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User Information needs and Information Seeking Behaviour of Physics Department at the University of Burdwan

Amit Kumar Das* & Dr. Sukumar Mandal**

Abstract

Purpose – The study found on the University of Burdwan physics department faculties and research scholars' information needs and information seeking behaviour. The purpose is to find out the information needs, source use, satisfaction level, and improvement needs for library infrastructure, sources and services.

Methodology – In this information needs and seeking behaviour study, two sets online questionnaire has been developed to achieve the objective. Only physics faculties and regular registered research scholars (session 2011 – 2020) in the University of Burdwan have been selected as main respondents. Data has been collected using Google form. Online questionnaire have been served through email to all the physics faculty members and one hundred five registered research scholars in the University of Burdwan. The response rates from respondents are 47.62% (faculty) and 64.86% (scholars). The ratio of male – female respondents' of physics faculty members and scholars are 9:1 and 38:10 respectively.

Findings – The study depicted the physics department faculty members and research scholars' information needs and information seeking behaviour at the University of Burdwan. Information need and information seeking behaviour of physics department faculty members and regular research scholars was in-depth understanding of the major roles on overall university library development in the angle from the students; purview on Burdwan university library.

Originality/value – The current finding are original and reflected latest observation on the physics department faculties and research scholars' information-seeking behaviour in the University of Burdwan. The study benefits information Seekers and as well as library policy makers who provide the library collection development and services to the users of the University.

Keywords – Information needs, Information seeking behaviour, Physics, Faculty, Research scholar, University of Burdwan

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Introduction

Information plays a pivotal role in day-to-day activities of the human being. Everyone use information for their regular personal, societal, professional and official needs. Optimum use of information determines the level of satisfaction on the fulfillment of information needs. The perspective and effective usage of information depends upon the attitudes is called as information seeking behaviors that the information seeker applies in the process of information seeking. The application of information seeking behaviors in the information seeking process becomes complex in a situation where the flow of information in various forms of information resources.

Information seeking behavior has its prime significance since it is the dynamic action to achieve the goal in academic, research and social information needs. In academic eco system, the arrays of resources of information are delivered through academic libraries, classroom lecture notes, web, various media and peers.

The academic libraries especially in higher educational institutions like traditional academic university plays a pivotal role in serving various information resources and services related to academic, research activities and general awareness. University library serves arrays of information resources and services with various formats.

In 1960, the University of Burdwan was established as the first higher education centre. The university started journey with twelve post graduate science departments. Pure science department started namely Physics (1960), Chemistry (1961), Mathematics (1960) and others since its establishment.

The Department of Physics started footprint with four teachers, two non-teaching employees and

twenty students in September, 1961 in the initial phase of The University of Burdwan. The department shifted to a newly constructed building at the central position of the Golapbag campus of the University. The department began with the objective to meet the academic needs and to fulfill the demand of a large section of students in rural Bengal for studying higher education in the Post Graduate level.

With increasing demand, the department made an initiation of courses programs, such as Ph. D program, M. Tech in E&CE (Microwaves) and M.Phil. in Physics. The department has got assistance from several major research funding agencies such as UGC, DST, DRDO, ARDB, ISRO, CSIR, BRNS, etc. Now the department has achieved recognition as a Center of Advanced Study (CAS) by UGC since 2011. Moreover, the Department is funded by DST under the FIST program (Phase-II).

Related works

The review of literature is an important and essential part of any research investigation, review of related literature is very essential in conducting a new research. The main function of review of literature is to determine the work which has been done before so that it helps in delineation of plethora of problems of an area. Review of literature is one of the most important tools in my research as it provides background knowledge on the work already carried out in the concerned field of investigation.

During the study of this literature review, various sources such as books, print journals, online journals and databases, etc. have been consulted. Directory of Open Access Journals (DOAJ), Directory of Open Access Repositories (DOAR), Registry of Open Access Repositories (ROAR), Google Scholar, Emerald Insight, Taylor & Francis Online, Project Muse,

Sage Journals, Library and Information Science Abstract (LISA), Doctoral Dissertations Abstracts and Indian Library Science Abstract (ILSA) have been consulted for obtaining relevant literature.

The major demographic community that have been investigated (along with relevant citations) are as follows: general public, children, and students (Hirsh, 1997; Jacobson, & Ignacio, 1997; Neuman, 1995); research scholars (Tenopir & King, 2008 ; Brown, 1999; Hemminger et al., 2007; Nicholas, Huntington, & Jamali, 2007); professionals such as lawyers and nurses (Gorman, 1995; Leckie, Pettigrew, & Sylvain, 1996; Nicholas & Martin, 1997; Urquhart & Crane, 1994). Generally, previous research on academics' information searching behavior tended to focus on health science (Vibert et al., 2007), social science and humanities (Cronin, 1982; de Tiratel, 2000; Folster, 1989; Francis, 2005); and natural science and engineering (Brown, 2007; Davis, 2004; Hallmark, 1994; Henderson, 1995; Kraut, Egidio, & Galegher, 1988; Stewart, 1996).

Dasgupta, Yadav and Dasgupta (2017) conducted a study on medical information seeking behavior of medical students and their teachers, worthy based in teaching hospitals in Kolkata. The main aims of the investigation are what sources are considered relevant with regard to the retrieval of crucial information by these medical professionals. The survey method was used in this paper in four medical colleges. The data collection tool was a self-designed. The respondents are nasty student (UG) and (PG) and teachers. The article highlights that a majority of the respondents had never received formal instruction on the use of information sources.

Paliwal, Bhardwaj and Sharma (2016) conducted a study on information need and seeking behaviour of faculty members of science and technology. G.B Nagar information is a pows fell

thing and plays an important role in our society. Different types of documents are available but which are need and who we find. Day by day at large extent users are making use of electronic sources of information for acquiring latest information. The main than of the paper is different types of information user want and how they collected

Khan and Alam (2016) studied on users' information seeking behaviour in the energy resource institute (TERI), New Delhi and observed various facets of library activities.

Yadav and Singh (2016) investigated on PG student and doctoral students' information need and information seeking behaviour and explored the seeking pattern of social science, information used.

Chinnasamy (2017) explored engineering college students' information need and seeking behaviour in Madurai using survey method. The prime finding is (81.23%) are using the e-resources.

Objective of the study

The prime research objectives are as follows:

- 1. To find out the physics department faculties and research scholars' information needs and information seeking behavior in the University of Burdwan**
- 2. To find out the physics department faculty members and research scholars' prime information needs.**
- 3. To find out the physics department faculties and scholars' information sources use.**
- 4. To find out the improvement needed of library infrastructure, sources and services**

among physics department faculties and scholars.

- 5. To find out the satisfaction level of physics department faculties and research scholars of the University of Burdwan library system.**

Methodology

In this information needs and seeking behaviour study, two sets online questionnaire has been developed to achieve the objective. Only physics faculties and regular registered research scholars (session 2011 – 2020) in the University of Burdwan have been selected as main respondents. Data has been collected using Google form. Online questionnaire have been served through email to all the physics faculty members and one hundred five registered research scholars in the University of Burdwan.

Data Analysis Techniques: Data collected from physics department faculties and research scholars in the University of Burdwan through online data collection tool using Google Form. Statistical Package for Social Sciences (SPSS V-25) statistical application software was used in this study for quantitative and qualitative data analysis.

Limitations of the Study

This study has a number of limitations. The respondents were physics department faculty members and research scholars in the University of Burdwan. Guest faculties and Post Graduate Students, and faculties of arts, humanities and social science departments are excluded.

Data Analysis and Discussion

Online Google form questionnaire has been distributed through email and whatsapp application

to twenty one physics faculties and seventy four registered research scholars. The response rates from respondents are 47.62% (faculty) and 64.86% (scholars). The ratio of male – female respondents’ of physics faculty members and scholars are 9:1 and 38:10 respectively.

1Q. Motivation of using library					
			Group		Total
			Research scholar	Teacher	
1Q	Self	Count	24	6	30
		% within 1Q	80.0%	20.0%	100.0%
		% within Group	50.0%	60.0%	51.7%
		% of Total	41.4%	10.3%	51.7%
	Parents	Count	2	1	3
		% within 1Q	66.7%	33.3%	100.0%
		% within Group	4.2%	10.0%	5.2%
		% of Total	3.4%	1.7%	5.2%
	Teachers	Count	17	3	20
		% within 1Q	85.0%	15.0%	100.0%
		% within Group	35.4%	30.0%	34.5%
		% of Total	29.3%	5.2%	34.5%
	Friends	Count	5	0	5
		% within 1Q	100.0%	0.0%	100.0%
		% within Group	10.4%	0.0%	8.6%
		% of Total	8.6%	0.0%	8.6%
Total		Count	48	10	58
		% within 1Q	82.8%	17.2%	100.0%
		% within Group	100.0%	100.0%	100.0%
		% of Total	82.8%	17.2%	100.0%

Table 1 Motivation of using library

Table 1 show that 80% of physics department research scholar and 20% faculties have been self-motivated. 66.7% scholars and 33.3% faculties have been motivated by their parents.85% scholars and 15% faculties motivate by their teachers. 100% research scholars motivated by their peers among respondents. Among all the scholars’ respondents, 50% physics research scholars have been motivated by self, 35% by their teachers, 10.4% by their friends and 4.2% by their parents. Where as in case of faculty members, 60%, 30% and 10% have been motivated by self,

teachers and parents respectively. Among all the respondents, 51.7%, 34.5%, 8.6% and 5.2% respondents of physics department have been motivated by self, teachers, friends and parents respectively (shows in Fig – 1).

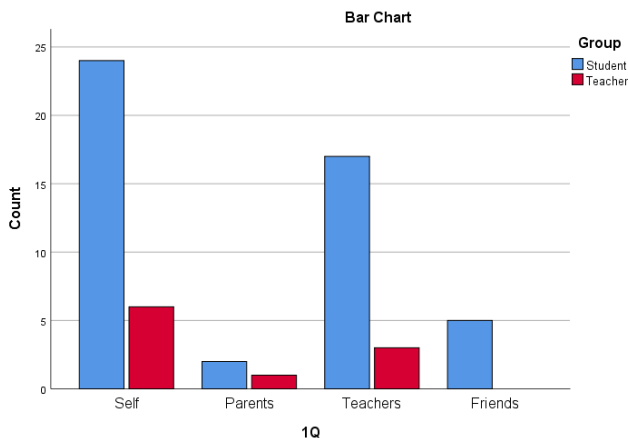


Fig – 1 Motivation of using library

2Q. Table 2 Starting of Library use					
			Group		Total
			Research scholar	Teacher	
2Q	Public Library	Count	2	0	2
		% within 2Q	100.0%	0.0%	100.0%
		% within Group	4.2%	0.0%	4.2%
		% of Total	3.4%	0.0%	3.4%
	College Library	Count	29	4	33
		% within 2Q	87.9%	12.1%	100.0%
		% within Group	60.4%	40.0%	56.9%
		% of Total	50.0%	6.9%	56.9%
	School Library	Count	17	6	23
		% within 2Q	73.9%	26.1%	100.0%
		% within Group	35.4%	60.0%	39.7%
		% of Total	29.3%	10.3%	39.7%
Total		Count	48	10	58
		% within 2Q	82.8%	17.2%	100.0%
		% within Group	100.0%	100.0%	100.0%
		% of Total	82.8%	17.2%	100.0%

Table 2 Starting of Library use

Table 2 depicts that all the research scholars have started using public library among respondents

who have given feedback on the public library. 87.9% scholars and only 12.1% faculties have started using college library. 73.9% research scholars and 26.1% faculty members in physics department have started school library. Among all the physics department scholar respondents, 60.4%, 35.4% and 4.2% research scholars have used library from college, school, and public respectively. In case of all the faculties, 60% and 40% have started using library from school, college respectively. Among all the respondents from physics department, majority of respondents (56.9%) have using college library. 39.7% and 3.4% respondents of physics department have started using school library and public library respectively (Fig – 2).

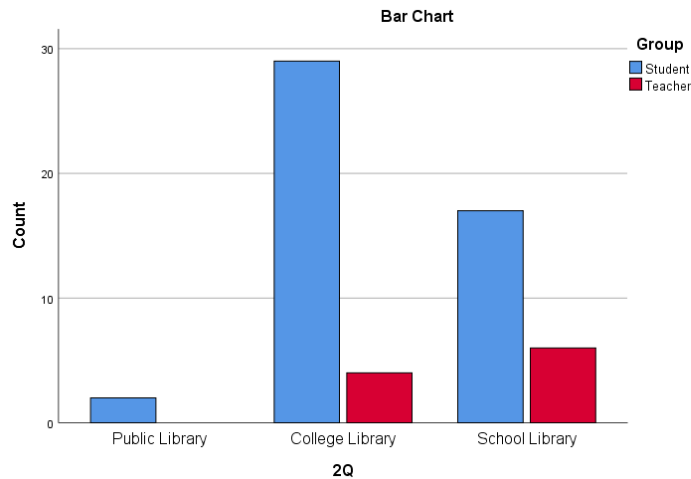


Fig 2 – Starting of Library use

3Q how often you visit Library					
			Group		Total
			Research scholar	Teacher	
3Q	Daily	Count	31	1	32
		% within 3Q	96.9%	3.1%	100.0%
		% within Group	64.6%	10.0%	55.2%
		% of Total	53.4%	1.7%	55.2%
	1 day/week	Count	12	7	19
		% within 3Q	63.2%	36.8%	100.0%
		% within Group	25.0%	70.0%	32.8%
		% of Total	20.7%	12.1%	32.8%
	2 day/week	Count	0	2	2
		% within 3Q	0.0%	100.0%	100.0%

		% within Group	0.0%	20.0%	3.4%
		% of Total	0.0%	3.4%	3.4%
	3 day/week	Count	4	0	4
		% within 3Q	100.0%	0.0%	100.0%
		% within Group	8.3%	0.0%	6.9%
		% of Total	6.9%	0.0%	6.9%
	5 day/week	Count	1	0	1
		% within 3Q	100.0%	0.0%	100.0%
		% within Group	2.1%	0.0%	1.7%
		% of Total	1.7%	0.0%	1.7%
Total	Count	48	10	58	
	% within 3Q	82.8%	17.2%	100.0%	
	% within Group	100.0%	100.0%	100.0%	
	% of Total	82.8%	17.2%	100.0%	

Table 3 how often you visit Library

Table 3 shows that among all the physics department respondents in daily, 96.9% research scholars and 3.1% faculty members visit library in daily basis. 63.2% scholars and 36.8% faculties have visited university library once in a week as per day in a week respondents. 100% faculties have visited university library 2 days in a week as per two day in a week respondents. 100% research scholars have visited university library 3 days in a week from three days in a week respondents. 100% physics scholars have visited university library 5 days in a week from five days in a week respondents. Maximum 64.6% of physics research scholar have visited university library in daily. 25%, 8.3% and 2.1% research scholars have visited library in one day, 3 days and 5 days in a week respectively among all scholar respondents. 70%, 20% and 10% of the faculty members visit library in one day, 2 days in a week and daily basis respectively among all the physics faculty respondents. Among all the physics department respondents, maximum 55.2% respondents have visited university library daily basis. 32.8%, 6.9%, 3.4%, and 1.7% respondents visit library in one day, 3 days, two days and 5 days in a week respectively (Fig – 3).

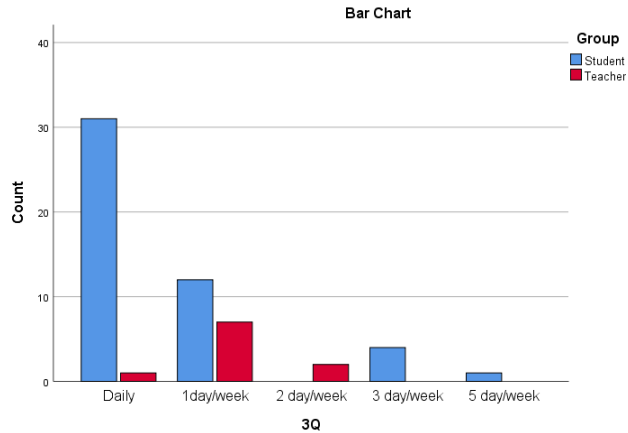


Fig 3 – how often you visit Library

4Q Spending Time in Library					
			Group		
			Research scholar	Teacher	
4Q	1 hr	Count	4	1	5
		% within 4Q	80.0%	20.0%	100.0%
		% within Group	8.3%	10.0%	8.6%
		% of Total	6.9%	1.7%	8.6%
	2 hr	Count	28	2	30
		% within 4Q	93.3%	6.7%	100.0%
		% within Group	58.3%	20.0%	51.7%
		% of Total	48.3%	3.4%	51.7%
	3 hr	Count	8	4	12
		% within 4Q	66.7%	33.3%	100.0%
		% within Group	16.7%	40.0%	20.7%
		% of Total	13.8%	6.9%	20.7%
	4 hr	Count	8	3	11
		% within 4Q	72.7%	27.3%	100.0%
		% within Group	16.7%	30.0%	19.0%
		% of Total	13.8%	5.2%	19.0%
Total		Count	48	10	58
		% within 4Q	82.8%	17.2%	100.0%
		% within Group	100.0%	100.0%	100.0%
		% of Total	82.8%	17.2%	100.0%

Table 4 Spending Time in Library

Table 4 depicts that among all the physics department respondents of one hour, 80% research scholars and 20% faculty members spend one hour in library. 93.3% scholars and 6.7% faculties have spent for two hours in university library. 66.7% scholars and 36.3% faculties have spent 3 hours in university library as per 3 hours respondents. 72.7% research scholars and 27.3% faculties have 4 hours in library from four hours respondents. Maximum 58.3% of physics research scholars have spent two hours in university library. 16.7% scholars spent three and four hours each, only 8.3% research scholars have spent minimum one hour in library. 40%, 30%, 20% and 10% of the physics faculty members have spent three, four, two hours and one hour respectively in university library among all the physics faculty respondents. Among all the physics department respondents, maximum 51.7% respondents have spent two hours in university library. 20.7%, 19%, and 8.6% among all physics department respondents have spent three, four hours and one hour in university library.

5Q Do you Use Departmental Library					
			Group		Total
			Research scholar	Teacher	
5Q	Yes	Count	48	10	58
		% within 5Q	82.8%	17.2%	100.0%
		% within Group	100.0%	100.0%	100.0%

Table 5 Do you Use Departmental Library

Table 5 shows that all the research scholar and faculties in physics department used departmental library. Among all the respondents, 82.8% scholar and 17.2% faculty members have visited departmental library.

6Q. Do you Visit Any Library Other Than University Library					
			Group		Total
			Research scholar	Teacher	
6Q	Yes	Count	34	6	40
		% within 6Q	85.0%	15.0%	100.0%
		% within Group	70.8%	60.0%	69.0%
		% of Total	58.6%	10.3%	69.0%
	No	Count	14	4	18

		% within 6Q	77.8%	22.2%	100.0%
		% within Group	29.2%	40.0%	31.0%
		% of Total	24.1%	6.9%	31.0%
Total	Count		48	10	58

Table 6 Do you Visit Any Library Other Than University Library

Table 6 depicts that among 40 respondents, 85% research scholars and 15% faculties of physics department have visited other library other than university library. Among 18 respondents, 77.8% scholars and 22.2% faculty members never visit any other library than university library. Majority of (70.8%) research scholars have visited other than university library among 48 scholars' respondents. 60% of the faculties have visited other than university library among ten respondents. Among all the physics department respondents 69% have visited other library than university library for their information needs.

7Q Spending on an average in other libraries						
		Group				
		Research scholar	Teacher	Total		
7Q	Not to spend	Count	16	4	20	
		% within 8Q	80.0%	20.0%	100.0%	
		% within Group	33.3%	40.0%	34.5%	
		% of Total	27.6%	6.9%	34.5%	
	weekly 1 hr	Count	10	2	12	
		% within 7Q	83.3%	16.7%	100.0%	
		% within Group	20.8%	20.0%	20.7%	
		% of Total	17.2%	3.4%	20.7%	
	weekly 2 hr	Count	5	2	7	
		% within 7Q	71.4%	28.6%	100.0%	
		% within Group	10.4%	20.0%	12.1%	
		% of Total	8.6%	3.4%	12.1%	
	weekly 3 hr	Count	2	0	2	
		% within 7Q	100.0%	0.0%	100.0%	
		% within Group	4.2%	0.0%	3.4%	
		% of Total	3.4%	0.0%	3.4%	
weekly 4 hr	Count	5	0	5		
	% within 7Q	100.0%	0.0%	100.0%		
	% within Group	10.4%	0.0%	8.6%		
	% of Total	8.6%	0.0%	8.6%		

monthly2hr	Count	0	1	1
	% within 7Q	0.0%	100.0%	100.0%
	% within Group	0.0%	10.0%	1.7%
	% of Total	0.0%	1.7%	1.7%
monthly3hr	Count	10	1	11
	% within 7Q	90.9%	9.1%	100.0%
	% within Group	20.8%	10.0%	19.0%
	% of Total	17.2%	1.7%	19.0%
Total	Count	48	10	58
	% within 7Q	82.8%	17.2%	100.0%
	% within Group	100.0%	100.0%	100.0%
	% of Total	82.8%	17.2%	100.0%

Table 7 Spending on an average in other libraries

Table 7 depict that 80% physics scholar and 20% faculty members never spent times in other libraries among 20 respondents. 83.3% scholars have spent one hour in week among 12 respondents. 71.4%, 100%, and 90% scholars visited other library for two, three and four hours in a week among 7, 2, and 5 respondents respectively. 91.9% physics research scholars have spent 3 hours in a month among 11 respondents. Majority of 66.7% physics research scholars have spent time in other libraries among all the scholar respondents. 20.8%, 10.6%, 4.2%, and 20.8% of scholars spent 1 hour, 2, 3, 4 hours in a week and 3 hours in a month respectively among all the scholar respondents. 60% of physics faculty members have spent times in other libraries among all the faculty respondents. 20% each faculties spent weekly 1 and 2 hours and 10% each faculties for monthly 2 and 3hours in other libraries among all the faculty respondents. 65.5% physics department respondents have spent time in other libraries. 20.7%, 12.1%, 8.6%, 3.4% and 1.7% respondents have spent time for 1 hour, 2, 4, 3 hours in a week and 2 hours in a month respectively among all the respondents. Surprisingly 19% physics department scholars and faculty members have spent three hours in a month among all the respondents (Fig 4).

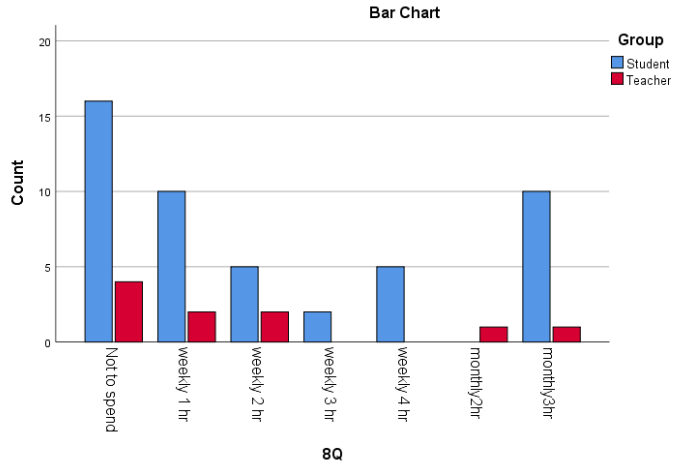


Fig 4 – Spending on an average in other libraries

8Q what are the main reasons of Information Needs?					
			Group		Total
			Research scholar	Teacher	
8Q	Research	Count	1	1	2
		% within 8Q	50.0%	50.0%	100.0%
		% within Group	2.1%	10.0%	3.4%
		% of Total	1.7%	1.7%	3.4%
	Study	Count	7	2	9
		% within 8Q	77.8%	22.2%	100.0%
		% within Group	14.6%	20.0%	15.5%
		% of Total	12.1%	3.4%	15.5%
	Research and Study	Count	35	7	42
		% within 8Q	83.3%	16.7%	100.0%
		% within Group	72.9%	70.0%	72.4%
		% of Total	60.3%	12.1%	72.4%
	Others	Count	5	0	5
		% within 8Q	100.0%	0.0%	100.0%
		% within Group	10.4%	0.0%	8.6%
		% of Total	8.6%	0.0%	8.6%
Total	Count	48	10	58	
	% within 8Q	82.8%	17.2%	100.0%	
	% within Group	100.0%	100.0%	100.0%	
	% of Total	82.8%	17.2%	100.0%	

Table 8 what are the main reasons of Information Needs?

Table 8 shows that research and study is the prime information needs of maximum 72.4% of physics research scholars and faculty members. Only study is the second most important information needs of 15.5% respondents among all the physics department respondents. Majority of (72.4%) respondents information needs is research and study. Only 8.6% and 3.4% respondents visit for other purpose and only study respectively. It is noted that equal number of scholars and faculties of physics department have visited university library for only satisfying their research purpose information needs. 78.8% physics scholars and 22.2% faculty members meet their information needs for only study. Majority of 83.3% physics scholars have satisfied their information needs for research and study among 42 respondents. All the physics research scholars visited library for other purpose among 5 respondents. Maximum physics research scholars (83.3%) meet their research and study, the major information needs among all the scholar respondents. Among all the scholar respondents, 14%, 10.4%, and 2.1% scholars visit for study, other purpose, and research respectively. Majority of 70% physics faculty members meet their prime information needs for research and study among all the faculty respondents. 20% and 10% faculty have visited university library for only study and research respectively (Fig 5).

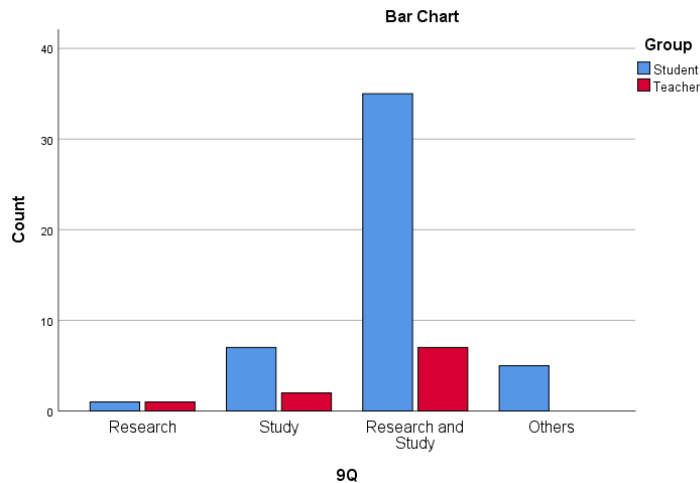


Fig 5 – what are the main reasons of Information Needs?

9Q Reasons for library visit					
			Group		Total
			Research scholar	Teacher	
9Q	Borrow books	Count	1	1	2
		% within 9Q	50.0%	50.0%	100.0%
		% within Group	2.1%	10.0%	3.4%

		% of Total	1.7%	1.7%	3.4%
	All of above	Count	47	9	56
		% within 9Q	83.9%	16.1%	100.0%
		% within Group	97.9%	90.0%	96.6%
		% of Total	81.0%	15.5%	96.6%
Total		Count	48	10	58

Table 9 Reasons for library visit

Table 9 depicts majority of 96.6% physics scholars and faculties access all types of university library services among all respondents. Only 3.4% scholars and faculties visit university library specifically for borrowing books among all the respondents. Among all the scholars' respondents, maximum 97.9% physics scholars access all types of resources and services from university library and only 2.1% specifically for borrowing books. Among all the physics faculty members, 90% have accessed all types of library resources and services and only 1.7% for mainly for borrowing books.

10Q Consultation with faculty members					
			Group		Total
			Research scholar	Teacher	
10Q	Yes	Count	48	10	58
		% within 10Q	82.8%	17.2%	100.0%
		% within Group	100.0%	100.0%	100.0%
		% of Total	82.8%	17.2%	100.0%

Table 10 Consultation with faculty members

Table 10 depicts majority of 100% physics research have consulted with faculty members among all scholar respondents. All the faculties consulted with their peer members among all physics faculty respondents. 82.8% physics research scholar and 17.2% faculties agreed for consultation with their faculty members for research and study among all the respondents.

11Q Day-wise information seeking					
			Group		Total
			Research scholar	Teacher	
11Q	Yes	Count	48	9	57
		% within 11Q	84.2%	15.8%	100.0%

		% within Group	100.0%	90.0%	98.3%
		% of Total	82.8%	15.5%	98.3%
	No	Count	0	1	1
		% within 11Q	0.0%	100.0%	100.0%
		% within Group	0.0%	10.0%	1.7%
		% of Total	0.0%	1.7%	1.7%
Total	Count	48	10	58	
	% within 11Q	82.8%	17.2%	100.0%	
	% within Group	100.0%	100.0%	100.0%	
	% of Total	82.8%	17.2%	100.0%	

Table 11 Day-wise information seeking

Table 11 shows that day-wise regular information seeking records was well-kept by 84.2% physics research scholars and 15.8% faculty members. All the physics scholars use to record their day-wise information seeking among scholar respondents. It is noted that only one faculty does not require for day-wise information seeking.

12Q Sources used					
			Group		Total
			Research scholar	Teacher	
12Q	Search engine	Count	1	0	1
		% within 12Q	100.0%	0.0%	100.0%
		% within Group	2.1%	0.0%	1.7%
		% of Total	1.7%	0.0%	1.7%
	All	Count	47	10	57
		% within 12Q	82.5%	17.5%	100.0%
		% within Group	97.9%	100.0%	98.3%
		% of Total	81.0%	17.2%	98.3%
Total		Count	48	10	58

Table 12 Sources used

Table 12 shows that majority of 100% research scholars use search engine for information seeking. It is noted that no physics faculty use search engine for information seeking rather than like to access all types of library resources. 82.5% physics scholars and 17.5% faculties access all types of university library resources among all the respondents.

13Q Success rate of users

			Group		Total
			Research scholar	Teacher	
13Q	100%	Count	10	0	10
		% within 13Q	100.0%	0.0%	100.0%
		% within Group	20.8%	0.0%	17.2%
		% of Total	17.2%	0.0%	17.2%
	90%	Count	3	4	7
		% within 13Q	42.9%	57.1%	100.0%
		% within Group	6.3%	40.0%	12.1%
		% of Total	5.2%	6.9%	12.1%
	80%	Count	25	5	30
		% within 13Q	83.3%	16.7%	100.0%
		% within Group	52.1%	50.0%	51.7%
		% of Total	43.1%	8.6%	51.7%
	70%	Count	9	1	10
		% within 13Q	90.0%	10.0%	100.0%
		% within Group	18.8%	10.0%	17.2%
		% of Total	15.5%	1.7%	17.2%
	60%	Count	1	0	1
		% within 13Q	100.0%	0.0%	100.0%
		% within Group	2.1%	0.0%	1.7%
		% of Total	1.7%	0.0%	1.7%
Total	Count	48	10	58	
	% within 13Q	82.8%	17.2%	100.0%	
	% within Group	100.0%	100.0%	100.0%	
	% of Total	82.8%	17.2%	100.0%	

Table 13 Success rate users

Table 13 shows that maximum 100% physics research scholars have hundred percent success rates for information seeking among hundred percent success respondents. 52.1% physics research scholars have 80 percent success rate for information needs and information seeking from university library resources and services.

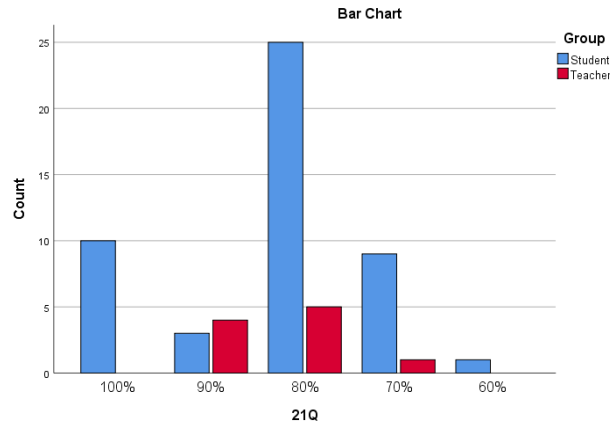


Fig 6 – Success rate users

14Q Reasons of dissatisfaction					
			Group		Total
			Research scholar	Teacher	
14Q	No dissatisfaction	Count	17	8	25
		% within 14Q	68.0%	32.0%	100.0%
		% within Group	35.4%	80.0%	43.1%
		% of Total	29.3%	13.8%	43.1%
	No comments	Count	1	0	1
		% within 14Q	100.0%	0.0%	100.0%
		% within Group	2.1%	0.0%	1.7%
		% of Total	1.7%	0.0%	1.7%
	Need more resource	Count	30	2	32
		% within 14Q	93.8%	6.3%	100.0%
		% within Group	62.5%	20.0%	55.2%
		% of Total	51.7%	3.4%	55.2%
Total		Count	48	10	58
		% within 14Q	82.8%	17.2%	100.0%
		% within Group	100.0%	100.0%	100.0%
		% of Total	82.8%	17.2%	100.0%

Table 14 Reasons of dissatisfaction

Table 14 shows that 68% physics research scholars and 32% faculties have not dissatisfied on university library among twenty five respondents. Only one scholar does “no comments” on dissatisfaction. Maximum 93.8% scholars and 6.3% faculties agreed on “need more resources among rest of the respondents. All the physics scholars’ respondents, majority of 62.5% demand

for more resources, 35.4% have no dissatisfaction and only 2.1% said “no comments”. Among all the faculty respondents, 20% requested for more library resources, maximum 80% have satisfied on library resources and services. Overall 55.2% respondents demand more resources and services, 43.1% have satisfied on library system.

15Q Improvement needs for University library infrastructure					
			Group		
			Research scholar	Teacher	Total
15Q	Yes	Count	33	9	42
		% within 15Q	78.6%	21.4%	100.0%
		% within Group	68.8%	90.0%	72.4%
		% of Total	56.9%	15.5%	72.4%
	No	Count	12	0	12
		% within 15Q	100.0%	0.0%	100.0%
		% within Group	25.0%	0.0%	20.7%
		% of Total	20.7%	0.0%	20.7%
	No comments	Count	3	1	4
		% within 15Q	75.0%	25.0%	100.0%
		% within Group	6.3%	10.0%	6.9%
		% of Total	5.2%	1.7%	6.9%
Total		Count	48	10	58

Table 15 Improvement needs for University library infrastructure

Table 15 shows that 78.6% physics research scholars and 21.4% faculty members have agreed on improvement needs for university library infrastructure among 42 respondents. Maximum 100% scholars out of 12 respondents agreed on no need on university library infrastructure development. 75% scholars and 25% faculties out of 4 respondents agreed on “no comments” on university library infrastructure development. Among all the respondents, majority of 72.4% physics respondents have agreed on improvement need on university library infrastructural development.

16Q Improvement needs for University library services					
			Group		
			Research scholar	Teacher	Total
16Q	Yes	Count	27	8	35

		% within 16Q	77.1%	22.9%	100.0%
		% within Group	56.3%	80.0%	60.3%
		% of Total	46.6%	13.8%	60.3%
	No	Count	18	1	19
		% within 16Q	94.7%	5.3%	100.0%
		% within Group	37.5%	10.0%	32.8%
		% of Total	31.0%	1.7%	32.8%
	No comments	Count	3	1	4
		% within 16Q	75.0%	25.0%	100.0%
		% within Group	6.3%	10.0%	6.9%
		% of Total	5.2%	1.7%	6.9%
	Total	Count	48	10	58
% within 16Q		82.8%	17.2%	100.0%	
% within Group		100.0%	100.0%	100.0%	
% of Total		82.8%	17.2%	100.0%	

Table 16 Improvement needs for University library services

Table 16 depicts that Majority of 60.3% physics respondents have agreed for enhancing university library services. 77.1% physic research scholar and 22.9% faculty members out of 35 respondents have suggested for improvement needs for library services. Out of 19 respondents, 94.7% physics scholars and 5.3% faculties said no needs for improvement of university library services. 75% physics research scholar and 25% faculty members said “no comments” among rest of the respondents. Among all the physics scholar respondents, majority of 56.7% have agreed on improvement needs for library services. Maximum 80% faculties have responded on the improvement needs for university library services among all the faculty respondents.

Conclusion

Information need and information seeking behaviour of physics department faculty members and regular research scholars because it was in-depth understanding of the major roles on overall university library development in the angle from the students; purview on Burdwan university library. The physics faculties need for information influenced on their course requirements and research related educational resources. The information seeking activity are based on accessibility of library resources, awareness of information sources; skills associated with information seeking process; interaction with peers and faculties. Majority of the faculties and scholars demand on more resources need, improvement needs on library infrastructure and

services. Interestingly, majority of the physics department faculty members and scholars satisfied on university library services.

Practical implication

The study is about physics department faculties and research scholars' information needs and seeking behaviour in the University of Burdwan. It should give top priority to quality education, staff training, and user education with IT based library resources and services. This in-depth quantitative and qualitative analysis of faculties and research scholars' information needs and seeking behaviour in the University of Burdwan helps decision makers, planners and policy makers to design a modern library centric education system based on the users' need.

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