supportive working environments. Through integrated efforts involving organizational, leadership, technological, and motivational dimensions, schools can more effectively strengthen teacher integrity and improve overall educational quality.

## CONCLUSION

The findings of this study demonstrated that Organizational Culture ( $\beta = 0.530$ ), Digital Literacy ( $\beta = 0.304$ ), and Work Motivation ( $\beta = 0.795$ ) significantly strengthened Teacher Integrity among public senior high school teachers in Langkat Regency. Work Motivation emerged as the strongest predictor of Teacher Integrity, while Organizational Culture, Principal Leadership, and Digital Literacy also significantly influenced integrity indirectly through Work Motivation. The study contributes to educational management literature by developing an

integrated SEM-PLS model that explains the relationships among organizational, leadership, technological, and motivational factors in strengthening teacher integrity. However, this study was limited to public senior high schools in one regency and relied on self-reported questionnaire data. Therefore, future studies are recommended to involve broader educational contexts, larger samples, and mixed-method approaches to obtain more comprehensive findings.

## ACKNOWLEDGMENT

The author gratefully acknowledges Universitas Islam Negeri Sumatera Utara Medan for its academic support, guidance, and scholarly environment, which have contributed significantly to the author's intellectual and professional development. The knowledge, experiences, and academic values gained from this institution have played an important role in the successful completion of this research.

## REFERENCES

- Achruh, Rapi, M., Rusdi, M., & Idris, R. (2024). Challenges and Opportunities of Artificial Intelligence Adoption in Islamic Education in Indonesian Higher Education Institutions. *International Journal of Learning, Teaching and Educational Research*, 23(11), 423–443. <https://doi.org/10.26803/ijlter.23.11.22>
- Alluhaybi, A., Wilson, A., Usher, K., & Durkin, J. (2023). Impact of Nurse Manager Leadership Styles on Work Engagement: A Systematic Literature Review. In *Journal of Nursing Management* (Vol. 2023). <https://doi.org/10.1155/2023/5090276>
- Bukhori, A. (2021). Role of Youth in Managing Educational Startup: Case Study of PrivatQ Startup. *Research Horizon*, 1(2), 62–70. <https://doi.org/10.54518/rh.1.2.2021.62-70>
- Burdina, E. V., & Alexandrov, S. V. (2022). Modern Trends in Further Professional Education of Judges: Russian and Foreign Experience. *Integration of Education*, 26(4), 771–786. <https://doi.org/10.15507/1991-9468.109.026.202204.771-786>
- Cheng, L., Fang, G., Zhang, X., Lv, Y., & Liu, L. (2024). Impact of Social Media Use on Critical Thinking Ability of University Students. *Library Hi Tech*, 42(2), 642–669. <https://doi.org/10.1108/LHT-11-2021-0393>
- Dogan, B., & Yıldız, B. (2023). The Correlation between Leadership Styles and Organizational Cynicism: Which Leadership Style is Best for Schools? *International Journal of Education and Literacy Studies*, 11(4), 343–352. <https://doi.org/10.7575/aiac.ijels.v.11n.4p.343>
- Even, U., & BenDavid-Hadar, I. (2021). Teachers' Perceptions of Their School Principal's Leadership Style and Improvement in Their Students' Performance in Specialized Schools for Students with Conduct Disorders. *Management in Education*. <https://doi.org/10.1177/08920206211054654>

- Fawaid, A., Baharun, H., Hamzah, M., Rohimah, Munawwaroh, I., & Putri, D. F. (2025). AI-based Career Management to Improve the Quality of Decision Making in Higher Education. *2025 15th IEEE Integrated STEM Education Conference, ISEC 2025*, 1–8. <https://doi.org/10.1109/ISEC64801.2025.11147274>
- Fornaia, A., Marotta, G., Pappalardo, G., & Tramontana, E. (2022). A Decentralized Solution for Epidemiological Surveillance in Campus Scenarios. *IEEE Access*, *10*, 103806–103818. <https://doi.org/10.1109/ACCESS.2022.3208167>
- Ghanad, A. (2023). An Overview of Quantitative Research Methods. *International Journal of Multidisciplinary Research and Analysis*, *06*(08), 3794–3803. <https://doi.org/10.47191/ijmra/v6-i8-52>
- Ghashghaeizadeh, N. (2020). Designing and Development Model for Improving the Quality of Work Life of Faculty Members. *Iran Occupational Health*, *17*(1).
- Gosselin, A., Abbasi, S., & Richards, A. (2024). Shell's Strategic Competence Development: Ensuring Capability and Capacity Building Across the Global Operational Safety Skill Pool. In the *Society of Petroleum Engineers - SPE International Health, Safety, Environment and Sustainability Conference and Exhibition, HSE 2024*. <https://doi.org/10.2118/220340-ms>
- Han, L., & Yan, H. (2020). The Imbalance of Mobile Phone Literacy and Regulatory Behavior among Different Contexts. *Journal of Library Science in China*, *46*(5), 74–93. <https://doi.org/10.13530/j.cnki.jlis.2020041>
- Hartnell, C. A., Christensen-Salem, A., Walumbwa, F. O., Stotler, D. J., Chiang, F. F. T., & Birtch, T. A. (2023). Manufacturing Motivation in the Mundane: Servant Leadership's Influence on Employees' Intrinsic Motivation and Performance. *Journal of Business Ethics*, *188*(3), 533–552. <https://doi.org/10.1007/s10551-023-05330-2>
- Haxhihyseni, S., Tirana, J., & de Carvalho, E. N. (2023). Impact of Principals' Leadership Styles on Teachers' Job Satisfaction and Motivation in Elementary Schools. *Journal of Educational and Social Research*, *13*(4), 188–195. <https://doi.org/10.36941/jesr-2023-0101>
- Héreginé Nagy, M., Lénárd, S., Horváth, L., & Rapos, N. (2024). The Organisational Context of Middle Management Role Behaviour in Hungarian Schools. *School Leadership and Management*, *44*(4), 389–412. <https://doi.org/10.1080/13632434.2024.2318435>
- Isa, M., Neliwati, & Hadijaya, Y. (2024). Quality Improvement Management in Teacher Professional Development. *Munaddhomah*, *5*(2), 136–147. <https://doi.org/10.31538/munaddhomah.v5i2.782>
- Jacobson, W. (2023). Sharing Power and Privilege Through the Scholarly Practice of Assessment. In *Designing Transformative Multicultural Initiatives: Theoretical Foundations, Practical Applications, and Facilitator Considerations* (pp. 89–102). <https://doi.org/10.4324/9781003444138-9>
- Kerdnaimongkol, U. (2025). Characteristics of Guidance Teachers in the 21st Century. *Suranaree Journal of Social Science*, *19*(1). <https://doi.org/10.55766/sjss251791>
- King, D. K., Ritzwoller, D. P., & Bender, B. G. (2020). Planning for Implementation Success Using RE-AIM and CFIR Frameworks: A Qualitative Study. *Frontiers in Public Health*, *8*. <https://doi.org/10.3389/fpubh.2020.00059>

- Kotlyarova, O. A., Povalyaeva, O. N., & Turko, U. I. (2022). Digital Competence of Teachers in the Context of Modern Challenges and Risks. *Teoriya i Praktika Fizicheskoy Kultury*, 2022(12), 55–57.
- Kraiwanit, T., & Terdpaopong, K. (2024). Digital Transformation Model: The Study of the Governmental Agency in a Developing Country. *Journal of Governance and Regulation*, 13(1 Special Issue), 458–470. <https://doi.org/10.22495/jgrv13i1siart18>
- LEE, J., & CHO, H. (2022). Determinants and Effects of Using an Ethical Management System in Korean Logistics Companies. *Asian Journal of Shipping and Logistics*, 38(1), 1–9. <https://doi.org/10.1016/j.ajsl.2021.11.005>
- Lindfors, M., Pettersson, F., & Olofsson, A. D. (2021). Conditions for Professional Digital Competence: The Teacher Educators' View. *Education Inquiry*, 12(4), 390–409. <https://doi.org/10.1080/20004508.2021.1890936>
- Mahmud, M. E., & Malik, L. R. (2024). Phenomenological Study on Enhancing Education Quality of Madrasa: Effective Strategies from School Principals' Perspectives. *Perspektivy Nauki i Obrazovania*, 69(3), 685–697. <https://doi.org/10.32744/pse.2024.3.42>
- Morgado, E. G., Rodrigues, J. B., & Leonido, L. (2024). Rethinking Teacher Training from an Inclusive and Community Dialogical Perspective. *Journal of Education and E-Learning Research*, 11(1), 219–228. <https://doi.org/10.20448/jeelr.v11i1.5430>
- Nisa, K., Imron, A., & Nada Salym, A. Q. (2024). Increasing Teacher Professionalism Through the Implementation of Digital Academic Supervision in Indonesian Secondary Schools: Personal Learning Networks as Mediator. *Journal of Infrastructure, Policy and Development*, 8(8). <https://doi.org/10.24294/jipd.v8i8.6420>
- Nurbayan, Y., & Sanusi, A. (2025). Integrating Character Values and EdTech Media: A Study of Arabic Teachers' Pedagogical Competence in Bandung Raya. *International Journal of Learning, Teaching and Educational Research*, 24(8), 248–271. <https://doi.org/10.26803/ijlter.24.8.11>
- Ogbuanya, T. C., & Shodipe, T. O. (2022). Workplace Learning for Pre - Service Teachers' Practice and Quality Teaching and Learning in Technical Vocational Education and Training: Key to Professional Development. *Journal of Workplace Learning*, 34(4), 327–351. <https://doi.org/10.1108/JWL-02-2021-0015>
- Ouyang, C., Zhu, Y., & Ma, Z. (2022). Ambidextrous Leadership and Employee Voice Behavior: The Role of Work Motivation and Ambidextrous Culture. *Psychology Research and Behavior Management*, 15, 2899–2914. <https://doi.org/10.2147/PRBM.S385033>
- Palacios-Rodríguez, A., (2023). Editorial: Educational digital transformation: new technological challenges for competence development. In *Frontiers in Education* (Vol. 8). <https://doi.org/10.3389/feduc.2023.1267939>
- Puzzo, G., Sbaa, M. Y., Zappalà, S., & Pietrantonio, L. (2024). The Impact of Cultural Intelligence on Burnout among Practitioners Working with Migrants: An Examination of Age, Gender, Training, and Language Proficiency. *Current Psychology*, 43(5), 4443–4457. <https://doi.org/10.1007/s12144-023-04641-x>

- Rais, S., Rubini, B., & Herfina. (2022). Increasing Teacher Creativity through Strengthening Transformational Leadership, Teamwork, and Work Engagement. *Pegem Eğitim ve Öğretim Dergisi*, 12(1), 232-241. <https://doi.org/10.47750/pegegog.12.01.24>
- Romanova, G., Kupriyevych, V., & Antoniuk, L. (2022). Digital Technologies As a Driver of Professional Development of Teachers of Vocational Education Establishments. *Youth Voice Journal*, 4(Special Issue), 67-80.
- Saleem, H. (2021). Examining the Key Effect of Authentic Leadership on Organizational Citizenship Behaviors of University Teachers in the Pakistani Context. *Bulletin of Education and Research*, 43(2), 123-138.
- Shofwani, W., Arifudin, I., Gloria, R. Y., & Wiradinata, D. R. (2025). Transforming Educational Management in Islamic Boarding Schools: A Historical and Digital Perspective. *JP (Jurnal Pendidikan) : Teori dan Praktik*, 10(2), 174-187. <https://journal.unesa.ac.id/index.php/jp/article/view/46027>
- Tobroni, Yunus Abu Bakar, M., Firmansyah, E., & Abdeljelil, M. Ben. (2024). Legal Framework Analysis of Islamic Religious Education Policy Implementation. *International Journal of Law and Society*, 3(3), 217-237. <https://doi.org/10.59683/ijls.v3i3.143>
- Tonich. (2021). The Role of Principals' Leadership Abilities in Improving School Performance Through the School Culture. *Journal of Social Studies Education Research*, 12(1), 47-75.
- Veglianti, E., & Varriale, L. (2024). Leveraging Technologies for Inclusion: Insights on Higher Education Organizations. In *Global Classroom: Multicultural Approaches and Organizational Strategies in Teaching and Learning Business and Economics* (pp. 101-106). <https://doi.org/10.1108/978-1-83549-284-020241013>
- Widodo, W., Damanik, J., Bastian, A., Chandrawaty, C., & Sariyo, H. (2024). How Cultural Intelligence-Based Principal Leadership Affects Teacher Task Performance: The Mediating Role of Organizational Culture and School Governance. *Journal of Intercultural Communication*, 24(2), 172-185. <https://doi.org/10.36923/jicc.v24i2.292>
- Yakubu, M. A., Sain, Z. H., Lawal, U. S., Arif, M., & Hakim, R. (2025). Student Perceptions of Artificial Intelligence as a Virtual Tutor and Its Relation to Self-Efficacy in Learning. *Indonesian Journal of Progressive Pedagogy*, 01(01), 1-11. <https://doi.org/10.61987/ijpp.v1i1.631>
- Yasir, M., & Jan, A. (2023). Servant Leadership in Relation to Organizational Justice and Workplace Deviance in Public Hospitals. *Leadership in Health Services*, 36(2), 164-185. <https://doi.org/10.1108/LHS-05-2022-0050>
- Zamroni, Fatmasari, R., Rasyidi, & Windiyani, T. (2025). Artificial Intelligence as a Tool to Improve the Quality of Job-Ready Graduate Skills in Higher Education. *2025 IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT)*, 129-136. <https://doi.org/10.1109/IAICT65714.2025.11101572>