

THE IMPACT OF KNOWLEDGE MANAGEMENT ELEMENTS ON WORK PERFORMANCE AMONG POLYTECHNIC LECTURERS IN SELANGOR AND THE FEDERAL TERRITORY

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Abstract: Knowledge management (KM) is increasingly recognised as a critical organisational capability for enhancing academic performance in higher education, particularly within teaching-intensive Technical and Vocational Education and Training (TVET) institutions. However, empirical evidence on how specific KM elements influence lecturers' work performance remains limited. This study aims to determine the level of work performance among polytechnic lecturers and to examine the impact of individual KM elements on lecturers' work performance in Malaysian polytechnics. A quantitative cross-sectional survey design was employed involving 320 lecturers from public polytechnics in Selangor and the Federal Territory. Data were collected using validated questionnaires measuring three knowledge management dimensions—organisational knowledge, knowledge reliability, and communication and knowledge sharing—and lecturers' work performance. Descriptive statistics, Pearson correlation analysis, and multiple linear regression were conducted using IBM SPSS Statistics. The findings revealed that lecturers reported a high level of knowledge management practices ($M = 4.09$, $SD = 0.475$) and a very high level of work performance ($M = 4.36$, $SD = 0.506$). Pearson correlation analysis indicated a significant positive relationship between knowledge management and lecturers' work performance ($r = 0.507$, $p < .001$). Multiple regression analysis further demonstrated that knowledge reliability ($\beta = 0.455$, $p < .001$) and communication and knowledge sharing ($\beta = 0.283$, $p < .001$) significantly predicted lecturers' work performance, whereas organisational knowledge did not show a significant influence ($\beta = -0.029$, $p = .707$). The regression model was statistically significant ($F(3,316) = 44.553$, $p < .001$) and explained 29.7% of the variance in lecturers' work performance ($R^2 = 0.297$). These findings showed the importance of reliable knowledge systems and active knowledge sharing in enhancing lecturer performance within the polytechnic education system. Strengthening institutional knowledge infrastructure and fostering collaborative knowledge practices may therefore contribute to improving academic effectiveness in the Malaysian TVET sector.

Keywords: *Knowledge management; Work performance; Polytechnic lecturers; TVET; Malaysia*

Introduction

In contemporary higher education, knowledge management (KM) has emerged as a critical organisational capability for enhancing academic effectiveness, institutional performance, and long-term sustainability (Quarchioni et al., 2022). Higher education institutions increasingly operate in complex knowledge environments characterised by rapid technological change, digital transformation, and growing accountability for educational outcomes. Within this evolving context, the ability to systematically manage institutional knowledge resources has become essential for supporting teaching quality, organisational learning, and professional performance among academic staff (Nonaka & Takeuchi, 1995; Grant, 2016; Dalkir, 2017).

Theoretically, KM is grounded in the knowledge-based view of the firm, which conceptualises knowledge as a strategic organisational resource capable of generating competitive advantage when effectively mobilised (Grant, 2016; Sahibzada et al., 2022). Knowledge-based theory emphasises that organisational performance is influenced not only by the possession of knowledge but also by the institutional mechanisms that enable its access, sharing, and utilisation within work processes. In academic institutions, lecturers play a central role in generating and applying knowledge through teaching, curriculum development, research, and professional collaboration (Budur et al., 2024a; Megnounif & Kherbouche, 2020). Consequently, the effectiveness of knowledge management systems and practices has direct implications for lecturers' work performance and the broader institutional outcomes of higher education institutions.

Within higher education settings, knowledge management practices typically involve several interrelated organisational processes, including the development of organisational knowledge structures, the reliability of institutional knowledge systems, and the communication mechanisms that facilitate knowledge sharing among academic staff (Asari et al., 2020). Organisational knowledge reflects the collective understanding of institutional practices, procedures, and shared expertise that guide academic work. Knowledge reliability refers to the accessibility, credibility, and consistency of knowledge resources available to lecturers through institutional systems and information infrastructure (Paudel et al., 2023). Communication and knowledge sharing, in contrast, emphasise the collaborative exchange of knowledge among colleagues, enabling lecturers to learn from one another and improve professional practice. Together, these dimensions represent key organisational conditions that enable knowledge to support effective academic performance (Nonaka & Takeuchi, 1995; Alavi & Leidner, 2017).

In the Malaysian higher education landscape, the strategic importance of knowledge management has been reinforced through national policy initiatives that emphasise institutional effectiveness, digital transformation, and knowledge-driven development. The Malaysia Education Blueprint (Higher Education) 2015–2025 highlights the need for universities and polytechnics to strengthen knowledge sharing cultures, promote innovation, and enhance academic productivity in order to remain globally competitive (Ministry of Higher Education Malaysia [MOHE], 2015). In line with these priorities, Malaysian higher education institutions have increasingly invested in information and communication technologies (ICT), digital learning platforms, and knowledge management initiatives designed to support academic work processes (Ismail et al., 2021). Previous studies suggest that such institutional efforts can

improve access to knowledge resources and facilitate collaboration among academic staff, although the effectiveness of these initiatives varies across institutional contexts (Hassan et al., 2021; Nair et al., 2020).

Despite these developments, the application of knowledge management within Technical and Vocational Education and Training (TVET) institutions remains comparatively underexplored. Polytechnic institutions operate within a distinctive educational environment that emphasises applied learning, industry engagement, and practical skill development (Mulaudzi et al., 2024). Unlike research-intensive universities, polytechnics focus primarily on teaching and professional training, requiring lecturers to integrate theoretical knowledge with evolving technical and occupational expertise. As a result, lecturers in polytechnic institutions must continuously update their professional knowledge and collaborate with colleagues to maintain curriculum relevance and teaching effectiveness (Omar et al., 2020; Khalid et al., 2025). Effective knowledge management practices are therefore essential for enabling lecturers to access reliable knowledge resources, exchange professional expertise, and sustain high levels of work performance.

However, much of the existing KM literature in higher education conceptualises knowledge management as a broad organisational construct without sufficiently examining how specific knowledge management dimensions influence academic staff performance. While prior research has demonstrated positive associations between KM practices and organisational outcomes, there remains limited empirical evidence explaining how distinct knowledge processes contribute to lecturers' work performance, particularly within teaching-focused institutions such as polytechnics (Gonzalez-Sanchez et al., 2022; Makinde et al., 2025). Furthermore, studies examining knowledge management in the Malaysian TVET sector remain relatively scarce, despite the sector's growing importance in national human capital development strategies.

Addressing this gap is important for several reasons. First, polytechnic lecturers operate within demanding educational environments where teaching effectiveness, professional competence, and institutional accountability are closely scrutinised. Second, understanding how different knowledge management dimensions influence lecturer performance can provide valuable insights for institutional leaders seeking to improve organisational effectiveness through targeted knowledge management initiatives. Third, empirical evidence from the TVET sector can contribute to the broader knowledge management literature by extending theoretical insights beyond research-intensive universities to teaching-focused vocational institutions.

In response to these research gaps, the present study aims to determine the level of work performance among polytechnic lecturers and to examine the influence of knowledge management dimensions on lecturers' work performance in Malaysian polytechnics. By examining organisational knowledge, knowledge reliability, and communication and knowledge sharing as distinct KM dimensions, this study provides a more nuanced understanding of how knowledge management practices contribute to lecturer effectiveness within the polytechnic education system (Budur et al., 2024b). The findings are expected to offer theoretically grounded and contextually relevant insights that may inform institutional strategies aimed at strengthening knowledge management practices and enhancing lecturer performance within Malaysia's TVET sector.

Methodology

Research Design

This study employed a quantitative cross-sectional survey design to examine the level of work performance and the impact of knowledge management (KM) dimensions on work performance among polytechnic lecturers in Selangor and the Federal Territory, Malaysia. A cross-sectional approach was considered appropriate as it enables the examination of relationships and predictive effects among organisational variables at a single point in time, consistent with the study objectives.

Population and Sample

The target population comprised full-time lecturers employed at public polytechnics in Selangor and the Federal Territory. Lecturers were eligible to participate if they were permanent academic staff and had at least one year of teaching experience. Part-time lecturers and administrative staff were excluded due to differences in work roles and engagement with institutional knowledge management processes.

Sample size determination was guided by Krejcie and Morgan's (1970) table for finite populations. Based on an estimated population of approximately 2,000 lecturers, a minimum sample size of 322 respondents was required. A stratified random sampling technique was employed to enhance representativeness, with academic departments serving as strata. A total of 320 usable questionnaires were returned and included in the final analysis, yielding a response rate of approximately 71%, which is considered acceptable for organisational research.

Research Instrument

Data were collected using a structured self-administered questionnaire consisting of three sections.

Section A collected respondents' sociodemographic information for descriptive purposes only. Section B measured knowledge management dimensions, adapted and modified from the knowledge management scale proposed by Kianto et al. (2016) to suit the polytechnic educational context. Section B measured knowledge management using three dimensions: organisational knowledge, knowledge reliability, and communication and knowledge sharing. Responses were measured on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Section C assessed work performance, adapted from Koopmans et al. (2016), covering three dimensions: task performance, contextual performance, and counterproductive work behaviour. Items measuring counterproductive behaviour were reverse-scored so that higher scores reflected higher levels of work performance. All items were rated using the same five-point Likert scale.

For the purpose of analysis, composite scores were computed for overall work performance, while individual KM dimension scores were retained and analysed separately as predictor variables, consistent with the study objectives.

Validity and Reliability

The questionnaire underwent pilot testing involving 30 lecturers from a polytechnic not included in the main study. Items with factor loadings below 0.50 were considered for removal; however, all retained items satisfied the minimum loading threshold. Reliability analysis

demonstrated satisfactory internal consistency, with Cronbach's alpha coefficients exceeding 0.80 for all KM dimensions and the work performance construct, indicating good reliability.

Data Collection Procedure

Ethical approval was obtained from the relevant institutional research and ethics committees. Permission to conduct the study was granted by the participating polytechnics. Data collection was carried out between May and August 2024 using both online and printed questionnaires. Participation was voluntary, and respondents were assured of anonymity and confidentiality. Informed consent was implied through voluntary completion of the questionnaire.

Data Analysis

Data were analysed using IBM SPSS Statistics (Version 29). Preliminary data screening was conducted to assess missing values, normality, and outliers. Descriptive statistics, including means and standard deviations, were used to determine the level of work performance among polytechnic lecturers.

To address the study's core objective, Pearson correlation analysis was first conducted to examine bivariate relationships between the KM dimensions and work performance. Subsequently, multiple linear regression analysis was conducted to examine the influence of the three knowledge management dimensions—organisational knowledge, knowledge reliability, and communication and knowledge sharing—on lecturers' work performance. Model fit was assessed using the coefficient of determination (R^2) and the F-statistic. Multicollinearity was evaluated using variance inflation factor (VIF) values. Statistical significance was set at $p < .05$.

Ethical Considerations

This study adhered to established ethical principles for research involving human participants. Respondents' participation was voluntary, and confidentiality was strictly maintained. Data were reported in aggregate form and stored securely to protect participant anonymity.

Finding

Descriptive Analysis of Knowledge-Management Dimensions

Table 1 presents the mean and standard deviation values for the three knowledge management dimensions measured in this study. Overall, lecturers demonstrated a high level of engagement in knowledge management practices, with mean scores ranging from 4.06 to 4.14 on a five-point scale. The overall mean score for knowledge management was 4.09 (SD = 0.475), indicating that knowledge-related practices are consistently embedded in the professional routines of polytechnic lecturers.

Table 1: Mean and standard deviation of knowledge-management dimensions

Knowledge Management Dimension	Mean (M)	SD	Level
Organisational Knowledge	4.08	0.588	High
Knowledge Reliability	4.14	0.533	High
Communication and Knowledge Sharing	4.06	0.687	High
Overall Knowledge Management	4.09	0.475	High

Among the three dimensions, knowledge reliability recorded the highest mean score ($M = 4.14$, $SD = 0.533$). This suggests that lecturers perceive the information systems, technological tools, and institutional mechanisms supporting knowledge access and utilisation to be dependable and supportive of their work. In practical terms, lecturers appear confident in the credibility and availability of knowledge resources within their institutions. Organisational knowledge followed closely ($M = 4.08$, $SD = 0.588$), reflecting a strong understanding of institutional processes, shared practices, and collaborative norms. This indicates that lecturers are generally well integrated into their organisational environment and can draw on collective experience when performing their duties. The dimension of communication and knowledge sharing recorded a mean of 4.06 ($SD = 0.687$), which, although slightly lower than the other dimensions, still falls within the high category. This suggests that while lecturers actively exchange ideas and engage in professional dialogue, there may be minor variations in the consistency with which knowledge is shared across units or departments.

These findings demonstrate that knowledge management practices among Malaysian polytechnic lecturers are well-established and consistently high across all three dimensions.

Descriptive Analysis of Work Performance

Table 2 presents the descriptive statistics for the three dimensions of lecturers' work performance. The overall mean score for work performance was 4.36 ($SD = 0.506$), indicating a very high level of perceived performance among polytechnic lecturers.

Table 2: Mean and standard deviation of work-performance dimensions

Work Performance Dimension	Mean (M)	SD	Level
Professional Performance	4.42	0.525	Very High
Work Self-Development	4.39	0.568	Very High
Work Efficiency	4.25	0.582	High
Overall Work Performance	4.36	0.506	Very High

Among the dimensions, professional performance recorded the highest mean ($M = 4.42$, $SD = 0.525$). This suggests that lecturers consistently uphold professional standards in their roles, including responsibility, problem-solving, and commitment to institutional expectations. The findings reflect a strong sense of accountability and professional conduct within the academic environment. Work self-development also achieved a very high mean score ($M = 4.39$, $SD = 0.568$), indicating that lecturers actively invest in improving their knowledge, skills, and teaching practices. This points to a culture of continuous professional growth, in which lecturers are motivated to enhance their competence and remain relevant in their fields. The dimension of work efficiency recorded a slightly lower, though still high, mean score ($M = 4.25$, $SD = 0.582$). This suggests that lecturers generally perform their duties effectively and manage their workload well, although there may be minor variations in efficiency across individuals.

The results demonstrate that lecturers perceive themselves as performing at a consistently high level across all three dimensions. The very high overall mean underscores a strong professional commitment and a well-established performance culture within the polytechnic institutions studied.

Relationship between Knowledge-Management Dimensions and Work Performance

Pearson's correlation analysis was conducted to examine the relationship between overall knowledge management and overall work performance. As shown in Table 3, knowledge management was positively and significantly correlated with work performance ($r = 0.507$, $p < 0.001$). The correlation coefficient indicates a moderate positive relationship between the two variables. This suggests that lecturers who report stronger engagement in knowledge management practices also tend to demonstrate higher levels of work performance. The result confirms that knowledge management is meaningfully associated with performance outcomes within the polytechnic context.

Table 3: Pearson Correlation between Knowledge Management and Work Performance

Variable	Knowledge Management	Work Performance
Knowledge Management	1	0.507**
Work Performance	0.507**	1

Note: $r = 0.507$, $p < 0.001$ (two-tailed). ** indicates significance at the 0.01 level.

Multiple Regression Analysis

A multiple regression analysis was conducted to examine the extent to which the three knowledge management dimensions predict lecturers' work performance. As presented in Table 4, the regression model was statistically significant, $F(3,316) = 44.553$, $p < 0.001$, indicating that the set of predictors reliably explains variation in lecturers' performance. The model accounted for 29.7% of the variance in work performance ($R^2 = 0.297$; Adjusted $R^2 = 0.291$), suggesting that knowledge management practices represent an important organisational factor influencing lecturers' work outcomes.

Among the three predictors, knowledge reliability emerged as the strongest contributor to work performance ($\beta = 0.455$, $p < 0.001$). This finding suggests that when lecturers perceive the knowledge systems, information resources, and institutional support mechanisms to be dependable and accessible, their ability to perform professional tasks improves significantly. Communication and knowledge sharing also demonstrated a significant positive influence on work performance ($\beta = 0.283$, $p < 0.001$). This indicates that lecturers who actively exchange ideas, collaborate with colleagues, and engage in professional dialogue tend to perform more effectively in their academic roles. In contrast, organisational knowledge did not show a statistically significant effect on work performance ($\beta = -0.029$, $p = 0.707$). Although familiarity with organisational processes and institutional knowledge remains important for operational functioning, the present findings suggest that this factor alone does not directly translate into improved performance when the other knowledge management dimensions are taken into account.

The results presented that lecturers' performance is particularly influenced by the reliability of institutional knowledge resources and the extent to which knowledge is communicated and shared within the organisation.

Table 4: Multiple regression analysis predicting lecturers' work performance

Predictor (Knowledge Management Dimension)	B (Unstandardised)	SE	β (Standardised)	t	p-value
Constant	1.827	0.221	—	8.283	< 0.001
Organisational Knowledge	-0.025	0.066	-0.029	-0.377	0.707
Knowledge Reliability	0.432	0.069	0.455	6.294	< 0.001**
Communication and Knowledge Sharing	0.208	0.038	0.283	5.479	< 0.001**

Model summary: $R^2 = 0.297$ and Adjusted $R^2 = 0.291$; $F(3,316) = 44.553$, $p < 0.001$

Note: $p < 0.01$ (two-tailed)

The findings indicate that knowledge management practices play a meaningful role in shaping lecturers' work performance within Malaysian polytechnics. Descriptive results showed that lecturers reported high levels of knowledge management engagement and very high levels of work performance. Correlation analysis further revealed a significant positive relationship between overall knowledge management and work performance. The regression results provided more detailed insight, demonstrating that knowledge reliability and communication and knowledge sharing significantly predict lecturers' performance, while organisational knowledge does not exert a direct influence. These findings suggest that the effectiveness of knowledge systems and the active exchange of professional knowledge among lecturers are critical drivers of performance in the polytechnic context.

Discussion And Conclusion

The present study provides empirical evidence on the role of knowledge management in shaping lecturers' work performance within Malaysian polytechnic institutions. By examining the level of knowledge management practices, the level of work performance, the relationship between these variables, and the predictive influence of specific knowledge management dimensions, the study contributes to a growing body of literature highlighting the importance of knowledge-driven organisational environments in higher education (Budur et al., 2024a). The findings indicate that knowledge management practices are strongly embedded within the professional routines of lecturers and that selected knowledge management dimensions significantly influence their work performance. These findings provide important insights into how knowledge processes operate within the Technical and Vocational Education and Training (TVET) context, particularly in Malaysian polytechnics where teaching, industry engagement, and applied learning are central institutional functions.

The descriptive results revealed that knowledge management practices among polytechnic lecturers are consistently high across all three dimensions examined: organisational knowledge, knowledge reliability, and communication and knowledge sharing. The overall mean score for knowledge management ($M = 4.09$) indicates that lecturers regularly engage in activities related to acquiring, using, and disseminating knowledge within their professional environment. This finding suggests that knowledge management practices are not merely theoretical organisational constructs but are actively embedded in lecturers' daily academic activities. In teaching-intensive institutions such as polytechnics, lecturers must continuously update

technical knowledge, adapt teaching strategies, and collaborate with colleagues to ensure that curricula remain relevant to industry requirements. The high level of knowledge management engagement observed in this study, therefore, reflects the practical demands placed upon lecturers working in vocational education systems.

Among the knowledge management dimensions, knowledge reliability recorded the highest mean score. This result indicates that lecturers perceive institutional knowledge systems, digital platforms, and information resources to be dependable and accessible. In modern higher education environments, particularly those influenced by digital transformation, reliable access to knowledge resources is essential for effective teaching and professional practice. Lecturers rely on institutional knowledge repositories, electronic learning platforms, and collaborative systems to prepare teaching materials, share pedagogical strategies, and maintain academic standards. When these systems are reliable and accessible, lecturers are better able to perform their duties effectively (Sarmiento & Riana, 2024). The importance of reliable knowledge infrastructure is consistent with the knowledge-based view of organisations, which emphasises the strategic role of knowledge systems in supporting individual and organisational performance (Grant, 2016). Within higher education institutions, such systems facilitate knowledge creation, dissemination, and application, thereby enhancing the effectiveness of academic work processes.

Organisational knowledge also recorded a high mean score, suggesting that lecturers possess strong awareness of institutional practices, organisational procedures, and shared professional norms. This finding indicates that lecturers are well integrated within the organisational structures of their institutions and have developed a clear understanding of how knowledge flows within the academic environment. Organisational knowledge is particularly important in complex institutional settings where collaboration across departments, programmes, and administrative units is required. When lecturers possess strong organisational knowledge, they are better able to coordinate teaching activities, participate in institutional initiatives, and contribute to collective academic goals. This result aligns with knowledge management research emphasising the importance of organisational memory and institutional learning in sustaining academic effectiveness (Nonaka & Takeuchi, 1995; Kianto et al., 2016).

The dimension of communication and knowledge sharing also demonstrated a high level of engagement among lecturers. This finding highlights the collaborative nature of academic work within polytechnic institutions. Teaching and curriculum development often require lecturers to exchange ideas, share pedagogical practices, and collectively solve instructional challenges. Knowledge sharing enables lecturers to learn from one another, improve teaching quality, and adopt innovative instructional approaches. Previous studies have emphasised that knowledge sharing represents one of the most critical mechanisms through which knowledge management contributes to organisational performance (Sahibzada et al., 2022). In educational institutions, knowledge sharing not only facilitates professional learning but also strengthens collegial relationships and collaborative teaching cultures. The high level of knowledge sharing observed in this study therefore reflects the collaborative academic environment within Malaysian polytechnics.

In addition to examining knowledge management practices, the study also assessed lecturers' work performance. The findings revealed that lecturers reported a very high overall level of work performance, with an overall mean score of 4.36. This indicates that lecturers perceive themselves as performing effectively in their professional roles. Among the three performance

dimensions, professional performance recorded the highest mean score. This suggests that lecturers consistently demonstrate professional responsibility, accountability, and commitment to their academic duties. Professional performance encompasses behaviours such as maintaining instructional quality, fulfilling administrative responsibilities, and adhering to institutional standards. The high level of professional performance observed in this study reflects the strong professional culture within Malaysian polytechnic institutions.

Work self-development also recorded a very high mean score, indicating that lecturers actively invest in improving their professional knowledge and skills. Continuous professional development is essential within vocational education environments where technological changes and industry developments require lecturers to remain updated with emerging knowledge and competencies. Lecturers who actively pursue self-development opportunities are better positioned to integrate new knowledge into their teaching practices and to maintain the relevance of their instructional content. This finding aligns with previous research highlighting the importance of professional learning and skill development in enhancing academic performance (Wahyudi, 2022; Younus & Zaidan, 2022).

The dimension of work efficiency also recorded a high mean score, suggesting that lecturers generally perform their duties effectively and manage their workload efficiently. Work efficiency involves completing tasks in a timely manner, organising work responsibilities effectively, and maintaining productivity within the academic environment. Although this dimension recorded a slightly lower mean score compared with the other performance dimensions, the overall results still indicate a strong performance culture among lecturers. These findings collectively demonstrate that polytechnic lecturers perceive themselves as performing at high levels across multiple aspects of their professional responsibilities.

Beyond descriptive findings, the correlation analysis revealed a statistically significant positive relationship between knowledge management and work performance. The Pearson correlation coefficient ($r = 0.507$) indicates a moderate positive association between the two variables, suggesting that lecturers who report stronger engagement in knowledge management practices also tend to demonstrate higher levels of work performance. This finding provides empirical support for theoretical arguments emphasising the role of knowledge management as a driver of organisational performance. According to the knowledge-based view of the firm, knowledge represents a strategic organisational resource that enhances individual capabilities and organisational outcomes when effectively managed (Grant, 2016). Within educational institutions, knowledge management practices enable lecturers to access relevant information, collaborate with colleagues, and develop innovative teaching strategies, all of which contribute to improved professional performance.

The positive relationship observed in this study is consistent with previous research conducted in higher education contexts. For example, studies have shown that effective knowledge management practices are associated with higher levels of academic productivity, improved teaching quality, and stronger professional engagement among lecturers (Sahibzada et al., 2022; Ajmal et al., 2025). When lecturers actively participate in knowledge creation, sharing, and application processes, they are more likely to develop effective teaching strategies, solve instructional problems, and contribute to institutional learning. These processes ultimately enhance the quality of teaching and the effectiveness of academic work. The correlation results therefore reinforce the argument that knowledge management practices represent an important organisational mechanism for supporting lecturer performance.

The regression analysis provided further insight into the specific knowledge management dimensions that influence lecturers' work performance. The regression model was statistically significant and explained approximately 29.7 percent of the variance in work performance. This indicates that knowledge management practices represent a meaningful organisational factor influencing lecturers' professional outcomes. Although a substantial proportion of performance variance remains unexplained, the results demonstrate that knowledge management practices play a significant role in shaping lecturers' work effectiveness.

Among the predictors, knowledge reliability emerged as the strongest determinant of lecturers' work performance. This finding suggests that the dependability and accessibility of institutional knowledge systems significantly influence lecturers' ability to perform their duties effectively. When lecturers trust the accuracy and availability of knowledge resources, they can access relevant information more efficiently and apply it effectively in their teaching practices. Reliable knowledge systems also reduce uncertainty and enable lecturers to focus on instructional activities rather than searching for information. This result highlights the importance of developing robust knowledge infrastructures within higher education institutions.

Communication and knowledge sharing also demonstrated a significant positive influence on lecturers' work performance. This finding emphasises the importance of collaborative knowledge processes in supporting academic effectiveness. When lecturers share ideas, exchange experiences, and collaborate on instructional strategies, they collectively enhance their professional competence. Knowledge sharing enables lecturers to learn from each other's expertise, adopt innovative teaching practices, and address instructional challenges more effectively. Previous studies have emphasised that knowledge sharing represents a key mechanism through which knowledge management contributes to organisational learning and performance improvement (Nonaka & Takeuchi, 1995; Kianto et al., 2016). The present findings reinforce this perspective by demonstrating that communication and knowledge sharing significantly predict lecturers' work performance within the polytechnic context.

Interestingly, organisational knowledge did not demonstrate a statistically significant influence on work performance when considered alongside the other predictors. Although organisational knowledge reflects lecturers' understanding of institutional processes and practices, the results suggest that this knowledge alone may not directly translate into improved performance outcomes. Instead, the findings indicate that dynamic knowledge processes such as reliable knowledge access and active knowledge sharing play a more influential role in shaping lecturers' performance. This interpretation is consistent with research suggesting that knowledge utilisation and interaction processes often have stronger performance implications than static knowledge possession (Otache & Inekwe, 2022).

The findings of this study have important implications for institutional leadership within polytechnic education. First, the results highlight the need to strengthen institutional knowledge infrastructure to ensure reliable access to information and learning resources. Universities and polytechnics increasingly rely on digital systems for knowledge storage, dissemination, and collaboration. Ensuring that these systems are reliable and user-friendly can significantly enhance lecturers' ability to perform their academic duties. Second, the findings underscore the importance of fostering a collaborative organisational culture that encourages knowledge sharing among lecturers. Institutional leaders may consider implementing structured knowledge-sharing initiatives such as communities of practice, collaborative teaching forums,

and professional learning networks. Such initiatives can facilitate the exchange of pedagogical knowledge and strengthen professional collaboration within academic departments.

In addition to organisational implications, the findings also contribute to the broader literature on knowledge management in higher education. Much of the existing research on knowledge management has focused on research universities or corporate organisations. Comparatively fewer studies have examined knowledge management practices within vocational higher education institutions. By focusing on Malaysian polytechnics, this study extends knowledge management research into a context where applied learning and industry relevance are central institutional priorities. The results demonstrate that knowledge management practices are equally relevant in teaching-intensive institutions and can significantly influence lecturers' professional performance.

Despite these contributions, several limitations should be acknowledged. First, the study relied on self-reported measures of knowledge management and work performance. Although such measures provide valuable insight into lecturers' perceptions and experiences, they may also be influenced by social desirability or response bias. Future studies could incorporate objective performance indicators or supervisor evaluations to complement self-reported data. Second, the cross-sectional research design limits the ability to establish causal relationships between knowledge management practices and work performance. Longitudinal studies could provide deeper insight into how knowledge management practices influence lecturers' performance over time. Third, the study focused exclusively on polytechnic institutions in Selangor and the Federal Territory. While these institutions represent an important segment of the Malaysian TVET sector, future research could expand the scope to include polytechnics in other regions or other types of higher education institutions.

Overall, the findings of this study highlight the strategic importance of knowledge management in supporting lecturers' professional performance within polytechnic institutions. The results demonstrate that reliable knowledge systems and active knowledge sharing practices play a particularly important role in enhancing lecturers' effectiveness. As higher education institutions continue to operate within increasingly knowledge-intensive environments, the ability to manage and utilise knowledge effectively will remain a critical determinant of institutional performance and academic excellence.

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