

# STUDENTS ENGAGEMENT IN OPEN UNIVERSITY MALAYSIA GRADUATE CENTRE (OUM GC): DOES INFORMATION SEEKING BEHAVIOUR PLAYS A ROLE?

**Shahril Effendi Ibrahim**  
Open University Malaysia  
shahril\_effendi@oum.edu.my

**Mohamad Afzhan Khan Mohamad Khalil**  
Open University Malaysia  
afzhankhan@oum.edu.my

## ABSTRACT

The objective of this study is to examine the relationships between Information Seeking Behaviour (ISB) and engagement of students in Open University Malaysia Graduate Centre (OUM GC). A literature review was undertaken to develop the instrument. Face-to-face data collection method was adopted. A total of 89 respondents from convenient sampling was analysed to answer the research hypotheses. A factor analysis was performed on the independent variable to manage the items and discover new constructs as a way to contribute to the area of study. The Kaiser Meyer Olkin figure is reported to be 0.77, indicating validity of the model. Cronbach Alpha for all variables are reported to be above 0.70, indicating reliability. There is a relationship between information seeking behaviour and student engagement as designated in the regression model. This paper will also give more information to ODL universities which can help them in their decision making process and ability to allocate resources.

*Keywords: Information Searching Behaviour, Learner Engagement, Distance Learning, Prior Experiential Learning, Libraries*

## INTRODUCTION

The advent of communication technology particularly the Internet has made the learning process more complex and challenging. Information has become abundant and overloaded as most data is available ubiquitously at our fingertips. Seeking information now is not only about whether you are able to retrieve the information, but also the ability to dismiss unrelated information. Hence, Information Seeking Behaviour (ISB) is very important for a success in learning. Weber, Becker & Hillmert (2018) points out that students who consult databases and search engines designed to find academic content in peer-reviewed journals, and use English-language search queries, tend to be more successful in terms of grades.

## PROBLEM STATEMENT

Most of students are working adults and their learning mode is in Open & Distance Learning (ODL). The attrition rate to be reported is nearly 30% of first semester students and this is a crucial issue (Santhi, Mohd, Loo & Ariff, 2014). In the study of Singh & Satija (2006), ISB is resulted from the recognition of some needs, perceived by the users, who as a consequence makes demand upon on formal system such as libraries and information centre, or some other person in order to satisfy the perceived need.

Therefore, it is important for OUM to determine the students' usage of information resources in the library, searching skills, library skills, awareness of library resources and services provided, and learners' interaction with librarians in order to identify their level of engagement. The relationship between ISB and its impact towards learners are yet to be explored by the University and this gap is an opportunity for research.

## **OBJECTIVES OF THE STUDY**

The main objective of this study is to examine the relationships between Information Seeking Behaviour (ISB) and learners' engagement of Open University Malaysia Graduate Centre (OUM GC).

The two specific objectives of this investigation are to explore the relationship between:

1. Using library for academics and learners engagement.
2. Using library for leisure and learners engagement.

## **LITERATURE REVIEW**

In the investigation of Fatima & Ahmad (2008), ISB is defined as a set of actions that an individual takes to express information needs, seek information, evaluate and select information, and finally uses the information to satisfy his/her information needs. In learning environment, these actions are motivated to complete various tasks in learning process such as for assignment completion, presentations and examinations. ISB is very much related to information seeking skills. Whitmire (2002) in her research explained that ISB would be different from the faculty and graduate students because their information-seeking skill are not well developed. Student engagement is always related to students themselves, peers, faculties, and support centres. Owen & Dunne (2013) argue that student engagement is used in the same breath as student participation, involvement, commitment, effort, time on task or motivation. It is associated with teamwork, leadership, community or civic engagement, democracy, with partner-ship, co-creation and collaboration. Other than that, it is also related to developing new relationships between staff, students and customers. Student engagement needs commitment from all aspects in an organisation. Fredin, Fuchsteiner & Portz (2015) claim that student engagement is fundamental for student success in any education institution.

One of elements in student satisfaction is student engagement. Martin & Bolliger (2018) argue that student engagement increases student satisfaction, enhances student motivation to learn, reduces the sense of isolation, and improves student performance in online courses. They also added that student engagement in online learning is very significant because online learners seem to have fewer opportunities to be engaged with the institution. Student engagement also very much contributed to student achievement and student retention. As Reyes (2006) states: 'student engagement inside and outside the classroom has been found to contribute to achievement, retention, and increased graduation rates'. Hence, a positive respond from activities such as completing all assignments and tasks, pay attention in all classes, and discussion with teaching staff outside class may result in a positive student engagement toward their study. Collectively, these studies outline a critical role for ISB in student engagement. The conceptual framework for this study is presented in Figure 1 below. Correspondently, a factor analysis will be presented to provide more information to the readers on how this framework was developed in the later part of this paper.

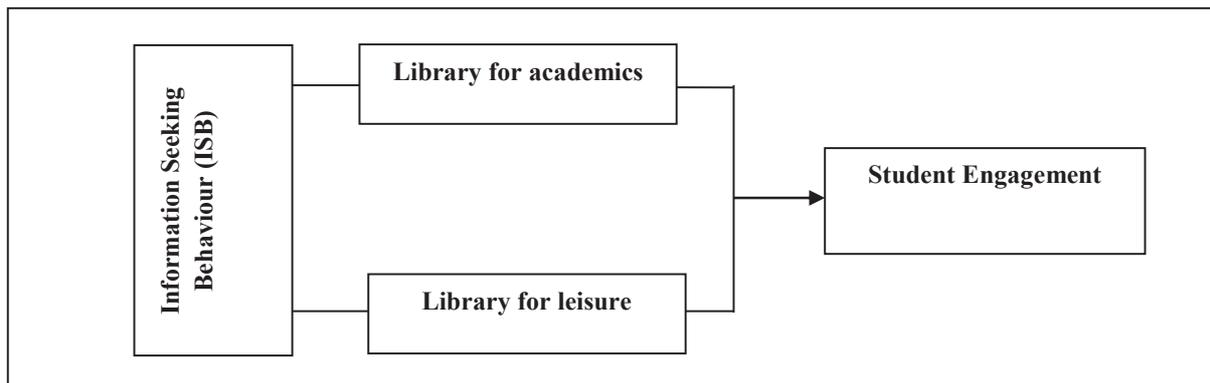


Figure 1: Conceptual Framework

## METHODOLOGY

Quantitative design is particularly useful in this study because the main objective is to examine causal relationships between independent variables and dependent variable. The questionnaire consists of three parts namely a) demographic profile b) information seeking behaviour and c) student engagement. In the survey, respondents were requested to rate their responses to the constructs based on the Likert-type scale of 1 to 5; from 1 (strongly disagree) to 5 (strongly agreed). All issues on reliability and validity were primarily resolved. Convenient sampling and face to face data collection methodology were used in this study. Hard copies of the questionnaires were administered to students in the library. The completed questionnaires were collected by the librarians after the tutorial session. They were then collated and hence data were entered, cleaned and analysed using Statistical Package for Social Sciences (SPSS) Version 22.

## ANALYSIS & RESULT

### Profile of Respondents

This section begins with a demographic overview of the respondents. The total number of respondents was 89 out of 120 questionnaires distributed, which is 74% responses. Based on the finding it reveals that 39% of the respondents are from Master of Counselling (MC) 39% and followed by Master of Business Administration (MBA) 21% participated in the Questionnaires. Majority of the respondents are from the age of 36 to 40 which is 35% and 41 to 55 (33%). 62% of the respondents' current management level is in Middle Management level. It is also revealed that 62% of the respondents never attend any Library Training session (Table 1).

Table 1: Profile of Respondents

<b>Demographic Variables</b>	<b>Percentage (%)</b>
Programme:	
Master of Counselling (MC)	39
Master of Business Administration (MBA)	21
Master of Occupational Health & Safety (MOSHRM)	10
Master of Early Childhood Education (MECHE)	8
Master of Human Resource Management (MHRM)	7
Master of Management (MM)	4
Master of Nursing (MN)	2
Master of Islamic Studies (MIST)	2
Master of Instructional Design (MIDT)	2
Master of English Studies (MEST)	2
Master of Project Management (MPM)	1
PhD Education	1
PhD Science	1
Enrolment:	
Normal Intake	98
APEL Intake	2
Age:	
18–25	2
26–30	14
31–35	12
36–40	35
41–55	33
Above 55	4
Gender:	
Male	37
Female	63
Current level of management:	
Low	18
Middle	62
Top	20
Number of hours access internet per day:	
Less than 1 hour	6
1 to 3 hours	36
4 to 6 hours	34
More than 6 hours	24
Respondents attended at least once Library Training:	
Yes	38
No	62

## DATA VALIDITY AND RELIABILITY

### Kaiser-Meyer-Olkin Measure& Bartlett's Test

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy measure varies between 0 and 1, and values closer to 1 are better. In this study, the KMO has a value of 0.77, which is much higher than the suggested minimum value of 0.6. Hence, the sample is more than adequate to conduct the factor analysis. The indices are shown in Table 2 below whereas the rotated matrix is reported in Table 3. It clearly displays that the independent variables can be broken down into two constructs for the regression analysis.

Table 2: Kaiser-Meyer-Olkin Measure& Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.77
Bartlett's Test of Sphericity	
Approx. Chi-Square	894.915
df	210
Sig.	.000

Table 3: Rotated Component Matrix

INFORMATION SEEKING BEHAVIOUR (ISB)	Component	
	Library as Academics	Library as Leisure
B13: I trust the library database more than resources given in the internet	<b>0.769</b>	
B12:I will use the popular terms suggested at the search box to support me in locating resources	<b>0.740</b>	
B7:I believe the OUM Library database supports me in getting resources for my thesis, project paper, assignment or exam	<b>0.738</b>	
B2:I find the OUM digital library is convenient for me to refer to when completing my thesis, project paper, assignment or exam	<b>0.733</b>	
B6:I prefer to use Library databases rather than the Internet search engine when looking for resources to complete my thesis, project paper or assignments	<b>0.667</b>	
B10: I will refer to OUM Library resources when doing presentations	<b>0.649</b>	
B4: I find the information resources in OUM Library sufficient for me to complete my thesis, project paper, or assignment	<b>0.645</b>	
B11: I believe the advanced search function in OUM Library portal is able to assist me in searching for accurate information	<b>0.597</b>	
B19: The WiFi speed in the OUM Library is sufficient for me to search for academic resources	<b>0.561</b>	
B21: I am satisfied with the services provided by the library	<b>0.506</b>	

INFORMATION SEEKING BEHAVIOUR (ISB)	Component	
	Library as Academics	Library as Leisure
B5: I consider the citation provided by the OUM Library portal is able to assist me in completing my thesis, project paper, or assignment	Item deleted from final model	
B8: I will ask the OUM Library personals for advise when I look for suitable resources / books	Item deleted from final model	
B20: I trust a five months loan period for maximum 5 books for one month is sufficient for me	Item deleted from final model	
B1: I believe the internet helps me to complete my thesis, project paper, or assignment	Item deleted from final model	
B15: I read the newspaper in OUM Library during my leisure time		0.772
B16: I use OUM Library room to conduct discussions		0.751
B14: I use the library guide in YouTube as a guidance when searching for information in digital library		0.719
B17: I browse Digital Library when I want to seek information for my non-academic matters such as seeking holiday destination		0.630
B18: I use Inter Libraryloan service when the book that I want is not available in the OUM Library		0.596
B9: I will refer to my classmates in MyInspire forum when I need advice on information resources	Item deleted from final model	
B3: I will ask my facilitators / lecturers when I need advice on resources for my thesis, project paper, assignment or exam	Item deleted from final model	

**Extraction Method:** Principal Component Analysis      **Rotation Method:** Varimax with Kaiser Normalization

## Reliability

Reliability was calculated using Cronbach’s Alpha. Cronbach’s Alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. A “high” value of alpha ( $\alpha > 0.70$ ) is often used as evidence that the items measure an underlying (or latent) construct. Before proceeding into the analysis, we check the reliability of the instrument use. Table 4 of this paper reports all the indices related to reliability and all constructs are found consistent (Nunnally, 1978).

Table 4: Reliability Statistics

Construct	Cronbach’s Alpha	No of Items
Library for academics	0.87	10
Library for leisure	0.78	5
Engagement	0.85	12

## REGRESSION MODEL

The ANOVA significance value ( $p < 0.01$ ) as shown in Table 6 signifies that the result is a valid model. The reported R square of 0.35 as presented in Table 5, indicates the goodness of fit of the regression model, which is closer to the substantial category. The p-values reported in Table 7 clearly signifies that three are significant statistical relationships between the independent variables and the dependent variable. Finally, Table 8 summarizes the findings of this study which proves that the objectives have been met.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589 <sup>a</sup>	.347	.332	.58883

Table 6: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	15.826	2	7.913	22.823	.000 <sup>a</sup>
Residual	29.818	86	.347		
Total	45.644	88			

a. Predictors: (Constant), Library for academic, Library for leisure

b. Dependent Variable: Engagement

Table 7: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.396	.384		8.846	0.000
Library for academic	.308	.076	.376	4.034	0.01
Library for leisure	.184	.051	.338	3.628	0.01

a. Dependent Variable: Engagement

Table 8: Summary of Findings

Research Objective	Hypotheses	P Value	Findings
RO1: To examine the relationship between using library for academic and learners engagement	H1: There is a relationship between using library for academic and learners engagement	0.01	<b>Supported</b>
RO2: To examine the relationship between using library for leisure and learners engagement	H2: There is a relationship between using library for leisure and learners engagement.	0.01	<b>Supported</b>

## IMPLEMENTATION

The findings of this research provide insights for the four implications below:

1. The University must find ways to promote the usage of library because it can enhance student's engagement which can influence academic achievements.
2. More training must be given to new students in the library.
3. More briefings must be conducted to give a clear picture to the students on how to utilize technology in OUM since digital library plays a vital role in delivering knowledge.
4. The postgraduate students are very much interested in viewing project papers and thesis of other students. The materials must be increased in view of increasing the satisfaction of this group of students.
5. Some of the students come to spend time in library for leisure. Newspapers and magazines can be used to attract them. Thus, materials can be requested to help enhance student engagement.

## REFERENCES

- Fatima, N., & Ahmad, N. (2008). Information seeking behaviour of the students at Ajmal Khan Tibbiya College, Aligarh Muslim University: a survey. *Annals of Library and Information Studies*, 55, June 141–144.
- Fredin, A., Fuchsteiner, P., & Portz, K. (2015). Working toward more engaged and successful accounting students: A balanced scorecard approach. *American Journal of Business Education*, 8(1), 49–62.
- Ikoja-Odongo, R., & Mostert, J. (2006). Information seeking behaviour: a conceptual framework. *South African Journal of Libraries & Information Science*, 72(3), 145–158.
- Martin, F., & Bolliger, D. U. (2018). Engagement Matters: Student Perceptions on the Importance of Engagement Strategies in the Online Learning Environment. *Online Learning*, 22(1), 205–222.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Owen, D., & Dunne, E. (2013). *Student Engagement Handbook: Practice in Higher Education* (Vol. First edition). United Kingdom: Emerald Group Publishing.
- Reyes, V. (2006). The future role of the academic librarians in higher education. *Portal: Libraries and the Academy*, 6(3), 301–309.
- Santhi, R., Mohd Ghazali Mohayidin, Loo, S. C., & Ariff Syah Juhari. (2014). Attrition in ODL: A macro perspective in reducing non-completion rate among LLL learners. *Seminar Kebangsaan Pembelajaran Sepanjang Hayat 2014*.
- Singh, K., & Satija, M. (2006). A Review of Research on Information Seeking Behaviour of Agricultural Scientists: International Perspectives. *DESIDOC Journal of Library & Information Technology*, 26(2).

Weber, H., Becker, D., & Hillmert, S. (2018). Information-seeking behaviour and academic success in higher education: Which search strategies matter for grade differences among university students and how does this relevance differ by field of study? *High Educ* (2018).

Whitmire, E. (2002). Disciplinary differences and undergraduates' information-seeking behavior. *Journal of the American Society for Information Science and Technology*, 53(8), 631–638.