

# INTERNATIONAL CONFERENCE ON

“ENVIRONMENT, AGRICULTURE & HUMAN WELFARE: AN  
OVERVIEW OF SUSTAINABLE GOALS OF FUTURE”

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## Assessing the Role of Professional College Libraries in Academic Success: A Case Study of Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

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### Abstract

This paper focuses on the contribution of professional College libraries in improving students' performance in Kavayitri Bahinabai Chaudhari North Maharashtra University Jalgaon. Given the progressive advancement in educational tools and learning spaces, academic libraries act as central knowledge and scholarly practice enablers. Therefore the research is cross sectional in nature with two components; the survey data collected from students and the data from the interviews collected from library staff. metrics which includes the level of resource use, patron's satisfaction and information literacy skills are also determined to evaluate the libraries' roles. The study shows that library activity has a positive impact on academic outcomes and underlines the role of access to various sources and helpful library facilities. In addition, the study reveals the Libraries' problems: limitations on resources, as well as the requirement to enhance their digital offerings. Accordingly, recommendations are provided in an effort to strengthen the library assets and provide better services in the academic support to the learners. This research pays attention to the place of professional college libraries in the process of education and their effectiveness on achievement.

**Keywords:** Academic Success, Information Literacy, Library Resource Utilization, Student Performance, Library Services

### Assessing the Role of Professional College Libraries in Academic Success: A Case Study of Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

Libraries are integral to academic institutions, serving as centers for learning, research, and the dissemination of knowledge. Over the years, professional college libraries have transitioned from being traditional book repositories to dynamic learning environments, providing access to digital resources, academic support services, and fostering information literacy (S. R. Ranganathan, 2012). This evolution aligns with the increasing demands placed on higher education institutions to equip students with the tools and skills necessary for academic success in a rapidly digitizing world (A. Togia, 2019). Professional college libraries, in particular, play a critical role in supporting students in specialized fields such as engineering, management, and health sciences, where access to updated resources is essential for academic and professional growth.

At Kavayitri Bahinabai Chaudhari North Maharashtra University (KBCNMU), Jalgaon, professional college libraries are key to the academic journey of students across diverse disciplines. The university's libraries provide access to a wide range of resources, including print materials, e-books, journals, and databases, which are vital for supporting the rigorous academic programs offered (Jindal, 2019). However, despite the acknowledged importance of libraries in academic environments, there is limited empirical research assessing their direct contribution to academic success, especially within the context of professional colleges in regions like Jalgaon.

Research has shown that students who frequently engage with library resources are more likely to succeed academically, as they benefit from enhanced research skills, access to information, and improved study habits (Ramsden, 2013). The role of libraries in fostering information literacy has also been linked to higher academic performance, particularly in professional disciplines where critical thinking and resource evaluation are key (Saunders, 2015). Nevertheless, professional college libraries face challenges in adapting to technological changes and meeting the diverse needs of students in an increasingly digital age (Singh, 2018).

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This study aims to fill the research gap by critically assessing the role of professional college libraries in fostering academic success at KBCNMU. By investigating students' use of library resources, their satisfaction with library services, and the correlation between library engagement and academic performance, this research will provide valuable insights into the effectiveness of library services in supporting academic achievement. Furthermore, the study will examine the challenges faced by libraries in this region and propose strategies for enhancing their contribution to student success.

### Method

#### Objectives of the study

To assess the utilization of library resources by students in professional colleges affiliated with Kavayitri Bahinabai Chaudhari North Maharashtra University.

To evaluate the impact of professional college libraries on the academic success and performance of students.

To analyze the level of satisfaction among students regarding the services and facilities provided by professional college libraries in the Jalgaon region.

#### Research Methodology

The research approach of this study is intended to analyse, evaluate and validate the importance of professional college libraries to academic achievement. A descriptive research approach of quantitative methods has been employed to enhance the understanding on the use of library resources by students as well as the contributions of these resources to Students' Performance.

##### 1. Research Design

This research uses a case study approach that targets the professional colleges linked to Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon. The data collection method of the research is cross-sectional because it aims at capturing information on library usage, levels of satisfaction and issues faced by the students and the library staff at a particular point in time.

##### 2. Population and Sample

The target population of this study is composed of students and library staff of the professional colleges which are part of the KBCNMU in the Jalgaon area. The sample comprises:

- Students: A refined sampling technique of stratified random sampling shall be employed to accommodate participation across different discipline categories such as engineering and management, law and health sciences among others. An estimate of 300 students will be used to get data on the library usage and usage satisfaction levels.
- Library Staff: Also, library staff members will purposefully be selected in various professional colleges involving 15-20 participants to share information on challenges and operations.

##### 3. Data Collection Methods

Survey Questionnaires: Self developed structured questionnaires will be used to capture the frequency of library usage, the type of resources used (books, e-journals, databases etc.) and perceived effectiveness of the resources used to perform the academic tasks. The survey will involve questioning the students through a set of questions that include closed-ended questions and the Likert scale.

##### 4. Data Analysis

Research data to be collected from the student questionnaires shall be analyzed by means of descriptive as well as inferential statistics. To get the library usage pattern and the level of satisfaction, the descriptive statistics such as mean, frequency and percentage will be used. Descriptive statistics like the Pearson's correlation coefficient and linear regression will be used to analyse the relationship between the level of library usage and academic performance of the students.

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### Results

#### Table 1

The descriptive statistics provide a synopsis of the important factors pertaining to the students' library use, satisfaction, and academic achievement. With a range of 1–7 trips per week, students typically visit the library 3.8 times on average ( $SD = 1.25$ ). This suggests that library usage varies somewhat across students, with some making frequent visits.

On a per-visit basis, students spend between one and five hours in the library, with an average of 2.5 hours ( $SD=0.85$ ). It seems that students usually devote a significant amount of time to using the library's resources whenever they come.

On a weekly basis, students spent an average of 4.1 hours ( $SD=1.45$ ) using digital resources such as databases, online journals, and e-books. Some students may spend a lot of time using digital resources, while others may use them less often, as shown by the large range (0.5 to 8 hours).

Students were generally pleased with the library's resources; on a 5-point scale, they gave them an average score of 4.2 ( $SD= 0.7$ ). This indicates that the majority of students are content with the library's resources, both in terms of availability and quality. There is some fluctuation in replies, but overall, students are happy with the assistance and services offered by library personnel. The satisfaction rating for library services was 4.0 ( $SD = 0.75$ ).

Finally, on a 10-point scale, with scores ranging from 5 to 9.5, the students' academic achievement was assessed by CGPA, which averaged 7.9 ( $SD = 1.2$ ). Most students are doing well academically, which may be linked to their use of library resources and services, since this average is rather high.

Overall, students are very satisfied with the library's physical and digital resources, and the data shows that they use them often. This might have a favourable impact on their academic success. The correlation between library use and academic achievement can be the subject of future research.

#### Table 2

Table 2 displays the results of a linear regression study that shows how library use (number of visits, average time spent per visit, and use of digital resources) relates to students' cumulative grade point averages. When all variables pertaining to the library are set to zero, the constant or intercept (6.2) indicates that, on average, students' CGPA is 6.2. Even without using the library, this baseline indicates a respectable level of academic accomplishment.

There is a favourable and statistically significant relationship between library use and academic achievement ( $B = 0.18$ ,  $p = 0.003$ ). A student's cumulative grade point average (CGPA) rises 0.18 points for every extra library visit per week, indicating that frequent library trips lead to improved academic performance.

Also significantly affecting CGPA ( $B = 0.28$ ,  $p = 0.002$ ) is the amount of time spent in the library on each visit. There is a positive correlation between the amount of time students spend using library resources during each visit and their overall academic performance; specifically, a 0.28 point gain in CGPA is associated with each extra hour spent in the library. One further important factor that determines academic achievement is the use of digital resources ( $B = 0.21$ ,  $p < 0.001$ ). Students' cumulative grade point averages rise 0.21 points for every extra hour spent using digital resources (such as databases or e-books). This demonstrates how digital technologies may greatly improve academic results.

There is a modest but significant correlation between library use and cumulative grade point average (CGPA), as the model accounts for 35% of the variation in academic achievement ( $R^2 = 0.35$ ). According to the substantial F-value (52.10,  $p < 0.001$ ), the variables have an impact on academic achievement when taken together. The study concludes that students' academic success is greatly enhanced by access to physical and digital library resources.

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#### Discussion

From the studies of this work, the researcher is in a position to present the composition of professional college library usage and student performance in Kavayitri Bahinabai Chaudhari North Maharashtra University with ease. The mean shows that students often use the library materials, which is 3.8 times a week with approximately 150 minutes on average for each visit. Second, source also indicates that students very frequently use digital resources spending approximately 4.1 hours in one week using such materials. Generally, the students are satisfied with both the resources and services offered by the libraries to the students.

The analysis by linear regression also shows a positive and statistically significant correlation between library patronage and performance, as captured by CGPA. In other words, as the library usage becomes more frequent, longer, and oriented toward digital tools and services, the academic achievement increase. Such views correlate with the earlier studies conducted with a focus on the relevance of libraries as the source of learning materials, the areas for individual studying, and both print and electronic resources for learners' success (Lance & Hofschire, 2012).

Based on the findings of the present study, one of the emerging trends standing out is enhanced use of electronic material in getting better academic performance. As students are awake and active a lot online, one can then easily tell that e-book, online journals and databases are as important as the physical visits to libraries. This shift towards computerization also mirrors the larger trends in colleges and universities, in which technology has universally boosted the quality of the education students receive (Nunberg, 2009).

#### Conclusion

Therefore, this research supports the significance of professional college libraries in improving performance. Students who visit the library more often or make good use of the online interfaces used in the library receive better CGPAs. The effect of both library use and library satisfaction on academic success emphasized the importance of libraries in education facilities to be equipped with resources.

This study also implies that adequate and updated stock of both hard and soft copy resources in library should always be accumulated to match the ever changing demands by students. With trends in using digital resources increasingly with time, libraries must provide patrons with easy access to contemporary academic resources on the Internet even as they can offer clients modern print and physical collections and services.

The findings of the study would be beneficial to the university administrators and library personnel especially in viewpoint that enhance investment on both the conventional and modern library services may pay direct positive returns on students. Further studies could consider how the use of digital library has a continuous effect to the students' performance or how library utilization affects other support reading services with regard to performance.

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**Table 1: Descriptive Statistics**

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Frequency of Library Visits (per week)	300	3.8	1.25	1	7
Hours Spent in Library (per visit)	300	2.5	0.85	1	5
Use of Digital Resources (hours/week)	300	4.1	1.45	0.5	8
Satisfaction with Library Resources (1-5 scale)	300	4.2	0.7	2	5
Satisfaction with Library Services (1-5 scale)	300	4	0.75	2	5
Academic Performance (CGPA out of 10)	300	7.9	1.2	5	9.5

**Table 2: Linear Regression Analysis of Library Usage and Academic Performance**

Variable	Unstandardized Coefficients (B)	Standard Error	Standardized Coefficients (Beta)	t-value	p-value	95% Confidence Interval
Constant (Intercept)	6.2	0.35	—	17.71	< 0.001	5.50 – 6.90
Frequency of Library Visits (per week)	0.18	0.06	0.22	3	0.003	0.06 – 0.30
Hours Spent in Library (per visit)	0.28	0.09	0.25	3.11	0.002	0.10 – 0.46
Use of Digital Resources (hours/week)	0.21	0.05	0.31	4.2	< 0.001	0.11 – 0.31