Print Books Usage at Bangalore University Library:
A longitudinal Analysis

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Abstract - Usage of books assumes that the Circulation of materials in a collection is an indicator of a library's effectiveness.[1]The purpose of this study was to find a statistical analysis of book transactions among Bangalore University Library users, Bangalore. In the study, it is available that the total 9701 books used to patrons of 48 departments from July 2018 to June 2019. the highest number of books used to the user of the Physics department with 78 books out of 9701, and most of the Used books are Nuclear Physics (1995&2014) by Ghoshal S N from S. Chand publishers, it is a top place with 81 times used Book. And the highest number of books used in October, with a total of 1274 books. Kannada medium books most used in 5212.In this study, we observed that the science department students are very interested in using library resources. Then arts students,The study will be beneficial to Library authorities to identify how the users are using the library facilities and their satisfaction with the use of books.

Keywords: Bangalore University, BUL Books , Users, Circulation analysis.

1.0. Introduction:

The Circulation Section is the heart of the Library. Circulation analysis is one of the traditional approaches taken to use studies and collection evaluation in libraries.[3]This section contacts the library collections to the readers and thus supports the first two laws of library science. The circulation section ensures the use of books by readers by offering them issue/return facilities. It is responsible for giving books to users. Keeping records of what has been given to whom, what has been returned, or what is overdue now. When the books, documents are returned to the Library, the circulation section must put them back on shelves, at the right places, and also get them repaired if the need arises. This section has a record of all the books which are issued to the users, and which are still on the shelves.This section keeps records of all registered users of the Library – their transactions, loan period, borrowing privileges, etc. It also supervises many other miscellaneous jobs like maintaining gate register, property counter and lockers for research scholars.

The study of circulation analyses have been applied to a number of important issues, including evaluating collection acquisition policies; guiding management decisions such as allocating physical space for materials, identifying materials for offsite storage, and allocating funding for materials; and suggesting approaches to deselection.[1]

1.1.The Bangalore University Library:

The Bangalore University library came into existence in the year 1966. The main Library was set up in the year 1975 at Jnanbharathi Campus.The primary objective of a library is to provide the right information at the right time in the right form to its users. The Library acquires, Organise, and provides access to various kinds of information sources, including Books, Journals Theses, etc., both in print and Electronic form. The Library is having rich collection (Print) about 3, 71,462 Textbooks and Reference books, 5455 Theses and Dissertations, 173 Current journals, 68,000 Bound Volumes, 20 News Papers,51 Magazines. Present Electronic Resources in Library e-ShodhSindu Subscribed 19 E-resources, 8 E-Books, and 8 Databases are available. [4]

2.0. Objectives of the Study:

The goal of this study is to analyse the statistical information of patrons like books usage in Bangalore University Library (BUL). The other objectives are:-
1.   To know the usage of books by gender of BUL.
2.   To identify the department wise Usage of books at BUL.
3.   To find the month-wise Usagebooks at BUL.
4.   To know the Usage of books by Medium.
5.   To find the most used books and patron with most used.
6.   To identify most used books by the author.
7.   To determine the scope of the user study.

3.0. Methodology:

The study was conducted based on the book Usage statistics collected, which was available in the Bangalore University Library automation website named. http://bublib-koha.informindia.co.in:8080/. Data has collected for a period of one year from July 2018 to June 2019. The collected data was divide by gender, department, subject, month, most used books, and most used authors, and patrons with most used[3]

4.0. Scope and Limitations of the study: The limitations of this study is confined to patrons of 48 departments located at Bangalore University, Bangalore. The scope of this study is limited for the academic year 2018-2019.

5.0. Data Analysis and Interpretation: In the present study, the data was simply put to excel format for executing simple operations like addition, subtraction, drawing percentage has been drawn up to two maximum decimal places and has also been rounded off at some places to the next higher percentile value.

5.1. Gender wise usage Books:

GENDER WISE USAGE BOOKS

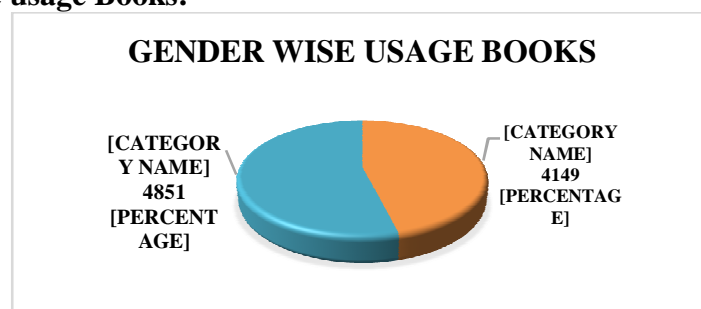[CATEGORY NAME] 4851 [PERCENTAGE]

[CATEGORY NAME] 4149 [PERCENTAGE]

Figure 1– In this study, the major part is Female (53.9%) users are utilized very much of the library resources compare with Male users (46.1%).

5.2. Department wise usage of Books:

S.I. No	Department	Total No.of Books Used	%
01	Physics	1318	13.62%
02	Kannada	890	9.20%
03	Botany	640	6.61%
04	Commerce	626	6.47%
05	Economics	530	5.48%
06	Biological Science	471	4.87%
07	Microbiology	414	4.28%
08	Performing Arts	401	4.14%
09	History	368	3.80%
10	Computer Science	366	3.78%
11	Chemistry	314	3.24%
12	Zoology	292	3.02%
13	Political Science	282	2.59%
14	Statistics	243	2.51%
15	English	232	2.20%
16	Electronic Science	212	2.07%
17	Life Science	190	1.96%
18	Bio-Technology	178	1.93%
19	Geology	173	1.84%
20	Bio-Chemistry	149	1.61%
21	Applied Genetics	148	1.54%
22	Mass Communication/Journalism	145	1.53%
23	Geography	138	1.43%
24	Library and Information Science	126	1.30%
25	Education	123	1.27%
26	MCA	107	1.14%
27	Psychology	96	1.11%
28	Mathematics	84	0.87%
29	Hindi	81	0.84%
30	Sociology	70	0.72%
31	Rural Development	50	0.52%
32	Library	41	0.42%
33	Yoga	41	0.42%
34	Social Work	31	0.32%
35	MBA	25	0.26%
36	Women Studies	20	0.21%
37	M.com	18	0.19%
38	MFA	18	0.19%
39	Philosophy	13	0.13%
40	Molecular Biology	11	0.11%
41	Environmental Science	8	0.08%

42	Ambedkar Studies	8	0.08%
43	Visual Arts	7	0.07%
44	Electronic Media	2	0.02%
45	Sanskrit	-	0.01%
46	Sericulture	-	0
47	Urdu	-	0
48	Telugu	-	0
	TOTAL	**9701**	**100%**

Table 1-Department wise usage of Books

Table-2 Shows that department wise Dispensation of issued Books in the Bangalore University Library, Bangalore. In this study, we have found a total of 9701 books issued to patrons of 48 departments. The highest number of books, 1318 (13.62%), were issued to the Physics department. Followed by 890 books to Kannada and 640 books to Botany department. The lowest number of books issued to the Department of Electronic Media and Sanskrit. Sericulture, Urdu and Telugu Departments were not issued any book in BUL at the period of 2018-19.
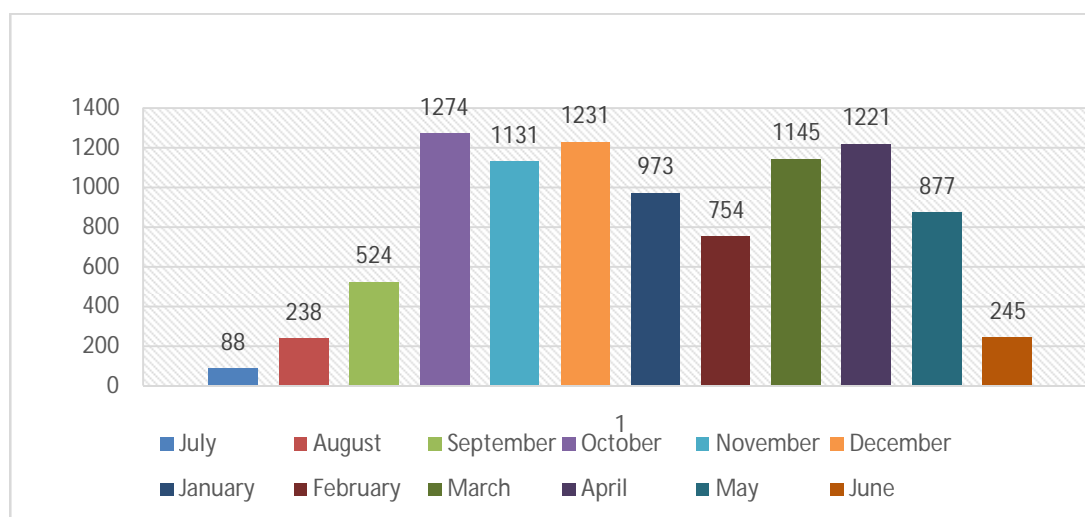
5.3.Month Wise usage of Books:

Figure- 2- Month-wise usage of Books

Figure– 2 shows the highest number of books usage in the month of October, with a total of 1274 books. December got the second place by 1231 Books, April is in third place by 1221 books.

5.4. Mediumwise usage of Books:

Medium Wise Usage of Books

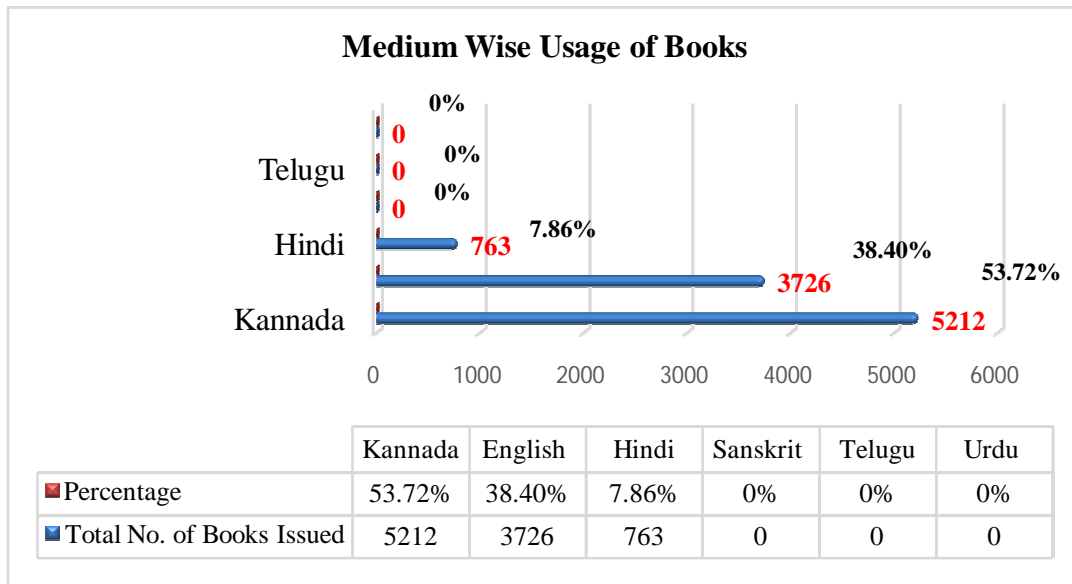|	Kannada	English	Hindi	Sanskrit	Telugu	Urdu
Percentage	53.72%	38.40%	7.86%	0%	0%	0%
Total No. of Books Issued	5212	3726	763	0	0	0

Figure 3- Medium Wise Usage of Books

Figure -3: It is observed that Kannada medium books issued with 5212 (53.72%), followed by English medium books issued with 3726 (38.40%), Hindi medium books issued with 763 (7.86%), Sanskrit Urdu and telugu books are not used in this pried.

5.5.TopmostUsed Books:

Topmost Used Books

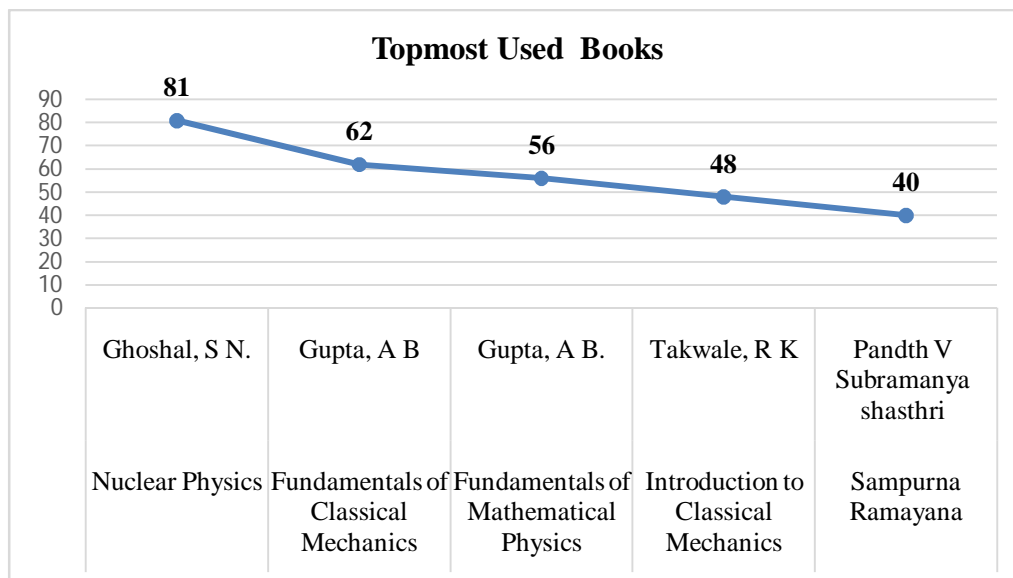| Ghoshal, S N.	Gupta, A B	Gupta, A B.	Takwale, R K	Pandth V Subramanya shasthri
Nuclear Physics	Fundamentals of Classical Mechanics	Fundamentals of Mathematical Physics	Introduction to Classical Mechanics	Sampurna Ramayana

Figure 4 - Topmost Used Books

Figure- 4 Represent the top five topmost used books regarding the highest number of checkouts. This can be shown that the highest number of an issued book entitled Nuclear Physics by Ghoshal, S N. from S. Chand & Company Pvt. Ltd publishers, with 81times checkouts. Followed by Fundamentals of Classical Mechanics by Gupta, A B. 62 times and Fundamentals of Mathematical Physics by Gupta, A B., 56 times, Introduction to Classical Mechanics by Takwale, R K. 48 time and only one kannada book Sampurna Ramayana by Pandth V subramanyashasthri , used 40 times in this pried.

5.6.Patrons with the most Used:

Patrons with the most Used

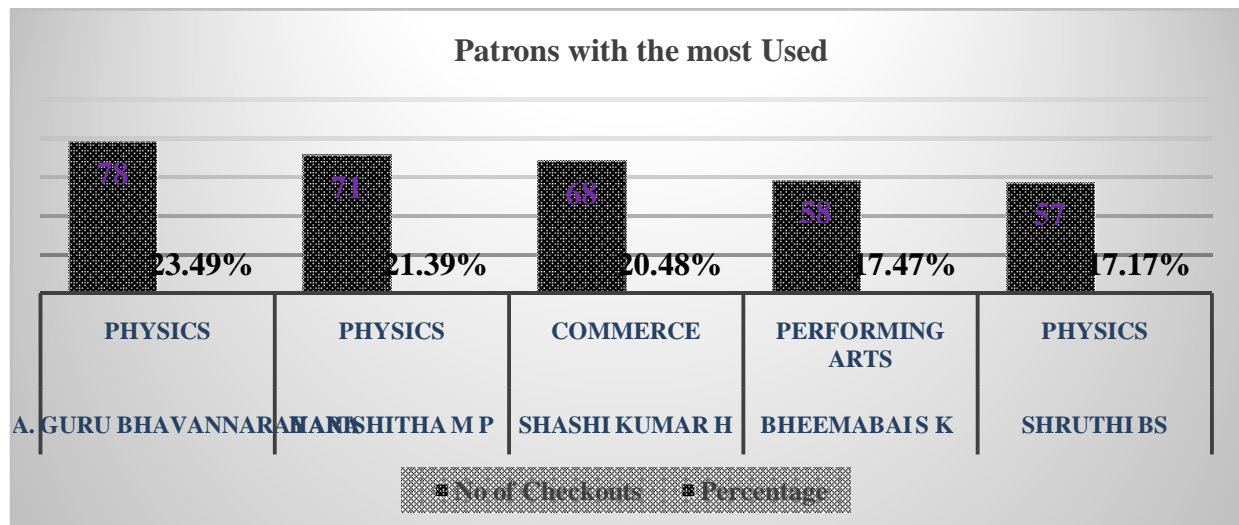|				
78	71	68	58	57
23.49%	21.39%	20.48%	17.47%	17.17%
PHYSICS	PHYSICS	COMMERCE	PERFORMING ARTS	PHYSICS
A. GURU BHAVANNARAYANA	MANISHITHA M P	SHASHI KUMAR H	BHEEMABAIS K	SHRUTHI BS

■ No of Checkouts   ■ Percentage

Figure 5 - Patrons with the most Used

Figure 5determines the five topmost patrons with the most checkouts of 9701 books issued over 12 months. In this study, we observed physics department patrons are using library resources very well compare with other department patrons
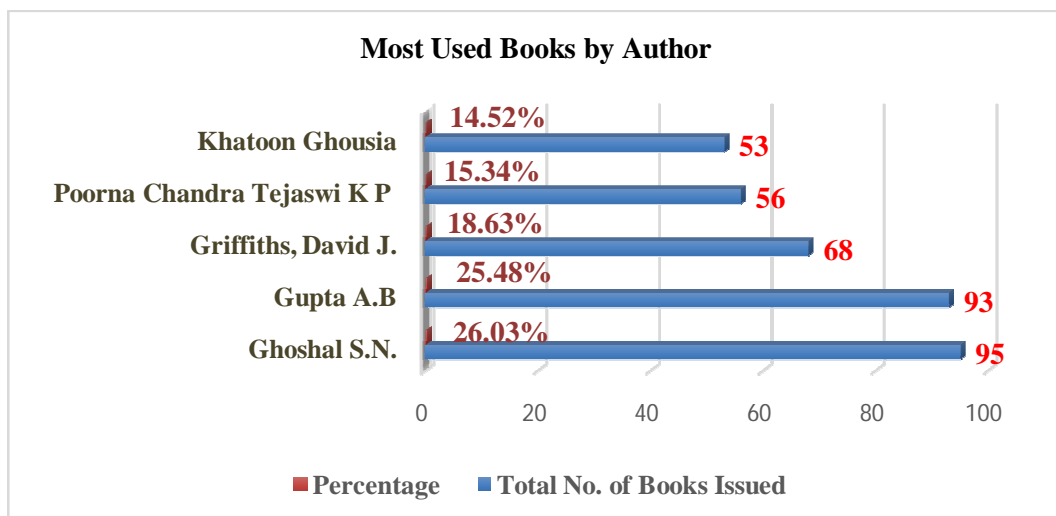
5.7.Most Used Books by Author:

Most Used Books by Author

Author	Percentage	Total No. of Books Issued
Khatoon Ghousia	14.52%	53
Poorna Chandra Tejaswi K P	15.34%	56
Griffiths, David J.	18.63%	68
Gupta A.B	25.48%	93
Ghoshal S.N.	26.03%	95

■ Percentage   ■ Total No. of Books Issued

Figure 5 -Most Used Books by Author

Figure 5 - shows that 95 (26.03%) books used by the author of Ghoshal S. N, with 93(25.48%) books used by the author of Gupta A. B, with 68(18.63%) books used by the author of Griffiths, David J.

6. Findings

- It is found that the highest number of books used to the user of the Physics department with 78 books out of 9701,
- most of the Used books are Nuclear Physics (1995&2014) by Ghoshal S N from S. Chand publishers, it is a top place with 81 times used Book.

- And the highest number of books usage in the month of October, with a total of 1274 books.
- Kannada medium books are most used 5212.
- In this study, we observed that the science department students are very interested in using library resources. Then arts students

8. Conclusion:
9.

Overall this study will be helped to the library authorities in identifying the nature and requirement of the user community. To give a good service, Library facilities to satisfy the needs of the users, and conducted some of library orientation programs to attract the users and create an awareness, how to utilize the library facilities and resources. Collected the suggestions to build the collection of the Library. As librarians continue to acquire books, circulation analysis will become increasingly important to identify a complete understanding to book usage patterns. The collection development committee uses these data to create book collection strategies and policies that better meet user requirements. [3]

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