

Correlation between Academic Performance and Library Resource Usage Among Engineering Students

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Abstract

Library was able to demonstrate its impact on student learning outcomes. This study investigated the relationship between academic performance and library resources usage among engineering students. The samples consist of 360 engineering students in Trichy district of Tamil Nadu. Library undertook an experimental project, which intended to establish a mathematical correlation of 2016-2019 batches between student library resources usage and their academic performance was university result secured marks.

Keywords: Academic Performance; Library Resources; Usage; Correlation; Engineering Students.

Introduction

In a world where information resources are rapidly changing and increasing in number college libraries need to play important roles that respect the missions and philosophies of their particular institution. Several studies have claimed that usage of libraries affect academic performance in a positive way. As high levels of academic performance are considered to be among the primary objectives and goals of higher education, engineering college libraries play an important role in the progress development of student's academic performance.

As an academic library, the focus is on the transformative power of information; and the question to be answered is: does a student's academic performance improve as a result of using information resources made available by the library? More recently, Pritchard (1996) stated that academic libraries are not separate units but part of the institution and their quality must be determined by their relationship with the outcomes that are important to the college or university. How does the academic library contribute to the overall institutional goals? In support of the

performance objectives it is also worthwhile to develop cooperation between the library and the faculty to which the student belongs, as well as a good understanding between the library and college administrators. In order to effectively influence factors that improve the educational performance of users, library administration needs to understand better the factors that influence library resource usage.

Literature Review

Libraries have a long history of measuring their performance and impact on users. As early as 1924, the American Library Association prepared a practical guideline and tool for libraries to evaluate their maintenance, administration, and service. The breadth of the literature about library assessment, or more specifically academic library assessment, is even more impressive. If we input a search statement with terms like "academic libraries," "assessment," "evaluation," and "user surveys" in any library science database, we can easily pull out thousands of articles that discuss assessment practices and assessment cultures found in the library sector.

Objectives of the Study

1. To assess the library resources usage among the engineering students.
2. To find out the level of academic performance achieved among the engineering students.
3. To find relationship between academic performance achieved and library resources usage among engineering students.

Need for the Study

Engineering colleges invest a good deal of time and money in providing this facility to the library books and e-resources for the faculties and the students. It is therefore important to find out the extent to which they are using this facility where fruitful way of academic achievement of the engineering students. It is necessary therefore to measure the academic performance to library resource usage determine whether the correlation between the academic performance and library resource usage.

Methodology

The investigator used questionnaire methods as a tool for data collection.

Sample of the Study

The study is based upon the engineering students in Anna University affiliated colleges in Trichy district of Tamil Nadu, India, which consists of 2016-2019 batch engineering students based on Anna University marks obtained and library resource usage of frequency of library visit and purpose of visit to the library and satisfaction on library resources available of the research study has been taken for real outcome. The sample total number of engineering students is 415. From the total population of 415, 360 questionnaires were returned duly filled in with the response rate of 86.7% of the total population. The researcher adopted simple random sampling method.

Data Analysis

The data collected through questionnaire methods are organized and tabulated by using statistical methods, Table and percentage.

Frequency of Visit to the Library

Libraries play a vital role in providing information / sources and services to the users. A well established library with good collection of resources and skilled staff can provide better services.

Table 1: Frequency of Visit to the Library

Visit to the Library	No of Respondents	Percentage (%)
Daily	122	33.8
Alternate days	83	23.3
Weekly	66	18.3
Monthly	52	14.4
Occasionally	37	10.2
Total	360	100

Table 1 is reveals that the majority of 122(33.8%) of the respondent stated that they visit to the library on daily, 83(23.3%) of the respondents stated alternate days, 66(18.3%) of the respondents stated weekly and 52(14.4%) and 37(10.2%) of the respondents stated monthly and occasionally visit to the library respectively. It is found that the engineering students have visit to the library daily.

Purpose of Visit to the Library

Table 2: Purpose of Visit to the Library

Purpose of Visit	No of Respondents	Percentage (%)
To Collect Reading Materials	206	57.2
To Know the latest arrivals in Library	52	14.4
To Read the News Paper and Magazines	89	24.7
Any others	13	3.7
Total	360	100

Table 2 find that majority of 206(57.2%) of the respondents have expressed that they were expressed purpose of visit to the library to collect reading materials, followed by 89(24.7%) of the respondents were expressed to read news papers and magazines and 52(14.4%) and 13(3.7%) of the respondents were expressed to know the latest arrivals in library and any others purpose of visit to the library respectively. It is clearly known that respondents purpose of visit to the library to collect the reading materials.

Opinion of Library Resource Facility

Table 3: Opinion of Library Resource Facility

Opinion of Library Resource Facility	No of Respondents	Percentage (%)
Very large Extent	152	42.2
Large Extent	98	27.2
Some Extent	67	18.6
Less Extent	31	8.6
Very Less Extent	12	3.4
Total	360	100

The majority of 152(42.2%) of the respondents opined that they were library resource facility in very large extent, followed by 98(27.2%) of respondents opined large extent, 67(18.6%) of respondents opined some extent and 31(8.6%) and 12(3.4%) of the respondents were opined library resource facility in less extent and very less extent respectively. It is find from the Table 3 that engineering students were opined that library resources facility very large extent. It is quite nature that technical education library infrastructure norms fixed by AICTE (All India Council for Technical Education).

Satisfactions on Library Resource Facility

Table 4: Satisfactions on Library Resource Facility

Satisfaction on Library Resource Facility	No of Respondents	Percentage (%)
Very much Satisfied	198	55.0
Satisfied	108	30.1
Dissatisfied	32	8.8
Very much dissatisfied	22	6.1
Total	360	100

Table 4 indicate that majority of 198(55%) of the respondents stated that they were library resources facility on very much satisfied and followed by 108(30.1%) of the respondents satisfied and 32(8.8%) and 22(6.1%) of the respondents were stated dissatisfied and very much dissatisfied respectively. It is shown that majority of the respondents from engineering students are very much satisfied, because engineering college libraries are well equipped.

Academic Performance Achievement

Table 5: Academic Performance Achievements

University Marks Obtained	No of Respondents	Percentage (%)
Less than 50%	39	10.8
51%-60%	68	18.8
61%-75%	191	53.2
Above 76%	62	17.2
Total	360	100

It is revealed in table 5 that majority of 191(53.2%) of the respondents have secured university marks on 61% to 75% in university marks obtained for academic achievement and followed by 68(18.8%) of the respondents have secured 51% to 60% marks obtained and 62(17.2%) and 39(10.8%) of the respondents have secured marks above 76% and less that 50% marks obtained respectively. It is find from that engineering students have secured university marks between in 61% to 75%.

Correlation between Academic Performance and Library Resource Usage

Table 6: Correlation between Academic Performance and Library Resource Usage

Academic Performance	Satisfaction on Library Resource	d ₁	d ₂	d ₁ -d ₂	d ₂
62	198	3	1	2	4
191	108	1	2	-1	1
68	32	2	3	-1	1
39	22	4	4	0	0

$$\text{Correlation } r = 1 - \frac{6 \sum d^2}{n(n^2-1)} = 0.4$$

It is examine that relationship between academic performance achieved and library resources usage. The significant of that study found in Table 6 that engineering student's university marks obtained and library resources usage r value is 0.4 it means positive correlation between engineering students' university marks obtained and library resources usage. It is shown there is relationship between academic performance and library resources usage.

Discussion

The findings of the study can be summarized as below.

- ⇒ The majority of the respondents are visited to the library daily
- ⇒ It is indicate that majority of the respondents are purpose of visit to the library to collect the reading materials.
- ⇒ It is found in the table majority of the respondents opined in library resource facility to very large extent and they are very much satisfied in library resource usage.
- ⇒ The academic performance in majority of engineering students university marks is secured between 61% to 75%
- ⇒ The correlation between academic performance and library resources usage were positive relation proved.

Recommendations

The recommendations of the study is follows

- ⇒ The engineering college library is to strengthening of reading materials and will be attract the user community.
- ⇒ To know the library resource usage to improve academic performance of the students
- ⇒ To aware about relationship between academic performance and library resource usage to college management.
- ⇒ AICTE should take necessary care for the library resource facilities available to improve the engineering student's academic performance in our country.

Conclusions

This study has established a correlation between academic performance achieved and library resources usage in engineering students. Engineering student has many situations which it is appropriate and usage of library resources. The result shows a significant correlation between academic performance and library resource usage. Further research it is suggested found large of sample size to strengthen the coefficient correlation between other subject students like science and humanities, agricultural and so on. Academic library measurement is fruitful way of what they input and what they out get it. In terms library resources budget allocation and students marks achieved.

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