



IMPACT OF LIBRARY PROFESSIONALS' ONLINE INFORMATION RETRIEVAL SELF-EFFICACY ON MANAGEMENT CONTROL IN UNIVERSITY LIBRARIES

TARIQ RASHEED

PhD Scholar, Department of Information Management, University of Sargodha, Sargodha, Punjab, Pakistan

Email: tariqrasheed141@gmail.com

MUHAMMAD TARIQ LATIF

Sr. Librarian, Department of Libraries, Govt. College University Faisalabad, Punjab, Pakistan

Email: mtariqlatif@gcuf.edu.pk

Muhammad Asif

PhD Scholar, Department of Information Management, University of Sargodha, Sargodha, Punjab, Pakistan

Email: masif22143@gmail.com

SAKHAWAT ALI

(Corresponding Author)

Assistant Professor, Department of Information Management, Govt. College University, Faisalabad, Punjab, Pakistan

Email: sakhawatali@gcuf.edu.pk

Dr. SHAMSHAD AHMED

Professor, Department of Information Management, University of Sargodha, Sargodha, Punjab, Pakistan

Email: shamshad.ahmed@uos.edu.pk

Abstract

Purpose – The current study aims to examine the impact of library professionals' online information retrieval self-efficacy (OIRSE) on management control in university libraries of Pakistan.

Design/ methodology/approach – Grounded in Bandura's framework of self-efficacy (SE), the current research study examines the four main sources including vicarious experience, mastery experience, psychological states, and social persuasion. The study used the model to examine how these four factors impact the management control within university libraries. Research data was collected from library professionals working in the libraries of HEC recognized universities in Punjab and Islamabad by using a survey questionnaire. Multiple linear regression tests were used to assess the impact of independent variables including, vicarious experience, mastery experience, psychological states, and social persuasion on the dependent variable (management control).

Findings – The results of the study show that psychological states, mastery experience, and social persuasion significantly and positively impact the management control. Alternatively, vicarious experience did not illustrate a significant impact on management control. Among all four factors, physiological states



show a high impact on management control as compared to all other SE sources. Overall, the study highlights the pivotal role of OIRSE in contributing the effective management within the library.

Practical Implications – The outcomes of the research provide valued insights for devising training initiatives, programs for professionals' development, and organizational policies aimed at consolidating the library professionals' SE, which will promote the better management in university libraries.

Originality Value – The current study offer significant perceptions into various key factors shaping the process of information retrieval, leading them to effectively manage the everyday library tasks. This is an area that has not been examined thoroughly in the national or international context. This study is valuable because it adds to academic discussions and will likely improve effective management in libraries.

Keywords - Online information retrieval (OIR), Library management, Management control, Library professionals, Self-efficacy (SE), Information-seeking behavior

1 Introduction

Efficient management of time is a crucial aspect of work performance, including various tasks like planning, establishing priorities, and adherence to deadlines (Daniel & Santeli, 2020). Individuals who are adept in time management show enhanced efficiency in fulfilling various job responsibilities while mitigating the likelihood of experiencing burnout and stress (Allbaugh, 2023). Librarians are responsible for selecting, procuring, and managing library resources. Management of this collection includes different duties such as selecting library materials according to the needs of library patrons, weeding out irrelevant/outdated materials, and managing of budget as well (Mastur, 2023). The relevance of the collection management profoundly influences the efficacy of library services/offering (Jinendran Jain & Kumar Behera, 2023).

To improve their management control in libraries, Librarians must have a comprehensive understanding of the library's objectives, vision, mission, and patron demographics (Vijesh & Ganesan, 2024). Moreover, they also have knowledge about the patrons' needs and recent trends in the field. The Librarians can enhance the above skills by participating in various training sessions and workshops dedicated to management control (Asante & Ngulube, 2020).

The current research work is designed to explore the influence of online information retrieval self-efficacy (OIRSE) on the management control in the university libraries. The study investigates how the abilities and confidence of Librarians affect their capacity of information management and workflow optimization, which ensure that library services must meet the growing demands of researchers, faculty, and students. Understanding of this correlation is very important, as it sheds light on how developing these skills can strengthen library operations and foster innovation in the current digital environment.

2 Review of Literature

A comprehensive review of literature was conducted to ascertain the practical aspects, constructs, variables, methodologies, significance, and relevant concepts for a deep understanding of OIRSE and management control phenomena. Various research studies from managerial sciences, social sciences, psychology, and library and information sciences were examined to explain these concepts, exploring these numerous models and dimensions.

2.1 Concept of Self-efficacy

Bandura (1977) defined self-efficacy (SE) as a "theory of behavioral change" centered on person's confidence in its personal capabilities and actions. A stronger sense of SE helps people better handle life's challenges, such as managing failures, health problems, loss, changes, and trauma. This SE is referred to as "resilient efficacy". But how can this SE be attained? Efficacy

expectations pertain to individual beliefs about how they would feel and what outcomes they can achieve by following a specific course of action or behaving in a particular manner. Moreover, Bandura (1997) defined SE as credence in own capabilities to execute and organize the required courses of action for producing the given statements, which serve to check the individuals' capabilities to perform the specific activity and task to achieve the particular goals.

Serap Kurbanoglu (2003) discussed the concept of SE within the domains of continuous learning and information literacy. The author contends that SE plays a pivotal role in cultivating both lifelong learning and information literacy proficiencies. Moreover, the study furnishes an inclusive exploration of the SE concept, its interconnectedness with lifelong learning and information literacy, and the inherent value of fostering SE in individuals. Furthermore, it presented the strategies aimed to enhance SE concerning lifelong learning and information literacy, encompassing support programs and trainings. In essence, the study underscores the vital significance of SE in the evolution of lifelong learning abilities, while underscoring the active involvement of individuals in the enhancement of their own SE.

2.2 Online Information Retrieval Self-efficacy

Perceived SE of librarians may play a vital role in influencing their information searches, as behavior and emotions have an impact on successful information retrieval (Bronstein & Tzivian, 2013). Gaining the successful and accurate retrieval of information extends beyond simply identifying the sources of research articles and mastering searching techniques. Furthermore, researchers' SE and emotions also play a vital role to obtain the required information.

A Library professional's SE is a very important factor that effects information searching, as their behavior and emotions influence the successful retrieval of information. SE belief determines individuals' behavior, feelings, motivations, and thoughts (Bandura, 1986). Monoi et al. (2005) developed an assessment tool to gauge the SE concerning online search abilities. Their primary goal was to establish a valid and reliable instrument capable of measuring SE beliefs specifically related to online searching proficiencies. The development and validation of this inventory involved a comprehensive process, including interviews and surveys with librarians, graduate students, and faculty members. The resulting scale encompassed 22 items and exhibited strong validity and reliability. In conclusion, the authors suggested that this instrument could serve as an effective means to evaluate individuals' SE beliefs pertaining to online searching skills. Downey and McMurtrey (2007) developed a novel tool to measure the overall a task-based general computer SE. Researchers compared this scale with two previous general SE instruments. Findings of the study show that a task-based instrument is a significant predictive capability in order to computer usage. Furthermore, research highlights the necessity for domain-specific measurements within computer-related domains and underscores the significance of discerning distinct categories of SE assessments.

2.3 Online information retrieval self-efficacy and management control

The quick advancement in current digital technologies has changed the landscape of academic libraries, particularly in the domain of information retrieval. University libraries gradually relying on online resources and digital databases, the skills of library professionals to effectively access, navigate, and manage information has become very pivotal to overall efficiency in management.

In the setting of university libraries, where access to digital contents must be controlled and managed effectively, the Librarians' SE in information retrieval can have far reaching



implications. Management control refers to the ability whereas Librarians to streamline and oversee the operations, usage, optimize the resources, and maintain high quality delivery of services. The Librarians having higher SE in the retrieval of online information, they are more inclined to efficiently manage digital resources and implement new technologies, as well as contribute to the strategies/goals of the library.

Spanos et al. (2002) examined the correlation between management practices and the adoption of Information and Communication Technologies (ICT). Authors have developed a conceptual framework grounded in four key dimensions of management: structure, strategy, processes, and culture. Findings suggested that all four management dimensions significantly influence ICTs adoption. Notably, structure and strategy emerge as the most influential predictors of ICT adoption, while processes and culture, although slightly weaker, still demonstrate a meaningful effect. This research contributes to the present form of knowledge on the nexus between ICTs adoption and management by offering empirical insights and underscoring the significance of considering diverse management dimensions when studying this relationship. In another study, Jelinek et al. (2006) check that how various factors, encompassing contextual, individual, and organizational elements, influence the adoption of sales technology and subsequent job performance over an extended period. Both objective metrics and self-reports were employed to assess sales technology adoption and job performance. Findings underscored the significant impact of individual factors, including technology SE, perceived behavioral control, and job satisfaction, on job performance and sales technology adoption. Moreover, organizational factors such as managerial encouragement, support, and training identified as positive contributors to job performance and sales technology adoption. Additionally, contextual factors like market turbulence and competitive intensity are observed to moderate the relationship between job performance and sales technology adoption.

3 Problem Statement

During this current digital information environment, university libraries are increasingly relying on digital resources and databases for the provision of better library services to researchers, faculty, and students. As these resources are becoming more abundant and complex, the ability of Librarians to effectively manage and retrieve online information has a direct influence on the efficiency and quality of library services. Online information retrieval SE, or the belief of a persons' ability to successfully conduct online searches and retrieval, plays a pivotal role in shaping how library professionals perform these tasks. However, the correlation between management control and SE within university libraries and specifically how it impacts library professionals' capacity to manage digital resources and maintain service quality, remains underexplored.

Without a clear understanding of how OIRSE impact the university Librarians' management control, they may struggle to maximize the potential of their digital assets, leading to suboptimal use of resources, leading to inefficiencies, and challenges in meeting the growing expectations of faculty and students. Thus, there is a need to examine how OIRSE enhances management control, ultimately leading to better resource management, overall institutional performance, and innovation in services.



4 Research objectives and questions

The primary aim of the study was to examine the impact of OIRSE, focusing on vicarious experience, mastery experience, physiological states, and social feedback on the management control within university libraries. Specifically, the research study aimed to understand how these four factors impact the ability of Librarians to effectively manage the digital resources and databases. To accomplish this purpose, the current study articulated two key research questions: (1) To what extent do the four constructs of OIRSE (vicarious experience, mastery experience, physiological states, and social feedback) predict the improved management control in university libraries? (2) Which factor of these dimensions is the strongest predictor of enhanced management control in the library environment?

5 Research Design

To assess individuals' self-perceived information retrieval SE, the study adapted the Reader Self-Perception (RSP) created by Henk and Melnick (1995) and the Internet Self-Perception (ISP) developed by Hinson et al. (2003). It contains four dimensions of SE proposed by Bandura (1986). Based on Bandura (1986) research on perceived SE and its link to student performance, Henk and Melnick (1995) created the Reader Self-Perception Scale (RSPS).

After that in the study of Hinson et al. (2003), references to reading in the RSPS were modified to references related to Internet use, known as the Internet Self-Perception Scale (ISPS). In the current study, references about internet usage were modified to pertain to the information retrieval skills of library professionals. This adaptation led to the creation of the Information Retrieval Self-Perception Scale (IRSPS). Bronstein and Tzivian (2013), Bronstein (2014), Mohd Suki and Mohd Suki (2016) and Eldakar and Kenawy (2020) also utilized these factors in various cultural enquiries and contexts. Moreover, the instrument used to measure management control was adapted from Torkzadeh and Doll (1999), resulting in an 11-items questionnaire known as management control.

The total research population comprised of 560 library professionals (Punjab and Islamabad), and the researchers calculated the sample size by using Yamane's formula and thus the sample size was taken as 234.

Nevertheless, 64 individuals from the total population were either retired from service, changed their employment or study leave. Afterward, researchers created a systematic alphabetical list for the remaining 496 individuals of the population. Following this, the sampling interval (K) was determined by dividing the total number of available individuals on the desired sample size, e.g., $496/234=2.11$. According to the answer, every 2nd person on the list has been identified as our target respondent and contacted for data collection. Investigators circulated the survey tool to 248 Librarians according to a systematic alphabetical list. As a result, 224 inclusive questionnaires were received; 10 returned as incomplete or invalid, despite multiple attempts, 14 respondents did not provide feedback. Consequently, the remaining 224 were chosen using systematic random sampling for data processing in SPSS.

6 Results

Descriptive statistics revealed that library professionals have a notable level of SE regarding their OIR skills. The results in table 1 indicated that physiological states and mastery experiences were utmost significant influences on SE beliefs, both with a mean value of 3.97. In contrast, social



feedback and vicarious experiences were the least influential factors, with mean values of 3.52 and 3.47, respectively.

Table 1 *Values of various factors*

Factors	No. Of Items	Mean	SD	Cronbach's		
				α	Skewness	Kurtosis
Mastery Experience	12	3.97	.65	.898	-1.820	4.594
Vicarious Experiences	03	3.47	.63	.737	-.355	.237
Physiological States	06	3.97	.67	.901	-.861	1.596
Social Persuasion	04	3.52	1.03	.927	-.252	-.837
Management Control	11	4.12	.60	.947	-.914	1.144

Additionally, the descriptive statistics for the variables were analyzed for their kurtosis and skewness values. The skewness values, which ranged from -0.25 to -1.82, were all within the acceptable threshold of ± 2.0 . Similarly, the kurtosis values, ranging from 0.23 to 4.59, were well below the ± 10 limit. These results suggest a normal distribution for the data.

6.1 Correlation Analysis

The Pearson product-moment correlation coefficient test was employed to evaluate the interconnection among constructs, namely mastery experience, physiological state, vicarious experience, social feedback, and management control of Librarians. Before conducting Pearson correlation, preliminary analyses were performed to ensure no violation of the assumption of normality, linearity, and Homoscedasticity. The correlation coefficient results presented in Table 2 reveal the relationship, direction of the relationship, strength of the relationship, and calculation of the coefficient of determination among mastery experience, physiological state, vicarious experience, social feedback, and management control of library professionals' exhibits statistically significant correlations at the 0.01 level.

Overall, a statistically significant positive correlation was observed between management control and four proportions of OIRSE, fluctuating from .319-.442 when $n=224$, $p<.0005$. Furthermore, coefficient values displayed in the table indicate the strength of the relationship; the outcomes underscore that physiological states hold a moderate and medium correlation regarding management control of librarians ($r = .442$), tracked by social feedback ($r = .441$) and vicarious experience ($r = .332$). Subsequently, the construct of mastery experience ($r = .319$) validates a minor correlation regarding management control of librarians. According to Lind et al. (2021), the correlation coefficient, denoted as r , ranges from -1.00 to +1.00. A value of +1.00 signifies a perfect positive correlation, while a value of -1.00 indicates a perfect negative correlation. The strength of the relationship is categorized by the magnitude of r : a value between 0.10 and 0.29 suggests a weak correlation, 0.30 to 0.49 indicates a moderate correlation, and 0.50 to 1.00 represents a strong correlation.

The largest amount of variance, 20% in the Librarians scores concerning management control, can be attributed to psychological states. Additionally, social feedback accounts for nearly 19% and vicarious experience 11% of the variance in respondents' scores related to management control. These percentages explained the considerable amount of variance particularly, when



compared to previous research related to the social sciences. Conversely, mastery experience explains the lowest amount of variance at 10% in the context of management control.

These findings align with the predicted connection between mastery experience, physiological state, vicarious experience, social feedback, and management control of library professionals. Consequently, psychological states play a considerable role and are an important component in forecasting the management control of Librarians in this regard.

Table 2 Association between management control and four extents of OIRSE factors

Variables	CS	Master y	Vicario us	Physiologic al	Socia l	P	r ²
C Satisfaction	1.000					.000	10
Mastery	.319**	1.000				.000	%
Vicarious	.332**	.250**	1.000			.000	11
Physiological	.442**	.288**	.346**	1.000		.000	%
Social	.441**	.291**	.490**	.467**	1.000	.000	19
							%

6.2 Multicollinearity, Outliers, Normality, Linearity, Homoscedasticity, Independence of Residuals

Researchers assessed multicollinearity by examining the Variance inflation factors (VIF) and tolerance values. Specifically, tolerance values below 0.10 and VIF values exceeding 10 would show multicollinearity issues. On the other hand, VIF values for all the independent variables ranged from 1.14 to 1.54, well below the threshold of 10, while the value of tolerance ranged from 0.64 to 0.87, comfortably above the cut-off value of 10. These findings show that multicollinearity was not present in the model.

Outliers were also identified by using the analysis of the scatter plot shown in Figure 1. In a scatter plot, **outliers** are data points with values below -3.3 or above 0.3. When only a few outliers are present, no drastic action is needed. The normal probability plot (Figure 1) shows a clear linear trend, suggesting that the data is normally distributed. Moreover, the scatter plot confirms the model adequacy, as the scores are cantered with minimal deviations from the expected pattern.

6.3 Evaluating the model

To investigate the direct influence of the four sources of OIRSE (mastery experience, physiological state, vicarious experience, and social feedback) on management control, researchers used linear regression analysis. In this analysis, SE sources are considered as independent predictor variables, with management control as the dependent variable. In Table 3, check the value of the Model summary box located under the heading of R square. This value tells you signify the model, including mastery experience, physiological state, vicarious experience, and social feedback which explains the proportion of variance in the dependent variable (management control). The value of R square is .295, which shows as a percentage (multiplying by 100, shifting the decimal point two places to the right). This will depict that our model including mastery experience, physiological

state, vicarious experience, and social feedback, accounts for 29.5 of the variance in management control. This is a reasonable outcome, especially when compared to the findings of other academic studies.

The Durbin–Watson statistic, which ranges from 0 to 4, was used to test for autocorrelation in the error terms. A value between 0 and 2 suggests a tendency toward positive autocorrelation. The calculated Durbin–Watson value of 1.992 indicated non-independence among the errors. Additionally, the regression model's results were statistically significant, as shown by a substantial F ratio ($F = 22.925, p < 0.001$), suggesting that the findings were not due to random chance. Therefore, the statistical model was considered a good fit for the data.

6.4 Evaluating Each of the Independent Variables

Table 3 presents the results of multiple linear regression analysis. The unstandardized beta (β) coefficients linked to the predictor variables were found to vary between .093 and .248. The equation for multiple linear regressions is formulated as follows: 1.684 (Librarians' management control after OIRSE), .153 (mastery experience), .093 (vicarious experience), .248 (psychological states), and .144 (social persuasion).

Researchers also sought to compare the influence of independent variables on a uniform scale by employing the standardized coefficient values. In Table 3, the beta coefficient of .258 for psychological states was the most substantial, indicating its significant contribution to explaining the management control of library professionals, even when considering other variables in the model. Social persuasion and mastery experience had slightly lower beta values of .231 and .155, respectively, suggesting a comparatively less distinct contribution. The vicarious experience variable, with a beta of .091, was not a significant contributor to the model ($p > 0.05$). The findings emphasize that three variables, mastery experience, psychological states, and social persuasion, hold significant and distinct importance in predicting library professionals' management control. However, vicarious experience does not carry the same level of significance.

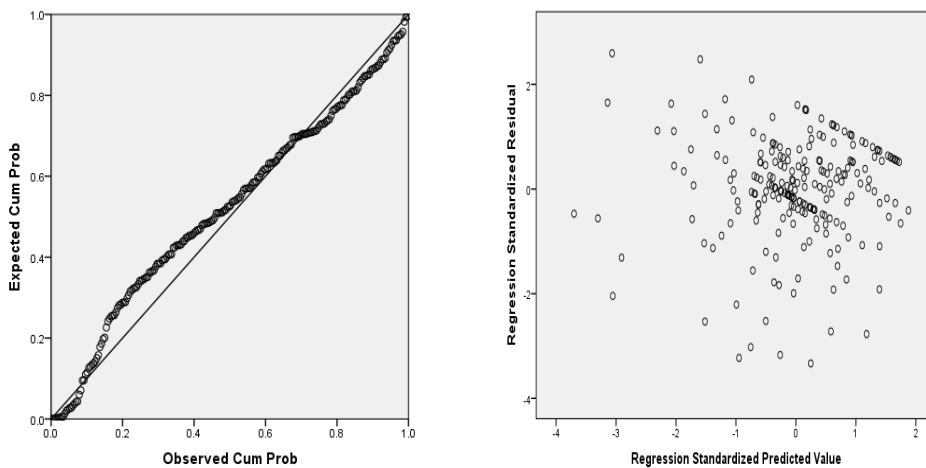
The findings presented here offer valuable insights for addressing the study's hypotheses. The proposed model, which includes social persuasion, mastery experience, psychological states, and vicarious experience, accounts for 29.5% of the variance in the management control of Librarians. Among these, psychological states emerged as the most significant unique contributor ($\beta_1 = .258, t = 3.922, p < 0.05$). Additionally, both social persuasion ($\beta_1 = .231, t = 3.275, p < 0.05$) and mastery experience ($\beta_1 = .155, t = 2.550, p < 0.05$) significantly influenced management control. In contrast, vicarious experience ($\beta_1 = .091, t = 1.374, p > 0.05$) did not appear to have a significant effect.

Table 3 Regression outcomes

	Unstandardized Coefficients		Standardized Coefficients	Co linearity statistics			
	B	Std. Error		B	T	Sig.	Tolerance
Constant	1.684	.301		5.598	.000		
Mastery	.153	.060	.155	2.550	.011	.876	1.141

Vicarious	.093	.068	.091	1.37	.171	.734	1.362
Physiological	.248	.063	.258	3.92	.000	.744	1.345
Social	.144	.044	.231	3.27	.001	.648	1.542
R2	.295						
F	22.925						
p-value	.000						
Durbin-Watson	1.992						

Figure 1 Normal probability and Scatterplot of management control



7 Discussion

Findings of the study confirmed that university library professionals perceived themselves as proficient in management control. The descriptive statistics derived from collected data indicates that Librarians expressed agreed with all eleven statements and had a mean score close to or above 4.00 in relation to management control. This score is considered a high-level average score. Moreover, values of standard deviation provide insights in to the respondents' consistency in their opinion. Among all eleven statements, eight statements had a mean score above 4.00, and the remaining three were slightly below 4.00. According to the opinion of library professionals' OIRSE helps them to control the managerial process in their library, which leads to increase their work performance.

The hypothesis was tested using a multiple linear regression analysis. The results showed that mastery experience has a significant and positive effect on library professionals' management control ($p < 0.05$). This finding is consistent with previous research by Mohd Suki and Mohd Suki (2016) and Bronstein and Tzivian (2013), who found that personal self-evaluation positively influences users' emotions during information retrieval. However, these findings contrast with the results obtaining from other studies where personal self-evaluation identified as the main



contributor to SE scores. This was observed in studies of individuals making science-based career choices (Lopez & Lent, 1992), immigrant and Anglo-Saxon adolescents (Klassen, 2004), Business executives searching for official information (Ren, 1999), and algebra students (Monoi et al., 2005). The Librarians' efficiency in retrieving the required articles and information pertains to their capacity to locate research articles efficiently, whether accessing databases from their homes or from a central library. As the process becomes easier and streamlined, personal self-evaluation of mastery experience is positively and significantly influenced by the emotions generated through these experiences.

When library professionals encounter difficulty in locating their desired information, they patiently modify and adapt their search strategies to address the difficult challenges and access relevant information. Bechwati and Xia (2003) noted that people feel pride and joy when they successfully retrieve the relevant and required information. To enhance personal SE, institutions should introduce various training programs for the effective utilization of OIR systems. Previous investigations illustrates that proper training of individuals encourages and increased their utilization of digital resources for retrieving current and latest information (Lai & Wang, 2012).

Conversely, the results showed no significant relationship between vicarious experience and the management control of librarians after OIR. In reality, Librarians often have more expertise in searching and retrieving required information and research articles more effectively than their counterparts do. Findings are consistent regarding the results of (Mohd Suki & Mohd Suki, 2016). However, Morris and Usher (2011) found that vicarious experience had minimal impact on the failure or success in attaining awards for personal achievements.

Another noteworthy finding was the impact of physiological states on the librarians' management control following the OIR. This aspect shows that library professionals derive satisfaction from locating and retrieving the required information from various databases, feeling better by the process and overall the management of a library. The findings of the study matched with the findings of Mohd Suki and Mohd Suki (2016) who founds that physiological states effect the feelings of the patrons of library. On the other hands, these findings contrast with the results of previous studies conducted by Flavián-Blanco et al. (2011), who confirmed that affective or physiological states were related with emotions like frustration and regret following by information retrieval.

Another notable finding underscored the influence of social feedback on the management control of Librarians. This factor highlights the important role of library professionals' social feedback in shaping their perceptions of SE. Family and friends perceive library professionals as proficient information seekers and often seek their assistance in expediting their own locating and retrieving the pertinent and required information effectively, thus contributing to Librarians' SE perceptions. This outcome matched with the study of Mohd Suki and Mohd Suki (2016), affirming that social persuasion plays a pivotal role in shaping the feelings of library users by retrieving the online information. Furthermore, various previous studies highlighted the importance of social persuasion from different sources, covering supervisors, family, and colleagues, in augmenting their work performance (van Dierendonck et al., 2007). Particularly, within academic settings, social persuasion has been shown to significantly and positively influence the SE of teaching in research institutions (Morris & Usher, 2011). Both past and present emotions serve as important sources of SE information for library professionals. This result corroborates the research study



conducted by Savolainen (2012), which highlighted that users are more inclined to initiate a query for information search if they perceive the tasks as enjoyable.

Furthermore, the researchers also sought to compare the influence of independent variables on a uniform scale by employing the standardized coefficient values. Table 3 shows that psychological states have the most significant beta coefficient, indicating that they are the most substantial factor in explaining the management control of Librarians, even after accounting for the influence of other variables in the model. Social persuasion and mastery experience had slightly lower beta values, suggesting they contributed less. In contrast, vicarious experience did not appear to be a significant factor in explaining management control.

The findings indicate that mastery experience, psychological states, and social persuasion are significant predictors of library professionals' management control, whereas vicarious experience is not. The proposed model, which includes all four variables, explains 29.5% of the variance in management control. Of the variables included in the model, psychological states emerged as the most leading sole contributor, with social persuasion and mastery experience also having a significant impact. These results provide key insights for addressing the hypotheses of this study.

8 Conclusion and Recommendations

The study confirms that university Librarians perceive themselves as proficient in management control, with high average scores across all statements. This self-perceived proficiency is significantly and positively influenced by their OIRSE. The multiple linear regression analysis revealed that mastery experience, psychological states, and social persuasion are all distinct and significant predictors of management control. Specifically, the successful and efficient retrieval of information (mastery experience), the feelings of satisfaction and pride that accompany it (psychological states), and the social recognition from others as a skilled information seeker (social persuasion) all contribute to this sense of control. These findings align with some previous research, but they also contrast with others, particularly regarding the primary drivers of SE in different contexts.

However, the study also found that vicarious experience does not significantly influence the management control of library professionals following OIR. The model, which includes mastery experience, psychological states, social persuasion, and vicarious experience, explains 29.5% of the variance in management control. Among these variables, psychological states emerged as the most influential unique contributor, highlighting the critical role of positive emotions in shaping a professional's sense of control. This outcome provides a clear understanding of the factors that most effectively empower Librarians in their roles

Based on the study's findings, to enhance the SE and management control of Librarians, institutions should invest in hands-on training to provide more mastery experiences, acknowledge and celebrate successful information retrieval to reinforce positive psychological states, and cultivate a culture of positive social feedback among colleagues and supervisors.

Future research should investigate why vicarious experience does not significantly impact library professionals' management control, perhaps through qualitative methods. New studies could also explore the interplay of psychological states, social persuasion, and mastery experience over the course of a professional's career. Additionally, applying this model to other information-intensive professions would provide valuable comparative insights.



References

- Asante, E., & Ngulube, P. (2020). Critical success factors for total quality management implementation and implications for sustainable academic libraries. *Library Management*, 41(6/7), 545-563. <https://doi.org/10.1108/LM-02-2020-0017>
- Bandura, A. (1977). *Self-efficacy*. Freeman.
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ, 1986*(23-28), 2. <https://doi.org/10.4135/9781446221129.n6>
- Bandura, A. (1997). *Self-efficacy in changing societies*. Cambridge university press. https://books.google.com.pk/books/about/Self_Efficacy_in_Changing_Societies.html?id=JbJnOAoLMNEC&redir_esc=y
- Bechwati, N. N., & Xia, L. (2003). Do computers sweat? The impact of perceived effort of online decision aids on consumers' satisfaction with the decision process. *Journal of Consumer Psychology*, 13(1-2), 139-148. <https://doi.org/https://doi.org/10.1207/153276603768344852>
- Bronstein, J. (2014). The role of perceived self-efficacy in the information seeking behavior of library and information science students. *The Journal of Academic Librarianship*, 40(2), 101-106. <https://doi.org/10.1016/j.acalib.2014.01.010>
- Bronstein, J., & Tzivian, L. (2013). Perceived self-efficacy of library and information science professionals regarding their information retrieval skills. *Library & Information Science Research*, 35(2), 151-158. <https://doi.org/10.1016/j.lisr.2012.11.005>
- Daniel, C. O., & Santeli, J. N. (2020). Effective time management on employee performance of Northern Nigeria Noodle Company Ltd. *International Journal of Research Science and Management*, 7(1), 72-82. <https://doi.org/10.5281/zenodo.3612089>
- Downey, J. P., & McMurtrey, M. (2007). Introducing task-based general computer self-efficacy: An empirical comparison of three general self-efficacy instruments. *Interacting with Computers*, 19(3), 382-396. <https://doi.org/https://doi.org/10.1016/j.intcom.2006.11.001>
- Eldakar, M. A. M., & Kenawy, Y. M. (2020). Researchers emotions after information retrieval from databases available through the Egyptian knowledge Bank: impacts of perceived self-efficacy. *The Journal of Academic Librarianship*, 46(5), 102173. <https://doi.org/https://doi.org/10.1016/j.acalib.2020.102173>
- Flavián-Blanco, C., Gurrea-Sarasa, R., & Orús-Sanclemente, C. (2011). Analyzing the emotional outcomes of the online search behavior with search engines. *Computers in Human Behavior*, 27(1), 540-551. <https://doi.org/DOI:10.1016/j.chb.2010.10.002>
- Henk, W. A., & Melnick, S. A. (1995). The Reader Self-Perception Scale (RSPS): A new tool for measuring how children feel about themselves as readers. *The Reading Teacher*, 48(6), 470-482.
- Hinson, J., Distefano, C., & Daniel, C. (2003). The internet self-perception scale: Measuring elementary students' levels of self-efficacy regarding internet use. *Journal of Educational Computing Research*, 29(2), 209-228. <https://doi.org/10.2190/BWGN-84AE-9AR6-16DY>
- Jelinek, R., Ahearne, M., Mathieu, J., & Schillewaert, N. (2006). A longitudinal examination of individual, organizational, and contextual factors on sales technology adoption and job



- performance. *Journal of Marketing Theory and Practice*, 14(1), 7-23. <https://doi.org/10.2753/MTP1069-6679140101>
- Jinendran Jain, S., & Kumar Behera, P. (2023). Visualizing the academic library of the future based on collections, spaces, technologies, and services. *International Journal of Information Science and Management (IJISM)*, 21(1), 219-243. <https://doi.org/10.22034/ijism.2023.700794>
- Klassen, R. M. (2004). A cross-cultural investigation of the efficacy beliefs of South Asian immigrant and Anglo Canadian nonimmigrant early adolescents. *Journal of Educational Psychology*, 96(4), 731. <https://doi.org/10.1037/0022-0663.96.4.731>
- Lai, H.-J., & Wang, C.-Y. (2012). Examining public librarians' information literacy, self-directed learning readiness, and e-learning attitudes: A study from Taiwan. *Malaysian Journal of Library and Information Science*, 17(2), 101-115.
- Lopez, F. G., & Lent, R. W. (1992). Sources of mathematics self-efficacy in high school students. *The career development quarterly*, 41(1), 3-12. <https://doi.org/https://doi.org/10.1002/j.2161-0045.1992.tb00350.x>
- Mastur, M. (2023). Library Management Strategy to Strengthen Literacy Culture in Elementary Schools. *Jurnal Basicedu*, 7(1), 964-974. <https://doi.org/10.31004/basicedu.v7i1.4758>
- Mohd Suki, N., & Mohd Suki, N. (2016). Library patrons' emotions after information retrieval: effects of perceived self-efficacy. *Program*, 50(3), 288-302. <https://doi.org/https://doi.org/10.1108/PROG-07-2014-0045>
- Monoi, S., O'Hanlon, N., & Diaz, K. R. (2005). Online searching skills: Development of an inventory to assess self-efficacy. *The Journal of Academic Librarianship*, 31(2), 98-105. <https://doi.org/10.1016/j.acalib.2004.12.005>
- Morris, D. B., & Usher, E. L. (2011). Developing teaching self-efficacy in research institutions: A study of award-winning professors. *Contemporary Educational Psychology*, 36(3), 232-245. <https://doi.org/> <https://doi.org/10.1016/j.cedpsych.2010.10.005>
- Ren, W.-H. (1999). Self-efficacy and the search for government information: A study of small-business executives. *Reference & User Services Quarterly*, 283-291. <https://doi.org/https://www.jstor.org/stable/20863563>
- Savolainen, R. (2012). Expectancy-value beliefs and information needs as motivators for task-based information seeking. *Journal of Documentation*, 68. <https://doi.org/10.1108/00220411211239075>
- Serap Kurbanoglu, S. (2003). Self-efficacy: a concept closely linked to information literacy and lifelong learning. *Journal of Documentation*, 59(6), 635-646. <https://doi.org/10.1108/00220410310506295>
- Spanos, Y. E., Prastacos, G. P., & Poullymenakou, A. (2002). The relationship between information and communication technologies adoption and management. *Information & management*, 39(8), 659-675. [https://doi.org/10.1016/S0378-7206\(01\)00141-0](https://doi.org/10.1016/S0378-7206(01)00141-0)
- Torkzadeh, G., & Doll, W. J. (1999). The development of a tool for measuring the perceived impact of information technology on work. *Omega*, 27(3), 327-339. [https://doi.org/https://doi.org/10.1016/S0305-0483\(98\)00049-8](https://doi.org/https://doi.org/10.1016/S0305-0483(98)00049-8)



- van Dierendonck, D., Haynes, C., Borrill, C., & Stride, C. (2007). Effects of upward feedback on leadership behaviour toward subordinates. *Journal of Management Development*, 26(3), 228-238. <https://doi.org/10.1108/02621710710732137>
- Vijesh, P. V., & Ganesan, P. (2024). An assessment of professional competencies and skills required for library professionals of management institutions in Kerala (India). *Library Management*, 45(3/4), 258-271. <https://doi.org/10.1108/LM-06-2023-0053>