Analyzing Information Seeking Behaviour of Library Usage Among Graduates

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ABSTRACT

The study investigates the information seeking behaviour (ISB) of the graduates in Kerala focusing on their information needs, sources, library usage and the role libraries in supporting study. It also examines demographic variable gender with information seeking behaviour. A quantitative approach is adopted using a survey questionnaire to collect data from 100 graduate students across various disciplines in universities of Kerala.

The study reveals that graduate students primarily seek information for research, projects, assignment, seminars etc. Gender differences were noted in their information seeking behaviour, influenced by socio-cultural, psychological factors. These insights could impact library usage and information literacy programs. This study fills a gap in information seeking behaviour literature within the context of Kerala. It highlights barrier in library usage and suggest the need for information literacy program to enhance research-based learning at the universities.

Keyword(s): Information needs; information seeking behaviours; library sources and services; graduate students; Kerala universities.

1. INTRODUCTION:

Information is rapidly expanding and with the rise of digital and print media, access to information is easier than ever. Advances in technology such as computer, telecommunication, internet and information storage innovations, have transformed the way information is stored and managed in libraries. F W Lancaster, has forecasted that 21st century will be a "paperless society" because of the emerging trends in the physical form of the documents.

Libraries are social institutions, which play multifarious needs of the users. Dr. S R Ranganathan, compared library as a growing organism. Libraries in educational institutions must comprehend to graduates information seeking in the changing world of today. Information available in educational libraries and public libraries are available in digital as well as in print medium. The user can make his choice to seek information.

In today's rapidly evolving information landscape, understanding the information-seeking behaviours of graduates is essential for libraries in educational institutions. As graduates' transition from academic environments to professional settings, their needs for information also change. Thus, the information

providers such as libraries and information centres face challenges on the usage of libraries with their dependence on e-resources.

2. SIGNIFICANCE OF THE STUDY

Students seek information for doing assignments, seminars/conference, project work and home-work. The purpose of the study is to understand information-seeking behaviour of graduate students in Kerala; And their dependency on the usage of library resources for lifelong learning. By identifying gaps in information seeking behaviour, universities and libraries can improve resource allocation and support graduates in their professional journey. The present study focuses on the usage of library resources among the graduates.

3. STATEMENT OF THE PROBLEM

The study tries to examines the information Seeking Behavior of graduates, focusing their strategies, preferences, challenges, while accessing information for academic purposes. Understanding this behavior is crucial for improving library resources, services and academic support. The study investigates entitled "Analysing the information seeking behaviour of library usage among graduates of Kerala"

4. RESEARCH OBJECTIVES

- To ascertain the various information sources most frequently used by graduate students.
- To determine the awareness of physical and digital resources and use of libraries by the graduates.
- To examine the strategies employed by students in their information-seeking process.
- To understand the nature of information seeking behavior with respect to gender.

5. METHODOLOGY

The present study is descriptive in nature. Both primary and secondary data are used for the study. Students studying in various colleges under Mahatma Gandhi University and Sree Sankara university for Sanskrit are taken as samples for the survey. To ensuring representation across fields of study, graduate students from various disciplines are taken.

A structured questionnaire was developed, incorporating, open and closed ended questions having 4-5 points on Likert-scale. The survey questions were distributed online and offline to the graduates. A sample size of 100 graduate students is taken for the study. Statistical tools like frequency, mean, standard deviation and correlations of the variables are used in the study. The study aims to find, how the graduate students of Kerala seek information, with a particular focus on gender differences.

6. SCOPE & LIMITATIONS

The scope of the study confines to graduates of Arts and Science colleges situated in Kerala. And is limited to institutions in Kerala, randomly collected affecting generalizability.

7. LITERATURE REVIEW

It is essential to comprehend how graduate students seek information in order to improve academic support, library resource its accessibility and services. The study proposes to investigate how graduate students find, assess, and apply knowledge to meet their academic requirements. Here are few literature reviews on information seeking behaviour.

1. Padmamma SS & Radhika & Sunitha (2010) studied on the information behaviour of users of PESTEM, Shimoga, library. The data collected through questionnaire of 100 management students, were analysed for research, the design applied was quantitative technique.

2. Kadli, J & Hanchinal, Veeresh, B (2015), evaluates the information seeking behaviour of two law colleges in Mumbai, with the changing digital Environment. Questionnaire of 194 were taken for analysis. Qualitative & Quantitative technique is studies.

3. Kumar, K & Tholkappian, S (2013) reported, library users in women's educational institutions and their information seeking behaviour. 144 data collected using questionnaire. Quantitative research technique is studied.

7.1.Gender as Moderating Variable

Few studies have identified Gender as a variable, influencing information seeking research. There may exist certain social psychological, physical and mental differences among the female and male graduate students. Hence, it is appropriate to find the gender based differences in information seeking behaviour of graduates of Kerala so as to help them abreast in their information search process.

Few literature studies with gender as moderating variable are given below-

1. Santoshi Halder, Anjali Ray, P.K. Chakrabarty. (2010), studied information seeking activities of gender differences among three universities in West Bengal, India. Data collected from 600 students was scheduled in qualitative technique, the result was that female students were higher in search strategy but they were poor in handling technology as of their counterparts.

2. R Rizal, D Rusdiana, W Setiawan, P Siahaan, I M Ridwan. (2022), A study on physics teacher's use of digital technology. 71 data were analysed; A qualitative technique is applied for study. Female physics teachers, are required to intensify their digital technology usage and acquire training in the digital literacy.

CONCLUSION

Seeking information is a complex area which is impacted by several social, psychological, and technological elements. The change in technologies, shifting user demographics, and the growing complexity of information environments, more research is needed to examine how Information Seeking Behaviour is changing with time and shift in the current circumstances. Gaining an understanding of these dynamics can help develop more efficient information systems and user education programs, which will ultimately improve information access of user.

The research will provide valuable insights into the information seeking behaviors of graduates, by understanding their needs, challenges and academic institutions can better assist students in their academic pursuits.

8. ANALYSIS AND INTERPRETATIONS

This study examines how undergraduate students in Kerala seek information, with a focus on the demographic variable-gender. This investigates the relationship between gender and various other aspects influencing information-seeking behaviour (ISB), using SPSS statistical methods to analyse the frequency, mean, and standard deviation of variables.

8.1 DESCRIPTIVE ANALYSIS

The study involves 100 Sanskrit undergraduate students, with 32% male and 68% female. The dependent

variable is Information Seeking Behaviour, while 11 independent variables are considered below.

Table.8.1 Variables and their Abbreviations

SL No	Variables	Abbreviations	Variables
1	Information Influence	Info_Infl	Independent Variable
2	Information Seeking	Info_seek	Independent Variable
3	Information Seeking Behaviour	ISB	Dependent Variable
4	Search Methods	Sear_Meth	Independent Variable
5	Resource Awareness	Reso_Awar	Independent Variable
6	Availability of Information	Avai_Reso	Independent Variable
7	Preferred Sources	Pre_Sour	Independent Variable
8	Preferred Medium	Pre_Medi	Independent Variable
9	Student Responsibility	Stu_Res	Independent Variable
10	User Expertise	Use_Exp	Independent Variable
11	Market Maven	Mar_Mav	Independent Variable
12	Enduring Involvement Index	End_Inv_ Ind	Independent Variable

Source: primary data

8.1.1. Demographic Variable-Gender

1) Gender Distribution**:** The mean score of gender 1.68 with a standard deviation of 0.47, demonstrating that majority of the participants are female.

Table 8.1.1: Gender

	Frequency	Percent	Cumulative Percent	Mean	SD
Male	32	32.0	32.0		
Female	68	68.0	100.0		
Total	100	100.0		1.68	.47

Source: primary data

From the table 8.1.2. variables with their respective individual statements is given.

Table 8.1.2 Mean and Standard Deviation of the variables

SL No.	Variables	N	Minimum	Maximum	Mean	SD
1	Information Influence	100	1.00	5.00	3.2450	0.95166
2	Information Seeking	100	1.00	5.00	3.2333	1.04979
3	Information Seeking Behaviour	100	1.00	5.00	3.5300	1.02485
4	Search Methods	100	1.00	5.00	3.5400	0.92619
5	Resource Awareness	100	1.00	5.00	3.2200	1.01744
6	Availability of Information	100	1.00	5.00	3.4320	0.96001

7	Preferred Sources	100	1.00	5.00	3.3700	0.95423
8	Preferred Medium	100	1.00	5.00	3.4200	0.89113
9	Student Responsibility and User Expertise	100	1.00	5.00	4.2300	1.30183
10	Market Maven	100	1.00	5.00	4.8180	1.60606
11	Enduring Involvement Index	100	1.00	5.00	4.5300	1.37984

Source: primary data

1. **Information Influence:** The mean scores is 3.2450 and a standard deviation (SD) 0.95166, indicating moderate variation in the influence information sources.
2. **Information Seeking:** The mean score is 3.2333, with an SD 1.04979, suggests moderate to high levels of information seeking behaviour, with variability in engagement.
3. **Information Seeking Behaviour:** The mean score 3.5300, (SD of 1.02485), indicating a moderate level of approach how students seek and engage with information.
4. **Search Methods:** A mean score of 3.5400, with (SD of 0.92619), indicates general satisfaction with the search methods they employ, reflects some variability.
5. **Resource Awareness:** The mean score 3.2200, and SD 1.01744, indicate a moderate level of awareness of resources, as some students may have less awareness.
6. **Availability of Information:** The mean score of 3.4320, with an SD of 0.96001, reflects moderate to high perception of information availability.
7. **Preferred sources:** The mean score 3.3700, with an SD of 0.95423), students exhibit different preferences for specific sources.
8. **Preferred medium:** The mean score of 3.4200, with an SD of 0.89113, indicates a strong preference for certain mediums.
9. **Students' responsibilities and user expertise**: High mean score for student responsibility (4.2300) and expertise (4.8180) reflects students' strong self-perception with significant variability.
10. **Market Maven:** The mean score of 4.8180, (SD of 1.60606), suggest a high inclination toward being information influencers.
11. **Enduring Involvement Index:** The mean scores of 4.5300, (SD of 1.37984), indicates strong long-term information seeking among students.

The data analysis indicates that the overall demographic distribution includes a larger proportion of female students. In terms of the independent variables, several key insights emerge:

a. **Information Influence, Information Seeking, and Information Seeking behaviour** all exhibit moderate to high mean scores, which suggests that students generally engage proactively in seeking and utilizing information. However, the standard deviations across these variables reflect differing degrees of behaviour, influence, and practices among participants.

b. Variables such as **Student Responsibility and User Expertise**, as well as the **Market Maven and Enduring Involvement Index**, show a tendency for students to feel highly responsible and involved in seeking information, though with some variability in these perceptions.

The students demonstrate a generally proactive approach to information seeking, though individual differences are notable across several variables, particularly in the areas of responsibility, expertise, and preference for information sources and mediums. This analysis provides a comprehensive overview of

students' information seeking behaviours and perceptions, highlighting areas of consistency and variability in their approaches.

8.2. CORRELATION OF VARIABLES WITH GENDER

Pearson Correlation Analysis: The Pearson correlation coefficient measures the relationship between two variables. It ranges from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 signifies no correlation. A correlation coefficient 1 indicates a variable's perfect correlation with itself. It indicates how well one variable can predict the value of the other. Any variable correlated with itself yields a correlation coefficient of 1.

Sample Size (N): denotes the number of cases used in the correlation analysis.

Table. 8.2.1. Relationship between Gender and Information seeking practices

Variables	R	Gender	Information seeking behaviour	p
Gender	Pearson Correlation	1	-.149	0.139
	Sig. (2-tailed)		.139	
	N	100	100	

Source: primary data

In examining the relationship between gender and information seeking behaviour, a Pearson Correlation is calculated (Table 8.2.1). The results indicate a weak negative correlation of -0.149, though the relationship is not statistically significant (p = 0.139).

Table. 8.2.2 Correlation of variables with Gender

	InfInfluence_Ave	Infseeking_Ave	searchmeth_Ave	ResAwar_Ave	AvailofInf_Ave	PrefSour_Ave	PrefMed_Ave	StuResUseExp_Ave	MarMav_Ave	EndInvInd_Ave	gender
InfInfluence_Ave	1	-.035	-.053	-.074	-.006	.090	.178	.193	.126	.188	.072
Infseeking_Ave	-.035	1	.260**	.304**	.288**	.411**	.325**	.478**	.414**	.374**	-.071
Searchmeth_Ave	-.053	.260**	1	.630**	.680**	.296**	.374**	.452**	.441**	.418**	-.266**
ResAwar_Ave	-.074	.304**	.630**	1	.609**	.290**	.261**	.321**	.300**	.308**	-.244*
AvailofInf_Ave	-.006	.288**	.680**	.609**	1	.539**	.587**	.444**	.397**	.394**	-.219*
PrefSour_Ave	.090	.411**	.296**	.290**	.539**	1	.626**	.578**	.564**	.560**	-.035

PrefMed_Ave	.178	.325**	.374**	.261**	.587**	.626**	1	.610**	.494**	.523**	-.141
StuResUseExp_Ave	.193	.478**	.452**	.321**	.444**	.578**	.610**	1	.825**	.607**	-.252*
MarMav_Ave	.126	.414**	.441**	.300**	.397**	.564**	.494**	.825**	1	.705**	-.193
EndInvInd_Ave	.188	.374**	.418**	.308**	.394**	.560**	.523**	.607**	.705**	1	-.158
gender	.072	-.071	-.266**	-.244*	-.219*	-.035	-.141	-.252*	-.193	-.158	1

**. Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

Source: primary data

Significance (2-tailed): This value represents the *p-value* associated with the correlation coefficient. Interpretation of significance levels is elucidated in the footnotes of the correlation table, where single and double asterisks denote specific significance thresholds.

This can be summarized, while some weak correlations exist between gender and information seeking behaviour among graduates in Kerala, the overall influence of gender appears to be limited. The statistically significant correlations suggest that gender may have some minor influence on variables such as search methods, resource awareness, preference of media, and student responsibilities and user experience, but these effects are relatively small. Further investigation may be acceptable to understand the intricate relationship between gender and information seeking behaviour in this context.

Gender-wise Regression Co-efficient of Information seeking behaviour

Table 8.2.3 Model Summary

Model	R	R Square	Adjusted R Square	St. error of the Estimate
1	.822[a]	.676	.639	.46550
2	.831[b]	.690	.651	.45778

a. Predictors: (Constant), Information influence, Information seeking, Search methods, Resource awareness, Availability of information, Preferred sources, Preferred medium, Students responsibilities and user expertise, Market Maven, Enduring involvement index,

b. Predictors: (Constant), Information influence, Information seeking, Search methods, Resource awareness, Availability of information, Preferred sources, Preferred medium, Students responsibilities and user expertise, Market Maven, Enduring involvement index, Gender

c. Dependent Variable: Information seeking behaviour

Model 1: The adjusted R-squared value is 0.639 (table 15), indicating that approximately 63.9% variance in information-seeking behaviour this indicates independent variables are statistically significant predictors $(p<0.05)$.

Model 2 (with gender added as a predictor), the adjusted R-squared value slightly increases 0.639 to 0.651 representing a slight improvement in the model's explanatory power; suggesting that gender moderates the relationship between the independent variables and information-seeking behaviour.

Table 8.2.4 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	40.156	10	4.016	18.532	**.000***
Residual	19.285	89	.217		
Total	59.441	99			
2 Regression	41.000	11	3.727	17.786	**.000***
Residual	18.441	88	.210		
Total	59.441	99			

Source: primary data
*Significant at 5 per cent level of significance

From table 8.2.4 ANOVA, shows both Model 1 and Model 2 are statistically significant as the associated **F values 18.532 and 17.782 with p =0.000 < 0.05**, suggests that the models explain a significant amount of variance in information-seeking behaviour.

9. FINDINGS AND CONCLUSION

The findings suggest that both gender and various independent variables play significant roles in shaping information-seeking behaviour among the graduate students in Kerala. Future research could delve deeper into understanding how gender interacts with other predictors to influence information-seeking behaviours.

From the correlation analysis, there exist no significant relationship between gender and information-seeking behaviour among the graduate students in Kerala. Therefore, further investigation into the relation between demographic variables and information-seeking behaviour may require consideration of additional factors beyond gender. If other independent variables are available, regression analysis can still be conducted to explore their collective influence on information-seeking behaviour.

The analysis considers gender as the only demographic variable and explores its influence along with eleven independent variables (Information influence, Information seeking, Search methods, Resource awareness, Availability of information, Preferred sources, Preferred medium, Students' responsibilities, User expertise, Market Maven, Enduring involvement index) on Information-seeking behaviour, which is the dependent variable. Gender appears to be statistically significant effect on information-seeking behaviour. The statistically significant correlations suggest that gender may have some minor influence on variables such as graduate students search methods to find the material such as text books, reference materials for the study, awareness and utilization of the resources, preference of use of resources in their course like print and digital medium and student responsibilities on the importance of knowledge gaining and user experience in competitive exams, all have relatively small effects on gender.

The findings of the study cannot be generalize to the larger population, as the outcome of the study have some implications on research and practice, especially in educational settings like colleges, universities, and in libraries of the institution in the training and performance appraisal. However, cause and effect

cannot be established, as an understanding of the relationship between gender and information seeking behaviour which, may help library staff to implement appropriate learning strategies, eventually enhancing their educational settings in an effective manner.

10. REFERENCES

1. Santoshi Halder, Anjali Ray, P.K. Chakrabarty. (2010). Gender differences in information seeking behaviour in three universities in West Bengal, India. *The International Information & Library Review*, *42*(4), 242-251.
2. Kadli, Jayadev H., and Veeresh B. Hanchinal. "Information seeking behaviour of law students in the changing digital environment." *DESIDOC Journal of Library & Information Technology* 35.1 (2015): 61-68.
3. Kumar, K., and S. Tholkappian. "Information seeking behaviour of library users in women's educational institutions: a survey." *International Research: Journal of Library and Information Science* 3.4 (2013).
4. Lancaster, F.W. *Towards a paperless information system.* New York, Academic Press. (1978).
5. Padmamma, S. "Information Seeking Behaviour of Users of PESITEM, Shimoga: a Study." *Journal of Information and Knowledge* (2010): 699-708.
6. Ranganathan, S.R. (1963) *The Five Laws of Library Science*, 2nd ed. Bombay: Asia Publishing House.
7. R Rizal, D Rusdiana, W Setiawan, P Siahaan, I M Ridwan (2021, March). Gender differences in digital literacy among prospective physics teachers. In *Journal of Physics: Conference Series* (Vol. 1806, No. 1, p. 012004). IOP Publishing.