

Library Book Transactions by PG Students of School of Sciences in Indira Gandhi Memorial Library, University of Hyderabad

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ABSTRACT

The basic function of any library is the circulation of books. The strength and weakness of any library can be judged by its circulation data. In our country the practice of lending books persists as major outlet of tapping information by users. Now it is appropriate to understand the rate and trend of issues, the characteristics of books that were circulated etc, for a need based acquisition of books. This study investigated book transactions by postgraduate students of school of social science students in Indira Gandhi Memorial Library, University of Hyderabad. There are 736 postgraduate students enrolled in the school of sciences during the academic year 2014-16. After obtaining permission from the Chief Librarian of University of Hyderabad IGM Library, Hyderabad, the researcher collected the all information about postgraduate students pertaining borrower's book transactions from the circulation section. Out of 736 School of Sciences PG students, II year students (362) are done more number of book transactions (53.69%) with an average of 19 books when compared to I year students book transactions (46.31%) with an average of 16 books.

KEYWORDS: Use of books, borrowing of books, borrowers, circulation section, library users.

INTRODUCTION

Libraries procure documents for readers. The documents should be put to maximum use. The first two laws of library science advocate that the readers should get books to meet their information needs; and every book in the library should be used by the readers. The circulation section of any library helps in following these laws by circulating books among the readers. Circulation work refers to all activities performed and procedures adopted for registration of users, issue and return of documents, maintenance of statistics, gate register, property counter and lockers. The circulation procedures exist to facilitate readers to have access to the books held by the library.

Every library has a circulation desk or counter. It is generally located near the entrance of the library. It is a service point meant for issue and return of books. The circulation desk is staffed by trained staff in order to handle circulation system and answer other queries of the readers. An efficient circulation section aims at ensuring maximum use of library materials by the users. It does so by adopting proper procedures, systems for charging and discharging and maintaining relevant records.

REVIEW OF RELATED LITERATURE

Nazim, Areeba and Sarkar (2021) conducted a study to assess the convenience and accessibility of library services to users with disabilities at Aligarh Muslim University in India. The paper concludes with the recommendations to implementing guidelines of IFLA and UNESCO regarding access to library services for users with disabilities. **Decker and Arthur (2020)** elucidate how acquisitions and ILL can work together to effectively deliver what users need when they need it. **Wang and Loftis (2020)** article explores the current status of video resources in the library catalog to better understand how users find and access streaming content. MARC records were evaluated, and searches were performed to gauge issues related to metadata quality and its impact on discovery. The study reveals new trends in how users access streaming content for teaching, learning, and research. **Tindowen, et al (2019)** gathered the data from the Follett Destiny Library System of the University Libraries to determine the circulation trends of materials which purchased on the year 2014-2017. **Wilson and Roberts (2019)** conducted a study on circulation policies in academic libraries in the United States. **Atkinson (2017)** examined to study on framework for academic library quality to be used by new and more experienced library practitioners and by others involved in considering the quality of academic libraries' services and provision.

NEED OF THE STUDY

In order to determine the books to be properly acquired, the library planners fully grasp the rate and trend of issues, apart from clearly knowing the distinctiveness of the books, nature of study, objectives of the book chosen for circulation. The librarians analyze the recorded library data and make effective decisions on the basis of factors like the qualitative and quantitative up graduation of information, multiple user interests, spiraling book costs and the limitations in budgetary support. Therefore, effectiveness of the acquisition process, collection development, financial allocation and long-term strategic planning is largely dependent on the proper analysis of library circulation statistics. In essence, circulation deals with the process to aid wage of books, which results in effectively predicting the varied needs of the user communities

METHODOLOGY USED IN THE STUDY

The present study seeks to conduct an analysis of the books borrowed by school of sciences Postgraduate students consist of 13 subjects like Animal Biotechnology, Bio chemistry, Bio technology, Chemistry, Computer Applications, Health Psychology, Mathematics, Molecular Microbiology, Ocean and Atmospheric Sciences, Physics, Plant Biology, Public Health, Statistics in Indira Gandhi Memorial Library, University of Hyderabad. There are 736 postgraduate students enrolled in the School of Sciences during the academic year 2014-16.

OBJECTIVES

The following are the objectives of the present study:

- To examine the book transactions of postgraduate students of school of sciences in Indira Gandhi Memorial Library, University of Hyderabad during their years of study;
- To know the gender wise book transactions by postgraduate students of school of sciences;
- To know the book transactions by postgraduate students of school of sciences according to their residential background;
- To analyse the book transactions according to the type of authorship(Indian or foreign);
- To know the authorship pattern of books borrowed by postgraduate students

Table 1: Library Book Transactions by School of Sciences PG students according to their Year of Study

Sl. No.	Subjects	School of Sciences									
		I Year					II Year				
		Students		Book Transactions		Average	Students		Book Transactions		Average
		No	%	No	%	No	No	%	No	%	No
1	Animal Biotechnology	21	52.50	415	45.11	20	19	47.50	505	54.89	26
2	Bio chemistry	26	50.00	446	46.46	17	26	50.00	514	53.54	20
3	Bio technology	20	50.00	400	46.73	29	20	50.00	456	53.27	23
4	Chemistry	45	50.00	785	48.70	17	45	50.00	827	51.30	18
5	Computer Applications	60	50.00	650	45.14	11	60	50.00	790	54.86	14
6	Health Psychology	11	50.00	205	46.59	19	11	50.00	235	53.41	21
7	Mathematics	41	51.25	410	46.07	10	39	48.75	480	53.93	12
8	Molecular Microbiology	14	50.00	395	47.59	28	14	50.00	435	52.41	31
9	Ocean and Atmospheric Sciences	12	50.00	250	44.64	21	12	50.00	310	55.36	26
10	Physics	49	51.04	810	47.65	17	47	48.96	890	52.35	19
11	Plant Biology	15	50.00	420	46.67	28	15	50.00	480	53.33	32
12	Public Health	39	52.70	450	42.45	12	35	47.30	610	57.55	17
13	Statistics	21	52.50	390	46.21	19	19	47.50	454	53.79	24
Total		374	50.81	6026	46.31	16	362	49.19	6986	53.69	19

The study intends to examine the library book transactions by School of Sciences PG students with respect to their year of study. It is evident from Table 4.1 out of 736 School of Sciences PG students, II year students (362) are done

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more number of book transactions (53.69%) with an average of 19 books when compared to I year students book transactions (46.31%) with an average of 16 books. Similarly, with respect to the each subject transactions by II year students, majority (57.55%) of the book transactions are done by the Public Health II year students with on average of 17 books followed by 55.36 per cent of book transactions are done by Ocean and Atmospheric Sciences students with an average of 26 books, Animal Biotechnology (54.89%) with an average of 26 books, Computer Applications (54.86%) with an average of 14 books, Mathematics (53.93%) with an average of 12 books, Statistics (53.79%) with an average of 24 books, Biochemistry (53.54%) with an average of 20 books, Health Psychology (53.41%) with an average of 21 books, Plant Biology (53.33%) with an average of 32 books, Biotechnology (53.27%) with an average of 23 books, MOlecular Microbiology (52.41%) with an average of 31 books, Physics (52.35%) with an average of 19 books and Chemistry (51.30%) with an average of 18 books.

It is also evident from Table 4.1 that majority (48.70%) of the book transactions are done by the Chemistry I year students with on average of 17 books followed by 47.65 per cent of book transactions are done by Physics 1 year students with an average of 17 books, Molecular Microbiology (47.59%) with an average of 28 books, Biotechnology(46.73%) with an average of 29 books, Plant Biology (46.67%) with an average of 28 books, Health Psychology (46.59%) with an average of 19 books, Biochemistry (46.46%) with an average of 17 books, Statistics (46.21%) with an average of 19 books, Mathematics (46.07%) with an average of 10 books, Computer Applications (45.14%) with an average of 11 books, Animal Biotechnology (45.11%) with an average of 20 books, Ocean and Atmospheric Sciences (44.64%) with an average of 21 books and Public Health (42.45%) with an average of 12 book.

It can be concluded that II year PG students of School of Sciences are done more number of book transactions when compared to I year PG Students.

Table 2: Library Book Transactions by School of Sciences PG Students according to their Gender

Sl. No.	Subjects	School of Sciences									
		Male					Female				
		Students		Book Transactions		Average	Students		Book Transactions		Average
		No	%	No	%		No	%	No	%	
1	Animal Biotechnology	27	67.50	568	61.74	21	13	32.50	352	38.26	27
2	Bio chemistry	35	67.31	511	53.23	15	17	32.69	449	46.77	26
3	Bio technology	27	67.50	470	54.91	17	13	32.50	386	45.09	30
4	Chemistry	56	62.23	835	51.79	15	24	26.67	777	48.21	32
5	Computer Applications	79	65.83	806	55.97	10	41	34.17	634	44.03	15
6	Health Psychology	16	72.73	237	53.86	15	06	27.27	203	46.14	34

7	Mathematics	52	65.00	477	53.60	9	28	35.00	413	46.45	15
8	Molecular Microbiology	20	71.43	537	64.70	27	08	28.57	293	35.30	36
9	Ocean and Atmospheric Sciences	18	75.00	390	69.64	22	06	25.00	170	30.36	28
10	Physics	61	63.54	933	54.88	15	35	36.46	767	45.12	22
11	Plant Biology	23	76.67	642	71.33	28	07	23.33	258	28.67	36
12	Public Health	49	66.22	656	61.89	13	25	33.78	404	38.11	16
13	Statistics	26	65.00	456	54.03	18	14	35.00	388	45.97	28
Total		489	66.44	7518	57.78	15	247	33.56	5494	42.22	22

The study intends to examine the library book transactions by School of Sciences PG students with respect to their gender. It is obvious from Table 4.7 that out of 736 School of Sciences PG students, most (489) of the sciences male PG students are done 57.78 percent of the book transactions with an average of 15 books. With respect to the each subject transactions by male students, Plant biology male students are done 71.33 per cent of book transactions with an average of 28 books followed by 69.64 per cent of book transactions are done by Ocean and Atmospheric Sciences students with an average of 22 books, Molecular Microbiology (64.70%) with an average of 27 books, Public Health (61.89%) with an average of 13 books, Animal Biotechnology (61.74%) with an average of 21 books, Computer Applications (55.97%) with an average of 10 books, Biotechnology (54.91%) with an average of 15 books, Physics (54.88%) with an average of 15 books, Statistics (54.03%) with an average of 18 books, Health Psychology (53.86%) with an average of 15 books, Mathematics (53.60%) with an average of 9 books, Biochemistry (53.23%) with an average of 15 books and Chemistry (51.79%) with an average of 15 books respectively.

It is also clear from table 4.7 that out of 247 female science PG students are done 42.22 percent of the book transactions with an average of 22 books. With respect to the each subject transactions by female students, Chemistry female students are done 48.21 per cent of book transactions with an average of 32 books followed by 46.77 per cent of book transactions are done by Biochemistry female students with an average of 26 books, Mathematics (46.45%) with an average of 15 books, Health Psychology (46.14%) with an average of 34 books, Statistics (45.97%) with an average of 28 books, Physics (45.12%) with an average of 22 books, Biotechnology (45.09%) with an average of 30 books, Computer Applications (44.03%) with an average of 15 books, Animal Biotechnology (38.26%) with an average of 27 books, Public Health (38.11%) with an average of 16 books Molecular Microbiology (35.30%) with an average of 36 books, Ocean and Atmospheric Sciences (30.36%) with an average of 28 books and Plant Biology (28.67%) with an average of 36 books.

It can be concluded that Male PG students of School of Sciences done more number of book transactions when compared to Female PG Students.

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Table 3: Library Book Transactions by School of Sciences PG Students according to their Region

Sl. No.	Subjects	School of sciences									
		Rural					Urban				
		Students		Book Transactions		Average	Students		Book Transactions		Average
		No	%	No	%		No	%	No	%	
1	Animal Biotechnology	20	50.00	420	45.65	21	20	50.00	500	54.35	25
2	Bio chemistry	24	46.15	426	44.38	17	28	53.85	534	55.62	19
3	Bio technology	18	45.00	380	44.39	21	22	55.00	476	55.61	22
4	Chemistry	42	46.67	632	39.21	15	48	53.33	980	60.79	20
5	Computer Applications	56	46.67	610	42.36	11	64	53.33	830	57.64	13
6	Health Psychology	10	45.45	180	40.91	18	12	54.55	260	59.09	22
7	Mathematics	34	42.50	334	37.64	10	46	57.50	556	62.36	12
8	Molecular Microbiology	12	42.86	340	40.96	28	16	57.14	490	59.04	30
9	Ocean and Atmospheric Sciences	11	45.83	250	44.64	22	13	54.17	310	55.36	24
10	Physics	46	47.92	665	39.12	14	50	52.08	1035	60.88	21
11	Plant Biology	15	50.00	420	46.67	28	15	50.00	480	53.33	32
12	Public Health	34	45.95	460	43.40	13	40	54.05	600	56.60	15
13	Statistics	18	45.00	343	40.64	18	22	55.00	501	59.36	23
Total		340	46.20	5461	41.97	16	396	53.80	7551	58.03	19

The study intends to examine the library book transactions by School of Sciences PG students with respect to their Region. It is obvious from Table 4.10 that out of 736 PG students, majority urban (396) PG students done more book transactions (58.03%) with an average of 19 books when compared to rural (340) PG students done 41.97 book transactions with an average of 16 books.

Similarly, with respect to the each science subjects transactions by urban students (396), most (46) of the Mathematics urban students are borrowed 62.36 per cent of book transactions with an average of 12 books followed by 60.88 per cent of book transactions are done by Physics urban students with an average of 21 books, Chemistry (60.79%) with an average of 20 books, Statistics (59.36%) with an average of 23 books, Health Psychology (59.09%) with an average of 22 books, Molecular Microbiology(59.04%) with an average of 30 books, Computer Applications (57.64%) with an average of 13 books, Public Health (56.60%) with an average of 15 books, Biochemistry (55.62%) with an average of 19 books, Biotechnology (55.61%) with an average of 22 books, Ocean

and Atmospheric Sciences(55.36%) with an average of 24 books, Animal Biotechnology (54.35%) with an average of 25 books and Plant Biology (53.33%) with an average of 32 books.

It is also clear from Table 4.10 that out of 340 school of sciences rural PG students, Plant Biology rural students are done 46.67 per cent of book transactions with an average of 28 books followed by 45.65 per cent of book transactions are done by Animal Biotechnology rural students with an average of 21 books, Ocean and Atmospheric Sciences (44.64%) with an average of 22 books, Biotechnology (44.39%) with an average of 21 books, Biochemistry (44.38%) with an average of 17 books, Public Health (43.40%) with an average of 13 books, Computer Applications (42.36%) with an average of 11 books, Molecular Microbiology (40.96%) with an average of 28 books, Health Psychology (40.91%) with an average of 18 books, Statistics (40.64%) with an average of 18 books, Chemistry (39.21%) with an average of 15 books, Physics (39.12%) with an average of 14 books and Mathematics (37.64%) with an average of 10 books,

It can be concluded that more number of urban students done more book transactions when compared to rural PG Students in school of sciences.

Table 4: Library Book Transactions by School of Sciences PG Students according to Foreign or Indian Authors

Sl. No.	Subjects	School of Sciences			
		Book Transactions			
		Foreign Author		Indian Author	
		No.	%	No.	%
1	Animal Biotechnology	732	79.57	188	20.43
2	Bio chemistry	706	73.55	254	26.45
3	Bio technology	660	77.10	196	22.90
4	Chemistry	1226	76.05	386	23.95
5	Computer Applications	1110	77.08	330	22.92
6	Health Psychology	344	78.18	96	21.82
7	Mathematics	708	79.55	182	20.45
8	Molecular Microbiology	640	77.11	190	22.89
9	Ocean and Atmospheric Sciences	388	69.29	172	30.71
10	Physics	1328	78.12	372	21.88
11	Plant Biology	690	76.67	210	23.33
12	Public Health	778	73.40	282	26.60
13	Statistics	514	60.90	330	39.10
Total		10385	79.81	2627	20.19

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The study intends to examine the library book transactions by School of Sciences PG students with respect to the books written by Indian authors or foreign authors. The book transactions are divided into two groups' namely Indian author books and foreign author books based on the country of author's origin. It can be observed from Table 4.13 that most of the book transactions (79.81%) are written by foreign authors and remaining 20.19 per cent book transactions are written by Indian authors in School of Sciences.

Similarly, with respect to the each science subjects, most of the Animal biotechnology students done more book transactions (79.57%) written by foreign authors whereas they used only 20.43 per cent of Indian author books followed by the foreign author written book transactions (79.55%) are done by the Mathematics students whereas they used only 20.45 per cent of Indian author books, 78.18 per cent of the foreign author written book transactions are done by the Health Psychology students whereas they used only 21.82 per cent of Indian author books, 78.12 per cent of the foreign author written book transactions are done by the Physics students whereas they used only 21.88 per cent of Indian author books, 77.11 per cent of the foreign author written book transactions are done by the Molecular Microbiology students whereas they used only 22.89 per cent of Indian author books and so on.

It can be concluded that most of the School of Sciences PG students are using large number of books written by foreign authors when compared to Indian authors.

Table 5: Library Book Transactions by School of Sciences PG Students according to Authorship Pattern

Sl. No.	Subjects	School of Sciences					
		Book Transactions					
		Single Author		Double Authors		More than Two	
		No.	%	No.	%	No.	%
1	Animal Biotechnology	794	86.30	90	9.78	36	3.92
2	Bio chemistry	870	90.62	64	6.67	26	2.71
3	Bio technology	760	88.79	68	7.94	28	3.27
4	Chemistry	1402	86.97	178	11.04	32	1.99
5	Computer Applications	1168	81.11	196	13.61	76	5.28
6	Health Psychology	330	75.00	80	18.18	30	6.82
7	Mathematics	806	90.56	62	6.97	22	2.47
8	Molecular Microbiology	706	85.06	74	8.92	50	6.02
9	Ocean and Atmospheric Sciences	430	76.79	90	16.07	40	7.14
10	Physics	1452	85.41	182	10.71	66	3.88
11	Plant Biology	760	84.44	90	10.00	50	5.56
12	Public Health	912	86.04	98	9.25	50	4.71
13	Statistics	756	89.57	50	5.93	38	4.50
Total		11146	85.65	1322	10.16	544	4.19

The study intends to examine the library book transactions by School of Sciences PG students with respect to the authorship pattern. The book transactions are divided into three groups' namely single author books, double author and more than two author books. It can be observed from Table 4.16 that majority of the book transactions (85.65%) are written by single authors, 10.16 per cent of book transactions written by double authors and remaining 4.19 per cent of book transactions are written by more than two authors in School of Sciences.

Similarly, with respect to other science subjects concerned, most of the Biochemistry students are done single author written book transactions (90.62%) whereas, 6.67 per cent of the students are done double author written book transactions and they used only 2.71 per cent of more than two author written books.

Most (90.56%) of the single author written book transactions are done by the Mathematics students whereas 6.97 per cent of double author written book transactions and they used only 2.47 per cent of more than two author written book transactions.

Most (89.57%) of the single author written book transactions are done by the Statistics students whereas 5.93 per cent of double author written book transactions and they used only 4.50 per cent of more than two author written book transactions.

Most (88.79%) of the single author written book transactions are done by the Biotechnology students whereas 7.94 per cent of double author written book transactions and they used only 3.27 per cent of more than two author written book transactions.

Most (86.97%) of the single author written book transactions are done by the Chemistry students whereas 11.04 per cent of double author written book transactions and they used only 1.99 per cent of more than two author written book transactions.

It can be concluded that most of the School of Sciences PG students are using large number of books written by single authors when compared to double and more than two authors' books.

FINDINGS

- ✓ Out of 736 School of Sciences PG students, II year students (362) are done more number of book transactions (53.69%) with an average of 19 books when compared to I year students book transactions (46.31%) with an average of 16 books.
- ✓ Most (489) of the sciences male PG students are done 57.78 percent of the book transactions with an average of 15 books.
- ✓ Out of 247 female sciences PG students are done 42.22 percent of the book transactions with an average of 22 books.
- ✓ Out of 736 PG students, majority urban (396) PG students done more book transactions (58.03%) with an average of 19 books in one hand and the rural (340) PG students done 41.97 book transactions with an average of 16 books on other hand.
- ✓ Most of the book transactions (79.81%) are written by foreign authors and remaining 20.19 per cent book transactions are written by Indian authors in School of Sciences.

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- ✓ Majority of the book transactions (85.65%) are written by single authors, 10.16 per cent of book transactions written by double authors and remaining 4.19 per cent of book transactions are written by more than two authors in School of Sciences.

CONCLUSION

Though there is a paradigm shift towards the adoption of digital media, print books currently dominate (90 per cent) the publishing landscape in India. Hence, to create reading habit among the PG students, emphasis should be given on extra reading library work. Reading habits not only increases the knowledge of the person but also make better use of leisure. Faculty as well as parents should pay attention to the habit of reading in students. Good Library should make available good scriptures. Revolution in the field of library should be increased with the help of these suggestions so that reading culture can be created in the field of education in particular and in the people of the society in general.

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