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Defining the Strategic Relationship of Competency Dimensions and Organisational Performance among Academic Librarians in Malaysia

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Abstract

This study investigates the strategic relationship between competency dimensions and organisational performance among academic librarians in Malaysia. Academic librarians play a pivotal role in supporting the educational and research objectives of institutions. Understanding how various competency dimensions, such as information literacy, technology proficiency, communication skills, and management capabilities, affect the overall performance of academic librarians can provide valuable insights for enhancing academic librarian effectiveness and institutional success. The results of the study found a strong positive relationship between professional competencies and personal qualities. A moderate correlation with organisational performance, highlighting their combined importance in enhancing institutional outcomes.

Keywords: Competencies; organisational performance; academic librarians;

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1.0 Introduction

The competencies among academic librarians in Malaysia have evolved significantly since the establishment of formal education systems in the country. These institutions primarily focused on traditional roles, such as collection development, cataloguing, and providing access to printed materials. Over the years, as educational institutions grew and diversified, academic librarians expanded in scope, adapting to meet the changing needs of competencies and performance in various disciplines (Abu Bakar, 2017).

In the digital age, academic librarians have transformed dramatically. Embraced new technologies, offering guidance on digital literacy and research skills, ensuring that users can effectively navigate and critically assess information in a rapidly changing information landscape (Negulescu, 2019).

The importance of librarians in information management and academic support has never been more pronounced. They are essential partners, collaborating with faculty and researchers to develop tailored information resources that enhance teaching and learning outcomes (Lyles, 2014). In this manner, they not only support the academic community but also play a crucial role in shaping future scholars who can engage thoughtfully with the ever-increasing volumes of information available in the digital age (Negulescu, 2019).

2.0 Literature Review

Numerous studies have demonstrated the importance of competency in fostering overall organisational success, making it a crucial criterion for assessing librarian effectiveness. Librarians equipped with the appropriate competencies are better positioned to support institutional goals effectively.

It plays a vital role in organisational performance, fostering a collaborative work environment and guiding effective team dynamics. Research highlights that achieving positive outcomes in team settings often requires emotional engagement and empathy as well as interpersonal competencies that enable individuals to address challenges professionally and constructively.

Competency development and evaluation are recognised as reliable indicators of job performance within an organisation (Wong, 2020). Competency is the standard by which academic librarians are judged. In this study, technical skills, human skills, and conceptual abilities are the three components of academic librarian competencies (Cottrell, 2017).

Organisational performance is broadly defined as the extent to which an organisation can strategically position itself in the marketplace by leveraging its informational, financial, and human resources. The ability of the organisation to adjust to changing external circumstances is a major determinant of its effectiveness. Adaptability is increasingly vital in fast-changing environments where traditional roles and expectations are being redefined.

A significant challenge faced by many library institutions is the shortage of adequately trained IT professionals. This gap in digital competencies often results in employees lacking the necessary qualifications to meet the evolving demands of modern library systems. As libraries transition into the Library 4.0 era, characterised by the integration of advanced technologies such as automation, artificial intelligence, and data analytics, the demand for a digitally competent workforce has become increasingly urgent.

The organisational performance of academic librarians in Malaysia has been a focus of various studies, with specific attention given to their competencies and personal attributes, cultural intelligence, quality of work life and knowledge performance (Frankiewicz, 2020). Studies examining the relationship between organisational learning capabilities and knowledge performance among academic librarians highlight the need for ongoing professional development to improve performance. This study emphasises the importance of competencies in collectively enhancing the performance of academic librarians in Malaysia.

3.0 Methodology

This study adopts a quantitative descriptive research design which enables the collection and analysis of numerical data to describe patterns, trends, and relationships among variables relevant to the research objectives. The selection of a quantitative technique ensures objectivity and the possibility of generalizability of results by enabling the use of questionnaires to collect data from a wider sample.

The study is both exploratory and descriptive. The exploratory component aims to investigate relatively under-researched aspects of the strategic relationship of the competencies dimensions and organisational performance, particularly focusing on the challenges related to IT competencies and professional development among librarians. This aspect helps to identify key variables and constructs that may influence organisational outcomes in the digital transformation context.

The descriptive component of the research focuses on systematically presenting the current state of librarians' skills, personal attributes, and organisational readiness for technological change. Data will be collected through validated survey instruments distributed to library professionals. The responses will be statistically analysed using descriptive statistics and, where applicable, inferential methods to examine relationships and differences across groups.

Selected academic librarians from 20 public university libraries in Malaysia were emailed questionnaires via Google Forms. The respondents included academic librarians in grades S41, S44, S48, S52, S54, and JUSA C. These grades represent a range of seniority and experience levels, ensuring a diverse and representative sample of the academic librarian workforce for this study.

3.1 Examining the strategic relationship between competencies and organisational performance effectiveness. Consequently, the following theories were examined:

- H1: Competencies are significantly related to Satisfaction.
- H2: Competencies are significantly related to Accomplishment.
- H3: Competencies are significantly related to Transformation.

4.0 Results

4.1 Demographic Profile

The respondents' demographic profile is shown in Table 1. There were 168 women and 172 men among the 240 respondents. The largest age group is 35–39, with 80 individuals (33.3%), while the smallest is under 24, with only 1 individual (0.4%). Only a few respondents are in grade JUSA, whereas 174 are in grade S44. A master's degree is the highest reported education level for 58.8% of respondents, while only 1.3% hold a doctorate, the lowest percentage.

Table 1. Demographic Profile

Demographic Data		Frequency	Percentage (%)
1. Gender	Male	68	28.3%

2. Age of Working Experience	Female	172	71.7%
	<24	1	0.4%
	6-10	38	15.8%
	11-15	94	39.2%
	16-20	61	25.4%
3. Grade	21-25	26	10.8%
	26-30	11	4.6%
	55-59	9	3.8%
	S41	42	17.5%
	S44	147	61.3%
	S48	32	13.3%
	S52	14	5.8%
4. Highest Education Level	S54	4	1.7%
	JUSA C	1	0.4%
	Bachelor's Master	95	39.6%
	Doctorate	3	1.3%

4.2 Reliability Analysis

The reliability analysis of 70 questionnaire items using Cronbach's alpha is presented in Table 2. A value of 0.70 or higher was considered acceptable for scale reliability. As shown in Table 2, the instrument comprises six dimensions and twelve sub-dimensions. The findings indicate high reliability of the entire instrument for further research. Respondents demonstrated sufficient understanding to answer all items on the questionnaire.

Table 2. Summary of Reliability Analysis

Dimensions	Variables	Number of Item in a Component	Cronbach Alpha
Technical Skills	Computer Skills	4	0.882
	Library System Skills	6	0.928
	Overall	10	0.984
Human Skills	Creativity Skills	5	0.964
	Communication Skills	5	0.974
	Managing Conflict Skills	5	0.976
	Overall	15	0.977
	Organisational Skills	5	0.968
Conceptual Skills	Strategic Thinking Skills	5	0.979
	Innovative Skills	5	0.978
	Problem-Solving Skills	5	0.966
	Overall	20	0.984
Competencies		45	0.987
Organisation Performance	Satisfaction	5	0.939
	Accomplishment	5	0.956
	Transformation	5	0.952
	Overall	15	0.964

4.3 The Strategic Relationship between Competencies Dimensions and Organisational Performance

Correlation analyses were conducted to determine whether the competencies dimension, which includes technical, human, and conceptual skills, is significantly correlated with organisational success. This section focuses on examining the relationship between competency dimensions and organisational performance. The Pearson correlation coefficient, a parametric statistical tool, was used because the variables were found to be normally distributed. Tables 3 to 6 present the summary statistics of the correlation analysis.

Table 3. Summary Statistics of Correlation Analysis between Satisfaction and Competencies

Dimensions	Sub-dimensions	Pearson Coefficient of Correlation (<i>r</i>)	<i>p</i> -value
Technical Skills	Computer Skills	0.612	0.000**
	Library System Skills	0.564	0.000**
	Overall	0.607	0.000**
Human Skills	Creativity Skills	0.652	0.000**
	Communication Skills	0.583	0.000**
	Managing Conflict Skills	0.613	0.000**
	Overall	0.669	0.000**
	Organisational Skills	0.690	0.000**
Conceptual Skills	Strategic Thinking Skills	0.702	0.000**
	Innovative Skills	0.648	0.000**
	Problem-Solving Skills	0.694	0.000**
	Overall	0.738	0.000**
Competencies		0.725	0.000**

** Significant at 0.01

4.4 The Strategic Relationship Between Technical Skills and Satisfaction

Table 3 shows a positive and moderate correlation between satisfaction and technical abilities ($r = 0.607$; $p < 0.01$), library system skills ($r = 0.564$; $p < 0.01$), and computer skills ($r = 0.612$; $p < 0.01$). In other words, increased satisfaction is moderately related to the development of computer, library system, and technical skills. This suggested that respondents thought contentment was the most crucial factor and that it happened more often in their workplace.

4.5 The Strategic Relationship Between Human Skills and Organisational Performance

In contrast, Table 3 shows a positive and moderate correlation between satisfaction and human skills ($r = 0.669$; $p < 0.01$), communication skills ($r = 0.583$; $p < 0.01$), creativity abilities ($r = 0.652$; $p < 0.01$), and conflict management skills ($r = 0.613$; $p < 0.01$). In other words, there is a moderate correlation between increased satisfaction and improved creativity, communication, conflict resolution, and interpersonal skills.

4.6 The Strategic Relationship Between Conceptual Skills and Organisational Performance

Table 3 shows that organisational skills ($r = 0.690$; $p < 0.01$), inventive abilities ($r = 0.648$; $p < 0.01$), and problem-solving skills ($r = 0.694$; $p < 0.01$) are favourably and moderately connected with satisfaction. A moderate degree, improved organisational, creative, and problem-solving abilities are linked to higher levels of satisfaction.

Table 4. Summary Statistics of Correlation Analysis between Accomplishment and Competencies

Dimensions	Sub-dimensions	Satisfaction	
		Pearson Coefficient of Correlation (r)	p -value
Technical Skills	Computer Skills	0.559	0.000**
	Library System Skills	0.513	0.000**
	Overall	0.554	0.000**
Human Skills	Creativity Skills	0.599	0.000**
	Communication Skills	0.522	0.000**
	Managing Conflict Skills	0.601	0.000**
	Overall	0.635	0.000**
Conceptual Skills	Organisational Skills	0.616	0.000**
	Strategic Thinking Skills	0.659	0.000**
	Innovative Skills	0.620	0.000**
	Problem-Solving Skills	0.658	0.000**
Competencies	Overall	0.690	0.000**
		0.676	0.000**

** Significant at 0.01

4.7 The Strategic Relationship Between Technical Skills and Accomplishment

Computer abilities ($r = 0.559$; $p < 0.01$), library system skills ($r = 0.513$; $p < 0.01$), and general technical skills ($r = 0.554$; $p < 0.01$) are favourably and modestly connected with success, according to Table 4. Therefore, a moderate degree of correlation exists between a rise in accomplishment and an increase in computer abilities, library system skills, and general technical skills. This demonstrated that the librarians met the requirements for technical skills and at least basic competencies.

4.8 The Strategic Relationship Between Human Skills and Accomplishment

Additionally, Table 4 demonstrates a positive and moderate correlation between accomplishment and the following skills: communication skills ($r = 0.552$; $p < 0.01$), creativity skills ($r = 0.599$; $p < 0.01$), conflict management skills ($r = 0.601$; $p < 0.01$), and general human skills ($r = 0.635$; $p < 0.01$). As a result, there is a moderate correlation between increased accomplishment and improved communication, creativity, conflict resolution, and general human qualities.

4.9 The Strategic Relationship Between Conceptual Skills and Accomplishment

In contrast, Table 4 demonstrates that proficiency in organization ($r = 0.616$; $p < 0.01$), strategic thinking ($r = 0.659$; $p < 0.01$), innovation ($r = 0.620$; $p < 0.01$), problem-solving ($r = 0.658$; $p < 0.01$), and general conceptual skills ($r = 0.690$; $p < 0.01$) are all positively and moderately connected with accomplishment. Therefore, a moderate degree, a rise in achievement is linked to a rise in organisational abilities, strategic thinking abilities, creative abilities, problem-solving abilities, and general conceptual abilities.

Table 5. Summary Statistics of Correlation Analysis between Accomplishment and Competencies

Dimensions	Sub-dimensions	Accomplishment	
		Pearson Coefficient of Correlation (r)	p -value
Technical Skills	Computer Skills	0.559	0.000**
	Library System Skills	0.513	0.000**
	Overall	0.468	0.000**
Human Skills	Creativity Skills	0.564	0.000**
	Communication Skills	0.473	0.000**
	Managing Conflict Skills	0.555	0.000**
	Overall	0.577	0.000**
Conceptual Skills	Organisational Skills	0.579	0.000**

	Strategic Thinking Skills	0.605	0.000**
	Innovative Skills	0.560	0.000**
	Problem-Solving Skills	0.606	0.000**
	Overall	0.635	0.000**
Competencies		0.604	0.000**

** Significant at 0.01

4.10 The Strategic Relationship Between Technical Skills and Transformation

Computer abilities ($r = 0.449$; $p < 0.01$), library system skills ($r = 0.454$; $p < 0.01$), and general technical skills ($r = 0.468$; $p < 0.01$) are all favourably and somewhat connected with transformation, according to Table 5. Therefore, there is a moderate correlation between an increase in transformation and an increase in computer, library systems, and general technical skills.

4.11 The Strategic Relationship Between Human Skills and Transformation

As shown in Table 5, there is a positive and moderate correlation between transformation and the following talents: creativity ($r = 0.564$; $p < 0.01$), communication ($r = 0.473$; $p < 0.01$), conflict management ($r = 0.555$; $p < 0.01$), and general human skills ($r = 0.577$; $p < 0.01$). Therefore, a moderate degree, a rise in transformation is linked to a rise in communication, creativity, conflict resolution, and general human qualities.

4.12 The Strategic Relationship Between Conceptual Skills and Transformation

Organisational skills ($r = 0.579$; $p < 0.01$), strategic thinking skills ($r = 0.605$; $p < 0.01$), innovation skills ($r = 0.560$; $p < 0.01$), problem-solving skills ($r = 0.606$; $p < 0.01$), and overall conceptual skills ($r = 0.635$; $p < 0.01$) are all positively and moderately correlated with transformation, according to Table 5. Therefore, a moderate degree, an increase in transformation is linked to an improvement in organisational skills, inventiveness, strategic thinking, problem-solving abilities, and general conceptual abilities.

Table 6. Summary Statistics of Correlation Analysis between Organisational Performance and Competencies

Dimensions	Sub-dimensions	Organisational Performance	
		Pearson Coefficient of Correlation (r)	p -value
Technical Skills	Computer Skills	0.560	0.000**
	Library System Skills	0.514	0.000**
	Overall	0.554	0.000**
Human Skills	Creativity Skills	0.600	0.000**
	Communication Skills	0.553	0.000**
	Managing Conflict Skills	0.602	0.000**
	Overall	0.635	0.000**
Conceptual Skills	Organisational Skills	0.617	0.000**
	Strategic Thinking Skills	0.660	0.000**
	Innovative Skills	0.620	0.000**
	Problem-Solving Skills	0.659	0.000**
Competencies	Overall	0.691	0.000**
		0.677	0.000**

** Significant at 0.01

4.13 The Strategic Relationship between Technical Skills and Organisational Performance

Computer skills ($r = 0.560$; $p < 0.01$), library system skills ($r = 0.514$; $p < 0.01$), and total technical abilities ($r = 0.554$; $p < 0.01$) are favourably and modestly connected with organisational performance, according to Table 6. As a result, there is a moderate correlation between improved computer abilities, library system skills, and general technical skills and improved organisational performance.

4.14 The Strategic Relationship between Human Skills and Organisational Performance

Table 6 demonstrates a positive and moderate correlation between the performance of the organisational and the following qualities: creativity ($r = 0.600$; $p < 0.01$), communication ($r = 0.553$; $p < 0.01$), conflict management ($r = 0.602$; $p < 0.01$), and general human skills ($r = 0.635$; $p < 0.01$). Therefore, a moderate degree, improving an organisation's effectiveness is linked to improving its capacity for innovation, communication, dispute resolution, and general human abilities.

4.15 The Strategic Relationship between Conceptual Skills and Organisational Performance

Conceptual Skills favourably and modestly connected with enhanced organisational performance. As a result, an increase in human attributes and competencies is somewhat correlated with an increase in organisational performance. Statistical analysis further reveals that conceptual skills are positively correlated with key indicators of organisational transformation, accomplishment, and employee satisfaction. These results support the assertion that competencies dimensions contribute meaningfully to an organisation's ability to adapt, innovate, and meet strategic goals in a changing library environment. The three hypotheses that were developed are supported by all of these findings:

H1: Competencies are significantly related to Satisfaction.

H2: Competencies are significantly related to Accomplishment.

H3: Competencies are significantly related to Transformation.

5.0 Findings and Discussion

Pearson's Correlation Coefficient was used to investigate the connections between the different competency dimensions and organisational performance. The analysis revealed that all nine competency dimensions namely computer skills, library system skills, creativity skills, communication skills, conflict management skills, organisational skills, strategic thinking skills, innovative skills, and problem-solving skills showed moderate to significant positive correlations with organisational performance.

These results suggest that improvements in these individual competencies are associated with corresponding increases in perceived organisational effectiveness. In particular, respondents who rated employee competencies more favourably were also more likely to perceive the organisational as performing well. This finding reinforces the notion that a competent and skilled workforce plays a vital role in driving organisational success, especially in knowledge-intensive environments like academic libraries.

The results are further supported by the work of Contu (2020), who highlighted the critical role of professional competencies in fostering institutional adaptability and innovation. The moderate correlations also imply that while these skills are important, they function alongside other organisational factors in influencing performance.

Overall, the findings underscore the importance of continuous professional development, especially in the context of Library 4.0, where digital transformation is increasingly central to organisational objectives. Strengthening these competencies among librarians can contribute significantly to organisational transformation, satisfaction, and goal achievement.

The findings suggest that while there are moderate to strong positive correlations between human attributes and organisational performance, a portion of the variance in organisational performance remains unexplained by the current model. This indicates that other influencing factors not included in the present study may contribute significantly to the dependent variable.

Incorporating additional variables or components such as organisational culture, leadership style, technological infrastructure, or external environmental factors could enhance the explanatory power of the model and offer a more comprehensive understanding of the predictors of organisational performance.

This interpretation is consistent with the findings of Brix (2017), who emphasized that while human attributes play a pivotal role in performance improvement, a multifactorial approach is often necessary to develop robust predictive models for organisational outcomes.

6.0 Conclusion and Recommendations

The findings of this study confirm that the core competencies required by academic librarians in Malaysian public university libraries are largely consistent across institutions. This uniformity is likely influenced by the widespread integration of information technology which has led to common expectations and standards for fundamental library skills (Calavia, 2021). The study further reveals a positive relationship between librarians' competencies and organisational performance, affirming that enhanced professional skills contribute to improved service delivery, greater user satisfaction, and overall institutional effectiveness (Care, 2016).

These outcomes underscore the critical importance of investing in the professional development of librarians, as doing so directly impacts the ability of libraries to meet evolving user demands and support institutional goals (Chau, 2018). Strengthening competencies in areas such as digital literacy, communication, innovation, and problem-solving can position libraries more competitively within the information services landscape.

Recommendations for future research include extending the scope of the study to include support staff across various types of libraries in Malaysia. This broader focus would provide valuable insights into how globalisation and digital transformation affect the entire library workforce, not just professional librarians. Additionally, future models should consider incorporating other variables such as leadership style, institutional policies, or technological infrastructure to better explain variations in organisational performance and develop a more holistic understanding of success factors in this field.

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Paper Contribution to Related Field of Study

This paper aims to contribute to the development of a preliminary, empirically informed framework within the field of Information Science.

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