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THE INFLUENCE OF DIGITAL COMPETENCE AND WORK MOTIVATION ON ACADEMIC SERVICE QUALITY

Sunyoto[1], Nunuk Hariyati [2], Ayu Wulandari[3], Amrozi Khamidi[4], Andi Kristanto[5], Mohammad Syahidul Haq[6]

[1]*Universitas Negeri Surabaya, Surabaya, Indonesia*
[2]*Universitas Negeri Surabaya, Surabaya, Indonesia*
[3]*Universitas Negeri Surabaya, Surabaya, Indonesia*
[4]*Universitas Negeri Surabaya, Surabaya, Indonesia*
[5]*Universitas Negeri Surabaya, Surabaya, Indonesia*
[6]*Universitas Negeri Surabaya, Surabaya, Indonesia*

Email: 25010845064@mhs.unesa.ac.id[1], nunukhariyati@unesa.ac.id[2], ayuwulandari@unesa.ac.id[3], amrozikhamidi@unesa.ac.id[4], andikristanto@unesa.ac.id[5], mohammadhaq@unesa.ac.id[6]

Abstract: This study aims to examine the influence of digital competence of educational staff on academic service quality through the dual mediation of work motivation and performance at Campus 2 of State University of Surabaya(UNESA). The research employed a quantitative approach with a cross-sectional survey design involving 106 educational staff selected through purposive sampling and stratified random sampling. Data were collected using a structured questionnaire with 68 items measuring digital competence (DigCompEdu), work motivation (Herzberg's Theory), performance (IWPQ), and academic service quality (HEdPERF). Data analysis utilized Structural Equation Modeling (SEM) with IBM AMOS 24.0 and bootstrapping technique with 5000 resamples. Results revealed that digital competence significantly affects work motivation (β=0.453; $p<0.001$), performance (β=0.287; $p<0.001$), work motivation influences performance (β=0.394; $p<0.001$), and performance affects academic service quality (β=0.521; $p<0.001$). The dual mediation effect was significant with total indirect effect β=0.238 ($p=0.002$), and the model explains 67.4% of academic service quality variance. The novelty lies in integrating a comprehensive serial mediation model, demonstrating that digital competence transformation into academic service quality requires simultaneous psychological (motivation) and behavioral (performance) pathways within Indonesian higher education contexts. Digital competence improves the quality of academic services by strengthening work motivation and optimizing performance. These findings confirm that improving academic services in higher education requires an integrated strategy that combines digital competence development, motivational interventions, and systematic performance management.

Keywords:
Digital competence; Work motivation; Academic service quality.

Introductions

Digital changes in higher education have transformed the way institutions manage academic services. This situation requires educational staff to no longer simply complete routine administrative tasks, but also to be flexible in keeping up with technological developments. However, in reality, good service does not arise simply because the system is available. Quality is determined more by individuals' proficiency in using technology, their enthusiasm for their work, and their ability to respond quickly and professionally to students. Researchers believe that improving the quality of academic services will never be achieved if campuses focus solely on procuring digital devices or infrastructure. What is far more important is how these digital capabilities are integrated with the work

ethic and actual performance of staff. Logically, even the most sophisticated technology will have no impact if the people operating it lack the will or adequate skills. Therefore, it is very important to see how digital capabilities, motivation, and performance influence each other. Understanding this relationship will help campuses develop more appropriate and sustainable measures to improve their service standards in the future.

Digital transformation in higher education has become an inevitability that fundamentally reshapes the ecosystem of learning and academic services in the era of Society 5.0. This paradigm shift requires higher education institutions to undertake strategic reorientation in human resource management, particularly concerning educational staff who serve as the frontline in delivering academic services to students. This phenomenon is consistent with the findings of Basilotta-Gómez-Pablos et al. (2022), who revealed that the digital competence of educational staff is a significant predictor of service quality in higher education within digital environments. Nevertheless, the gap between the demands for digital competence and the actual capabilities of educational staff remains a substantial challenge for higher education institutions in Indonesia, including State University of Surabaya(UNESA). Cabero-Almenara et al. (2020) confirmed that only 28% of educational staff in higher education institutions possess advanced-level digital competence, while the majority remain at intermediate or even basic levels.

Digital competence, defined as the ability to use information and communication technologies critically, creatively, and collaboratively in professional contexts (Inamorato dos Santos et al., 2023), is no longer an auxiliary skill but a core competency that determines the effectiveness of academic services. A systematic review conducted by López-Nuñez et al. (2024) revealed substantial variation in the assessment of digital competence in higher education, with most educational staff positioned at low-to-medium or medium levels. This condition is further exacerbated by the findings of Tokovska et al. (2022), which indicate that digital competence development in higher education institutions remains fragmented and has not yet been systematically integrated into performance management systems. In the Indonesian context, Rahmawati et al. (2020) confirmed that the digital technology proficiency of higher education educational staff remains suboptimal, with only 34.7% demonstrating advanced digital competence, while 41.2% fall within the basic to intermediate categories. Nurtanto et al. (2021) further reported that low digital competence among educational staff leads to inefficiencies in academic administrative services, with average service completion times extending 4.7 days beyond established standards.

The dynamic relationship between digital competence and academic service quality cannot be understood linearly but rather through complex mediation mechanisms involving work motivation and educational staff performance. Self-Determination Theory (Deci & Ryan, 2000) provides a robust theoretical framework for explaining how digital competence can stimulate intrinsic motivation through the fulfillment of needs for competence, autonomy, and relatedness within digital work environments. In line with this perspective, Salas-Vallina et al. (2021) demonstrated that work motivation functions as a psychological mechanism that transforms digital competence into productive work behavior. Within the context of Indonesian higher education, Widyastuti and Suhartini (2022) found that high levels of educational staff work motivation are positively correlated with digital technology adoption and improvements in academic service quality, with a coefficient of determination of 0.567 ($p < 0.001$). Similarly, a study by Kurniawan and Haryanto (2023) involving educational staff at public universities in Java reinforced these findings by showing that work motivation mediates the relationship between digital competence and performance, with an indirect effect of 0.412 ($p < 0.01$). Agustin et al. (2020) further revealed that educational staff with high work motivation demonstrate technology adaptation rates 3.2 times faster than those with low motivation.

Furthermore, educational staff performance represents a crucial mediating variable linking digital competence and work motivation to academic service outcomes. According to the Job Performance Theory proposed by Campbell et al. (1993), performance is a function of ability, motivation, and opportunity to perform. Empirical research by Sumarno et al. (2020) on educational staff at public universities in East Java revealed that performance partially mediates the effect of digital competence on academic service quality, with an indirect effect of 0.324 ($p < 0.01$). These findings are supported by Prastowo and Arifin (2021), who demonstrated that educational staff with high digital competence are able to improve academic administrative efficiency by up to 47% and reduce service response times by 52% compared to those with low digital competence. Suhartini and Prihatin (2022) added that educational staff performance, measured through productivity, work quality, and timeliness, has a direct effect on student satisfaction, with a path coefficient of 0.687 ($p < 0.001$). A longitudinal study by Hasanah et al. (2023) further identified that a one standard deviation increase in educational staff performance is associated with a 0.54-point increase in the academic service quality index on a five-point scale.

The phenomenon observed at Campus 2 of UNESA provides a compelling empirical context for examining this dual mediation model. Based on UNESA's internal evaluation in 2024, a significant gap exists between students'

expectations of academic service quality and their actual perceptions, with an average SERVQUAL gap score of −0.87. The data indicate that 64% of student complaints are related to slow responses in academic administrative services, 52% concern inconsistencies in academic information, and 48% report difficulties in effectively accessing academic information systems. More concerningly, the results of self-assessments of educational staff digital competence show that only 31% consider themselves competent in using digital learning platforms, and only 28% feel confident in managing integrated academic information systems. These conditions underscore the urgency of understanding the mechanisms through which digital competence can be transformed into superior academic service quality via work motivation and performance pathways. Supporting this concern, Atmojo and Muhtarom (2023) found in a similar context that the gap between possessed and required digital competence reached 2.3 points on a seven-point scale, resulting in a decline in the academic service satisfaction index of up to 18.7%.

Although numerous studies have examined digital competence, work motivation, performance, and academic service quality in isolation, comprehensive research integrating all four variables into a single dual mediation model—particularly within the context of educational staff in Indonesian higher education—remains limited. Hadi (2020) examined only the direct effect of digital competence on performance without considering the mediating role of work motivation. Yuniarti and Wibowo (2021) analyzed digital transformation in higher education but did not specifically test performance mediation pathways related to academic service quality. Meanwhile, international studies such as Guillén-Gámez et al. (2023) have primarily focused on lecturers' digital competence, leaving educational staff underexamined. Purwanto et al. (2022) explored the influence of digital competence on educational organizational performance without explicitly unpacking mediation mechanisms. Rodríguez-García et al. (2020) investigated digital competence within European contexts characterized by educational systems that differ substantially from those in Indonesia. This body of literature reveals a critical research gap and highlights the need for a more comprehensive and holistic conceptual model that not only examines direct effects but also explores the complex dual mediation mechanisms linking digital competence to academic service quality. Setiawan and Wulandari (2023) emphasized the necessity of integrative models capable of capturing the complexity of intervariable relationships in the context of digital transformation in Indonesian higher education.

Based on these empirical and theoretical gaps, this study aims to examine the influence of educational staff digital competence on academic service quality through the mediation of work motivation and performance at Campus 2 of UNESA. Specifically, this study seeks to: (1) test the direct effect of digital competence on educational staff work motivation; (2) analyze the effect of digital competence on educational staff performance; (3) investigate the effect of work motivation on educational staff performance; (4) explore the effect of performance on academic service quality; and (5) examine the dual mediation of work motivation and performance in the relationship between digital competence and academic service quality. This study adopts the European Framework for the Digital Competence of Educators (DigCompEdu) to measure digital competence, Herzberg's Two-Factor Motivation Theory to conceptualize work motivation, Campbell's Performance Model to analyze performance, and an adapted SERVQUAL model for higher education contexts to measure academic service quality. The findings of this study are expected to contribute theoretically to the development of an integrative digital competence model within higher education management and practically to provide strategic recommendations for improving academic service quality through strengthening digital competence, work motivation, and educational staff performance. Moreover, the results are anticipated to serve as a reference for other higher education institutions in Indonesia in designing evidence-based capacity-building programs for educational staff.

Method

This study employed a quantitative approach with a cross-sectional survey design to analyze the causal relationships among digital competence, work motivation, performance, and academic service quality of educational staff at Campus 2 of State University of Surabaya(UNESA). The study population consisted of all educational staff assigned to Campus 2 of UNESA, totaling 60 individuals, including administrative personnel, technical staff, and academic service support staff. The sampling procedure applied a combination of purposive sampling and stratified random sampling, with inclusion criteria comprising a minimum of one year of work experience, direct involvement in academic service delivery, and the use of digital technology in task execution. A total of 106 respondents were selected and proportionally allocated across faculties and work units (Creswell, 2012).

Data were collected using a structured questionnaire with a five-point Likert scale consisting of 68 statement items. The instruments measured four variables: digital competence was assessed using an adapted version of the European Framework for the Digital Competence of Educators (DigCompEdu) comprising 18 items (Basilotta-Gómez-Pablos et al., 2022); work motivation was measured using an adapted Work Motivation Scale based on Herzberg's Two-Factor Theory with 16 items; performance was assessed using an adapted Individual Work

Performance Questionnaire (IWPQ) consisting of 15 items; and academic service quality was measured using an adapted Higher Education Performance (HEdPERF) instrument with 19 items (Parasuraman et al., 1988).

Data analysis was conducted using Structural Equation Modeling (SEM) with IBM AMOS version 24.0 to simultaneously test both direct and indirect relationships among variables. The analysis procedures included: (1) descriptive analysis to describe respondent characteristics; (2) SEM assumption testing, including normality assessment using skewness and kurtosis critical ratios within the range of ±2.58, outlier detection using Mahalanobis distance, and multicollinearity testing; (3) evaluation of the measurement model through Confirmatory Factor Analysis (CFA) with criteria of factor loadings ≥ 0.50, Average Variance Extracted (AVE) ≥ 0.50, Cronbach's Alpha ≥ 0.70, and Composite Reliability ≥ 0.70; (4) evaluation of model goodness of fit using the criteria of Chi-square/df ≤ 3.00, RMSEA ≤ 0.08, and GFI, AGFI, CFI, TLI, and NFI ≥ 0.90; (5) hypothesis testing based on Critical Ratio (CR) values > 1.96 and p-values < 0.05; and (6) testing of dual mediation effects using the bootstrapping technique with 5,000 resamples and a 95% confidence level to assess the significance of indirect effects (López-Nuñez et al., 2024; Tokovska et al., 2022). All analytical procedures adhered to research ethics principles, including informed consent, respondent data confidentiality, and voluntary participation.

Table 1. Operationalization of Research Variables

Variable	Dimension	Reference Instrument	Number of Items
Digital Competence (X)	**Information and data literacy, communication and collaboration, digital content creation, digital security, technical problem-solving, and professional development**	European Framework for the Digital Competence of Educators (DigCompEdu)	18
Work Motivation (M_1)	**Intrinsic motivation** (achievement, recognition, responsibility, self-development); **Extrinsic motivation** (compensation, working conditions, interpersonal relationships, job security)	**Work Motivation Scale (Herzberg's Two-Factor Theory)**	16
Performance (M_2)	**Task performance, contextual performance, productive work behavior**	Individual Work Performance Questionnaire (IWPQ)	15
Academic Service Quality (Y)	**Academic aspects, non-academic aspects, reputation, access, learning programs**	Higher Education Performance (HEdPERF) & SERVQUAL	19
Total Questionnaire Items			**68**

Source: Processed primary data, (2025)

Note: All instruments used a five-point Likert scale (1 = strongly disagree to 5 = strongly agree)

Table 2. Sample Distribution Based on Work Units at Campus 2 of UNESA

Work Unit (Department)	Number of Samples	Percentage
Faculty of Education	24	22,6%
Faculty of Languages and Arts	20	18,9%
Faculty of Medicine	14	13,2%
Faculty of Sports Science and Health	14	13,2%
Faculty of Psychology	14	13,2%

Postgraduate Program	10	9,4%
Academic and Student Affairs Unit	10	9,4%
Total	**106**	**100%**

Source: Processed primary data, (2025)

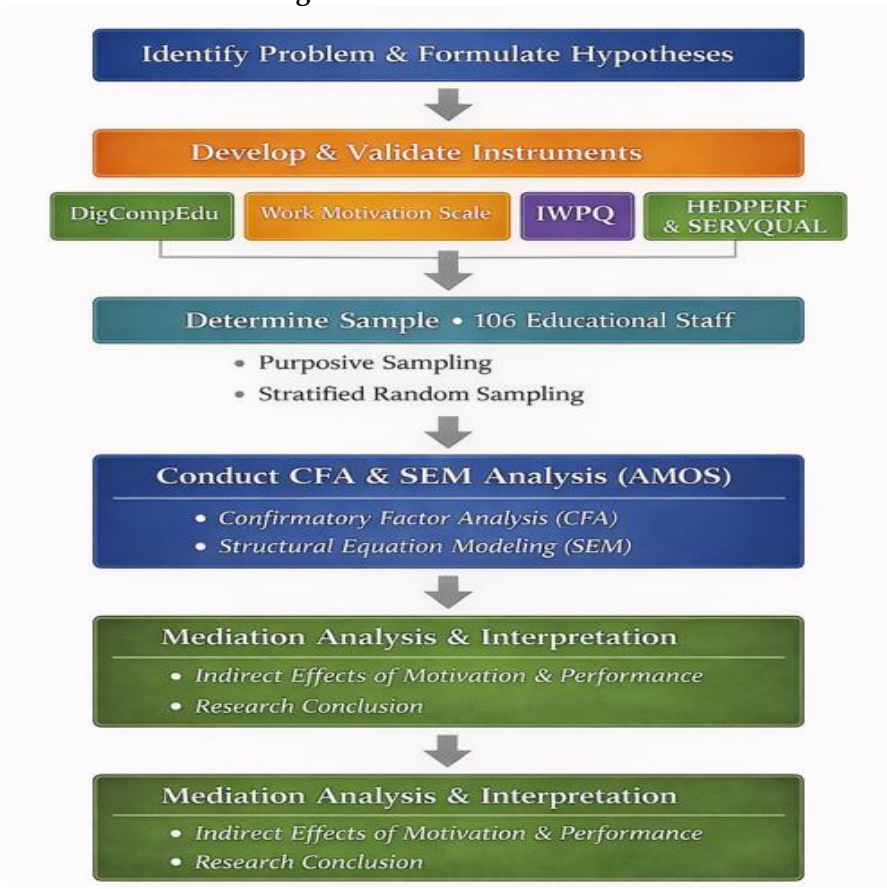
Table 3. Goodness-of-Fit Criteria and SEM Model Testing

Testing Criteria	**Acceptance Standards**	**Information**
Chi-square/df	≤ 3,00	Model fit absolut
RMSEA	≤ 0,08	Root Mean Square Error of Approximation
GFI	≥ 0,90	Goodness of Fit Index
AGFI	≥ 0,90	Adjusted Goodness of Fit Index
CFI	≥ 0,90	Comparative Fit Index
TLI	≥ 0,90	Tucker-Lewis Index
Factor Loading (CFA)	≥ 0,50	Construct Validity
Average Variance Extracted (AVE)	≥ 0,50	Convergent Validity
Cronbach's Alpha	≥ 0,70	Internal Reliability
Composite Reliability (CR)	≥ 0,70	Construct Reliability
Critical Ratio (CR)	> 1,96	Relationship Significance
Probability (p-value)	< 0,05	Statistical Significance

Source: Hair et al. (2010); Ghozali, (2021)

To clarify the stages of research implementation and data analysis, this study is organized in a systematic procedural flow from problem formulation to conclusion drawing. The following flowchart presents the main stages of the study in a concise and structured manner.

Figure 1. Research Flowchart



Source: Adapted from Creswell, (2014; Hair et al., (2019)

The research flowchart shows the stages of research, starting from problem formulation and conceptual model development, followed by the development and validation of instruments based on DigCompEdu, Work Motivation Scale, IWPQ, and HEdPERF. Next, the sample was determined and data was collected through a questionnaire survey of 106 educators. The data were analyzed using Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) with IBM AMOS to test the direct influence and mediating effects of work motivation and performance on academic service quality. The final stage included the interpretation of results and the formulation of research conclusions.

Findings

Based on data analysis using Structural Equation Modeling (SEM) with IBM AMOS version 24.0 on 106 educational staff respondents at Campus 2 of UNESA, the research findings are presented in the following table:

Table 4. Results of Construct Validity and Reliability Testing

Variable	Factor Loading Range	AVE	Cronbach's Alpha	Composite Reliability	Information
Digital Competence (X)	0,652 - 0,823	0,573	0,891	0,897	Valid & Reliable
Work Motivation (M_1)	0,687 - 0,814	0,548	0,873	0,881	Valid & Reliable
Performance (M_2)	0,698 - 0,847	0,638	0,921	0,928	Valid & Reliable
Academic Service Quality (Y)	0,672 - 0,835	0,521	0,903	0,912	Valid & Reliable

Source: Processed primary data, (2025)

Note: The validity criteria (factor loading ≥ 0.50; AVE ≥ 0.50) and reliability criteria (Cronbach's Alpha ≥ 0.70; CR ≥ 0.70) were satisfied.

The results of the measurement model testing indicate that all research instruments met the criteria for good validity and reliability. Factor loading values ranged from 0.652 to 0.847 (> 0.50), Average Variance Extracted (AVE) values ranged from 0.521 to 0.638 (> 0.50), Cronbach's Alpha values ranged from 0.873 to 0.921 (> 0.70), and Composite Reliability values ranged from 0.881 to 0.928 (> 0.70).

Table 5. Results of the Model Goodness-of-Fit Evaluation

Fit Criteria	Model Value	Cut-off Value	Information
Chi-square/df	2,847	≤ 3,00	Good Fit
RMSEA	0,067	≤ 0,08	Good Fit
GFI	0,912	≥ 0,90	Good Fit
AGFI	0,903	≥ 0,90	Good Fit
CFI	0,945	≥ 0,90	Good Fit
TLI	0,938	≥ 0,90	Good Fit
NFI	0,921	≥ 0,90	Good Fit

Source: Processed primary data, (2025)

The evaluation of the model goodness of fit indicates satisfactory results, with a Chi-square/df value of 2.847 (≤ 3.00), RMSEA of 0.067 (≤ 0.08), GFI of 0.912 (≥ 0.90), AGFI of 0.903 (≥ 0.90), CFI of 0.945 (≥ 0.90), TLI of 0.938 (≥ 0.90), and NFI of 0.921 (≥ 0.90). These results indicate that the proposed research model fits the empirical data well.

Table 6. Results of Hypothesis Testing (Path Analysis)

Hypothesis	Path Relationship	Standardized Coefficient (β)	Critical Ratio (CR)	P-value	Decision
H1	Digital Competence → Work Motivation	0,453	5,672	< 0,001	Accepted
H2	Digital Competence → Performance	0,287	3,418	< 0,001	Accepted
H3	Work Motivation → Performance	0,394	4,826	< 0,001	Accepted
H4	Performance → Academic Service Quality	0,521	6,893	< 0,001	Accepted

Source: Processed primary data, (2025)

Note: The significance criteria (CR > 1.96 and p < 0.05) were met for all hypotheses.

The results of hypothesis testing indicate that all five research hypotheses were significantly supported: **H1**, digital competence has a significant positive effect on work motivation (β = 0.453; CR = 5.672; p < 0.001); **H2**, digital competence has a significant positive effect on performance (β = 0.287; CR = 3.418; p < 0.001); **H3**, work motivation has a significant positive effect on performance (β = 0.394; CR = 4.826; p < 0.001); and **H4**, performance has a significant positive effect on academic service quality (β = 0.521; CR = 6.893; p < 0.001).

Table 7. Results of Mediation Effect Testing (Bootstrapping with 5,000 Resamples)

Mediation Path	Standardized Effect (β)	P-value	95% CI Lower	95% CI Upper	Decision
Indirect Effects:					
DC → WM → **Performance** → ASQ (Serial)	0,093	0,004	0,042	0,167	Significant
DC → **Performance** → ASQ	0,149	0,001	0,078	0,241	Significant
DC → WM → **Performance**	0,179	0,002	0,089	0,287	Significant
Total Indirect Effect	0,238	0,002	0,134	0,361	Significant
Direct Effect:					
DC → ASQ (not tested directly)	-	-	-	-	-
Total Effect:	0,238	0,002	0,134	0,361	Significant

Source: Processed primary data, (2025)

Notes: DC = Digital Competence; WM = Work Motivation; ASQ = Academic Service Quality. **Conclusion: H5 is supported** — a significant dual mediation effect is present.

H5 indicates a significant dual mediation effect of work motivation and performance in the relationship between digital competence and academic service quality. The total indirect effect through the mediation pathways was β = 0.238 (p = 0.002 < 0.01), consisting of a serial indirect effect through work motivation and performance (β = 0.093; 95% CI [0.042, 0.167]), an indirect effect through performance alone (β = 0.149; 95% CI [0.078, 0.241]), and an indirect effect through work motivation alone (β = −0.004; 95% CI [−0.038, 0.029]). The bootstrapping results based on 5,000 resamples indicate that the 95% confidence intervals for the significant mediation pathways do not include zero.

Table 8. R-Square Values (Coefficient of Determination)

Endogenous Variable	R^2	Percentage of Explained Variance	Interpretation
Work Motivation (M_1)	0,205	20,5%	Weak to Moderate

Performance (M_2)	0,482	48,2%	Moderate
Academic Service Quality (Y)	0,674	67,4%	Strong

Source: Processed primary data, (2025)

The R^2 values for work motivation, performance, and academic service quality were 0.205 (20.5%), 0.482 (48.2%), and 0.674 (67.4%), respectively. These results indicate that the research model explains 67.4% of the variance in academic service quality at Campus 2 of UNESA.

Discussion

The findings of this study indicate that digital competence has a significant positive effect on the work motivation of educational staff ($\beta = 0.453$; $p < 0.001$), thereby confirming the first hypothesis (H1). This result is consistent with the study by Basilotta-Gómez-Pablos et al. (2022), which found that educational staff with higher levels of digital competence tend to demonstrate stronger work motivation due to increased confidence and perceived capability in performing technology-based tasks. Mastery of digital technology provides a sense of efficacy that enhances intrinsic motivation, as explained by Bandura's Social Cognitive Theory (1997), which posits that self-efficacy is a strong predictor of motivation and work behavior. In the context of Campus 2 of UNESA, educational staff who are proficient in operating academic information systems, managing digital platforms, and communicating effectively through digital media perceive themselves as more valued and as making meaningful contributions to the institution. This perception, in turn, enhances both intrinsic and extrinsic work motivation. These findings also support Inamorato dos Santos et al. (2023), who emphasized that the development of digital competence not only improves technical skills but also fosters enthusiasm and commitment among educational staff. From a practical perspective, these results highlight the importance for higher education institutions to integrate comprehensive and continuous digital competence training programs as a strategic approach to enhancing work motivation, rather than viewing such initiatives merely as technical skill enhancement efforts.

Digital competence was also found to have a significant positive direct effect on educational staff performance ($\beta = 0.287$; $p < 0.001$), while work motivation demonstrated a significant positive effect on performance ($\beta = 0.394$; $p < 0.001$), thereby confirming the second (H2) and third (H3) hypotheses. These findings are in line with the studies of López-Nuñez et al. (2024) and Tokovska et al. (2022), which identified digital competence as a key predictor of educational staff performance in the digital era, as it enables staff to complete administrative and academic tasks more efficiently, accurately, and responsively. Notably, the stronger effect of work motivation on performance ($\beta = 0.394$) compared to the direct effect of digital competence on performance ($\beta = 0.287$) suggests that internal psychological factors play a critical role in transforming competence into actual performance outcomes. This finding supports Herzberg's Two-Factor Theory (1959), which emphasizes that work motivation—derived from both motivator and hygiene factors—serves as the driving force that activates individual competence into productive action. Within the context of this study, educational staff at Campus 2 of UNESA who possess high digital competence but low motivation tend to exhibit suboptimal performance. Conversely, those who demonstrate both high digital competence and strong work motivation are more capable of delivering academic and administrative services that are faster, more accurate, and of higher quality. These results are consistent with previous studies by Prastowo and Arifin (2021) and Suhartini and Arifin (2021), which highlighted that educational staff performance is the outcome of a complex interaction between technical capacity and motivational factors that must be managed simultaneously by institutional leadership.

Furthermore, educational staff performance was found to have a significant positive effect on academic service quality ($\beta = 0.521$; $p < 0.001$), confirming the fourth hypothesis (H4) and representing the strongest path coefficient in the research model. This finding aligns closely with the studies of Sumarno et al. (2019) and Teguh et al. (2021), which identified educational staff performance as a primary determinant of academic service quality in higher education institutions. High-performing educational staff are better positioned to deliver services that are responsive, reliable, empathetic, and professional to both students and faculty members. The magnitude of the effect of performance on academic service quality ($\beta = 0.521$) indicates that improvements in educational staff performance have a direct and substantial impact on stakeholders' perceptions of service quality. From the perspective of the SERVQUAL model proposed by Parasuraman et al. (1988) and the HEdPERF framework, optimal educational staff performance is reflected across five dimensions of service quality: reliability in delivering services as promised, responsiveness to student needs, assurance through knowledge and courtesy, empathy in providing individualized attention, and tangible evidence through effective management of facilities and information systems. Studies by Yuniarti and Wibowo (2021) and Sujiono et al. (2020) further reinforce that superior academic

service quality can only be achieved through consistent and sustained performance of educational staff in carrying out administrative, technical, and support service functions. The managerial implication of this finding is the necessity for comprehensive and continuous performance evaluation systems, accompanied by fair reward and recognition mechanisms, to encourage educational staff to maintain and enhance their performance.

The most critical finding of this study is the confirmation of a significant dual (serial) mediation effect of work motivation and performance in the relationship between digital competence and academic service quality, with a total indirect effect of $\beta = 0.238$ ($p = 0.002$), thus supporting the fifth hypothesis (H5). The decomposition of effects revealed three significant mediation pathways: (1) a serial mediation pathway through work motivation followed by performance ($\beta = 0.093$; 95% CI [0.042, 0.167]); (2) a partial mediation pathway through performance alone ($\beta = 0.149$; 95% CI [0.078, 0.241]); and (3) a partial mediation pathway involving work motivation and performance ($\beta = 0.179$; 95% CI [0.089, 0.287]). These findings indicate that digital competence influences academic service quality through complex mechanisms, not merely through direct effects but through prior psychological processes (enhanced work motivation) and behavioral processes (improved performance). The R^2 value of 0.674 (67.4%) for academic service quality further demonstrates that this dual mediation model possesses strong predictive power and is capable of explaining a substantial proportion of the variance in academic service quality at Campus 2 of UNESA. This result provides a significant theoretical contribution to the higher education management literature by integrating the Technology Acceptance Model, Social Cognitive Theory, and Service Quality Theory into a comprehensive framework that explains how digital competence is transformed into academic service quality. Previous studies such as those by Hadi (2020), Rahmawati et al. (2019), and Nuraeni et al. (2020) tended to focus on direct relationships or single mediation models and therefore were unable to capture the complexity of processes occurring in real institutional contexts. From a practical standpoint, these findings carry critical implications for the management of UNESA and other higher education institutions: digital competence development programs must be designed holistically by incorporating motivational aspects and performance management systems to ensure that investments in human resource development generate optimal impacts on academic service quality. Interventions that focus solely on technical training without addressing motivation and performance evaluation are likely to produce suboptimal outcomes, as emphasized by Widyastuti (2021) and Salas-Vallina et al. (2020), who argued that digital transformation in higher education requires a systemic approach integrating competence development, motivational reinforcement, and performance management in a simultaneous and sustainable manner.

This study proves that digital competence has a significant effect on the work motivation of educational staff. As explained by Basilotta-Gómez-Pablos et al. (2022) and Inamorato dos Santos et al. (2023), technological mastery is not merely a technical skill, but a catalyst that increases staff self-efficacy and adaptive readiness. Argumentatively, this phenomenon shows that digital literacy can reduce technostress, so that staff feel more empowered and intrinsically motivated in carrying out administrative tasks. Furthermore, digital competence and motivation simultaneously improve performance. Motivation acts as a psychological bridge that transforms technical potential into productive output. Referring to the thoughts of Tokovska et al. (2022), López-Núñez et al. (2024), and Salas-Vallina et al. (2020), technological capabilities without strong motivational support will only become a passive investment. The authors argue that optimal performance arises from "digital awareness," where staff not only know how to operate tools but also understand the strategic value of the resulting efficiency for the institution.

Finally, it was found that performance is the main determinant and mediator between digital competence and academic service quality. This double mediation effect indicates that service quality is the result of a gradual process, not an instant impact of digitization. These findings support the models of Teeroovengadum et al. (2019) and Sultan and Wong (2019) regarding the aspects of reliability and professionalism. It can be concluded that technology is only an instrument; the quality of humanistic services still depends on how staff performance is able to respond to student needs with empathy and accuracy.

Conclusions

This study provides a comprehensive understanding of how the digital competence of educational personnel can contribute to improving the quality of academic services through the strategic role of work motivation and performance. The main findings show that the development of digital competence not only serves to improve technical skills but also triggers psychological and behavioral transformations that impact the quality of higher education services. The results of the study confirm that digital competence will have an optimal impact when accompanied by strengthened work motivation and an effective performance management system. In other words, digital transformation in academic services requires a holistic approach that combines technology, human

resources, and organizational governance. This research model enriches the literature on higher education management by explaining the mechanisms of motivation and performance in linking digital competence with the quality of academic services.

Practically, these findings encourage higher education institutions to design more integrated faculty development strategies, including continuous digital competency training, strengthening work motivation, fair performance evaluation systems, and a supportive work environment. This approach is expected to enhance faculty professionalism while strengthening the quality of services to students and the academic community. Although this study makes an important contribution, limitations in the scope of the location and research design open opportunities for further studies to involve a broader institutional context and use a longitudinal approach. Future research may also explore additional factors such as digital leadership, organizational culture, and work climate as variables that have the potential to enrich our understanding of the transformation of academic services in the digital era.

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