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Academic Library and Students' Learning at University Level: Nothing is Pleasanter than Exploring a Library

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Academic Library and Students' Learning at University Level: Nothing is Pleasanter than Exploring a Library

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ABSTRACT

This study has been aligned to examine the effect of the role of the academic library on students' learning at the university level. The administration of academic libraries has been found to facilitate university students in the global south and global north. For this study, a cross-sectional survey has been conducted at the Hafiz Hayat Campus, University of Gujrat, Pakistan. A sample of 131 BS program students has been sampled from the Department of Sociology and Psychology. A total of 120 students have participated in the survey. A well-structured questionnaire has been used as a tool of data collection to measure the response of the students consisting of sections including identification, the socio-demographic, role of the academic library, and student learning. Descriptive statistics, Pearson correlation, and multiple regression analysis have been employed to draw results and conclusions. The study finding indicates that the role of the academic library has a favorable significant effect on students learning at the university level. The study also points out that the academic library has been playing a vital role to facilitate university students. The study concludes that study spaces and library catalog facilities have favorable effects on students' learning at the university level by controlling the age of students.

Keywords: Academic Library, Study Space, Library Services, Students' Learning, Critical Thinking, University Students

INTRODUCTION

It has been observed that university libraries are facilitating students for academic activities (Ihejirika et al., 2021; Wilkinson and Breneman, 2020). The academic learning of students has been based on a collection of print material and online available resources (Adams, 2020). However, several studies used different indicators of the role of the academic library including a collection of print material (Stearns et al., 2020), online available resources (Adams, 2020; Herie, 2005), library services (Tubulingane, 2021), study spaces (Adeyemi, 2021), and library catalogs facilities (Ayık and Yılmaz, 2021). In the same fashion, several other interlinked factors have also been studied to support academic libraries and learning among university students for their purpose of academic activities (Ullah and Shoaib, 2021;

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Shoaib, 2021). It has been observed that libraries have physical resources as well as online databases (Shoaib et al., 2021g; Shoaib et al., 2021f; Ali et al., 2021c). Similarly, academic libraries have also to compile print and online resources to facilitate the students for their academic activity (Ahmad et al., 2021c; Ahmad et al., 2021b). However, in Pakistan print material along with other digital databases has also been practiced in academic libraries (Shoaib et al., 2021g). These libraries provide print material to library users for their academic purpose (Ahmad et al., 2021c). Academic libraries collect these print resources on their databases and also provide them as per the demand of the students (Gaetjens, 2020). It is worth mentioning to state that libraries have online resources as well as online databases (Shoaib et al., 2021g; Ali et al., 2021c). Similarly, academic libraries have also provided online journals and online resources to facilitate the students for their academic activities (Shoaib et al., 2021h; Palmer, 2021).

In Pakistan, academic libraries provide required periodicals along with other digital databases to library patrons (Shoaib et al., 2021g). These libraries also provide online catalogs facilities to library users for their academic purpose. The empirical evidence provides insight that libraries provide students with circulation services (Jansen, 2021; Shoaib et al., 2021b; Shoaib et al., 2021a). Similarly, academic libraries have also to compile photocopying services and preorder the missing books to facilitate the students for academic activity (Ali et al., 2021b; Ali et al., 2021a). However, libraries facilitate to students with reading material on students demand along with other digital databases has also been practiced in academic libraries (Ahmad et al., 2021c; Ahmad et al., 2021b; Ahmad et al., 2021a; Abdullah and Shoaib, 2021; Shoaib et al., 2020). The crux of the study shows that libraries promote gender study spaces to students for academic learning (Shoaib, 2021). Similarly, academic libraries have also been allowed to study during office hours for the students for their academic activities. However, academic libraries facilitate students' distraction-free spaces. These libraries provide a comfortable zone to students for their academic purpose (Ali et al., 2021b). However, in Pakistan libraries facilitate the students with the facility of catalog to library users for their academic purpose (Ho, 2020; Edmunds and Enriquez, 2020). Hence, this study has been aligned to examine the effect of the role of the academic library on students learning at the university level.

PUBLISHED LITERATURE

The empirical review consists of different available researches in peer-review journals that showed that academic libraries are facilitating students at the university level (Tubulingane, 2021; Odonnell and Anderson, 2021; Nance, 2021). The empirical shreds on the role of academic library and several studies have also been conducted to analyze students learning following different domains including qualitative and quantitative analysis (Regehr and Goel, 2020; Gould and Brett, 2020; Bao, 2020; Azonobi et al., 2020). It is pertinent to mention here that the role of student learning has favorable effects on critical thinking, civic engagement, browsing of data, and sessional work (Ahmad et al., 2021b; Shoaib et al., 2020; Shoaib and Ullah, 2019). A huge body of literature has been available using the contents on the role of the academic library (Ali et al., 2021b)**,** collection of print material (Shoaib et al., 2021f), online resources (Shoaib et al., 2021g), library services (Ali et al., 2022), study spaces (Shoaib et al., 2021f), library catalog (Ali et al., 2021c), student learning (Shoaib and Ullah, 2021a; Shoaib and Ullah, 2019)**,** critical thinking**,** civic engagement**,** browsing of data, and sessional work (Shoaib et al., 2021a; Ali et al., 2021b).

The study finding of Shoaib et al. (2021f) pointed out that the collection of print material is more beneficial for students. Similarly, the result of Ali et al. (2021b) revealed that the academic library provides books to students. However, the key findings of Shoaib et al. (2021g) depict that the library provides new arrival displays. In the same fashion, the main argument of the study of Gaetjens (2020) in the library facilitates students to provide articles. In the same way, the main idea presented Perkins (2020) commissioned that the periodicals are available at the academic library. The study finding of Shoaib et al. (2021g) point out that the library provides students with online books**.** However, the result of Ali et al. (2021c) reveals that libraries facilitate to provide online journals. Similarly, the key findings of Crawford et al. (2020) depict that the library provides students with required online periodicals**.** in the same way, the main argument of the study of Adeoye et al. (2020) points out that the university library facilitates referencing resources**.** In the same fashion, the main idea presented by Adams (2020) commission library provides online study material to the students**.** Therefore, the overall conclusion of Ayık and Yılmaz (2021) pointed out that libraries have an online catalog facility.

The study finding of Leest and Wolbers (2021) pointed out that critical thinking promotes academic improvement among students. However, the result of the study revealed that critical thinking is crucial for self-reflection (Singh, 2019; Al-Fadhli and Khalfan, 2009). Similarly,

the key findings of the study depict that critical thinking explores possibilities (Al-Fadhli and Khalfan, 2009). In the same fashion, the main argument of the study of Kim (2020) in critical thinking helps to cultivate higher-order skills. In the same fashion, the main idea presented by Hall et al. (2021) is to explore alternatives with critical thinking. Therefore, the overall conclusion of Shoaib, Iqbal, and Tahira (2021) pointed out that student makes a better judgment (Shoaib et al., 2021d; Shoaib et al., 2021c). It is pertinent to mention here that different researches have been conducted using different study design including qualitative and quantities to draw results and conclusions (Shoaib and Ullah, 2021b; Shoaib et al., 2021e; Shoaib and Abdullah, 2021; Shoaib, 2021; Naseer et al., 2021b; Naseer et al., 2021a; Shoaib et al., 2013; Anwar et al., 2013; Shoaib and Shah, 2012; Shoaib et al., 2012c; Shoaib et al., 2012b; Shoaib et al., 2012a; Shoaib et al., 2011c; Shoaib et al., 2011b; Shoaib et al., 2011a). This study has been aligned to employ quantitative study design. The study finding of Shoaib (2021) pointed out that students engaged themselves in sports activities. However, the result of Shoaib and Abdullah (2020) revealed that students participate in daily activities. Similarly, the key findings of Shoaib (2021) depict that students worked as a volunteer at a university. In the same way, the main argument of the study of Shoaib and Abdullah (2021) support that students create assignment regarding their social work. In the same fashion, the main idea presented by Shoaib and Ullah (2021a) is that students participate in extra circular activities. Therefore, the overall conclusion of Shoaib (2021) pointed out that students are a member of different library-oriented societies for smooth learning activities.

THE DATA AND METHODS

Study Design: This research used a quantitative study design in nature to conduct study. It is pertinent to mention here that the nature of this research is quantitative further the sample size is more than 30. This study has used different variables including dependent and independent variables based on the research objective. Moreover, a cross-sectional survey has been conducted.

The population of the Study: The population of the study has consisted of the enrolled studied in a different program of studies at the Hafiz Hayat Campus, University of Gujrat. Thus the population of the study has been considered based on the enrolled student at the BS (4 years) program. The target population for the study has been based on the enrolled students of BS Sociology and Psychology. The unit of analysis for the study has been following on criteria;

- Enrolled in BS (4years) program
- Females and males

- Semester 1st, 3rd, 5th, and 7th
- Department of Sociology and Psychology
- Student of Hafiz Hayat campus

A complete list of students has been collected from Sociology and Psychology. This semester has been taken from the BS 1st, 3rd, 5th, and 7th semesters.

Sampling Design: Proportionate random sampling technique has been opted to draw a representative sample from the target population of the study (i.e. Sociology and Psychology). The sample size has been calculated by using Yamane (1967) sample calculation formula;

$$n=N/1+N(e)^2$$

Here, n is equal to sample size and N is equal to a total unit of the study and e is equal to the margin of error.

$$N=195$$

$$e= 0.05$$

$$\text{Therefore, } n= 195/1+195(0.05)^2$$

$$n= 131.09$$

$$\text{Say } 131$$

The sample size has been proportionally allocated to the department and semester of the students.

Technique and Tool of Data Collection: A cross-sessional survey has been conducted to collect the data. A well-structured questionnaire has been used as a tool of data collection to measure the response of the students. The tool has been consisting of sections including identification, the socio-demographic, role of the academic library, and student learning (*See Appendix A*).

Pre-testing: A pre-testing from 25 students has been done to check the reliability of the tool of data collection. After pre-testing the tool has been finalized for final data collection.

Table 1
Reliability Statistical Test of the Variables

Sr. No.	Variable Name	Code	Items No.	Cronbach's Alpha
1	Collection of Print Material	COPM	6	.701
2	Online Available Resources	ONAR	6	.800
3	Library Services	LISE	6	.704
4	Study Spaces	STSP	6	.703
5	Library Catalogues Facilities	LICF	6	.787
6	Critical Thinking	CRTH	6	.864
7	Civic Engagement	CIEN	6	.826
8	Browsing of Data	BROD	6	.748

An attitudinal scale of (dis)agreement has been developed to measure the response of students. The response was measured as 1, 2, 3, and 4 starting from strongly disagree to strongly agree. **Data Collection and Response Rate:** The data has been collected from a student of Hafiz Hayat Campus, University of Gujrat. We visited the classes and departments of the students and collected by distributing the questionnaire to the students at their relevant department and collected on the same day. The response rate has been very good. The sample size has been calculated as 131 students. However, the actual sample size has been taken as 120. A total number of 11 students have not been provided the data out of 131, 3 students have been absent from their class by visiting more than 2 times, and 4 other of the students partially filled the questionnaire. The response rate for this study is 92 percent.

THE RESULTS

The primary data analysis presented in Table 2 points out that 35.8 percent of the students are enrolled in the 5th semester. Similarly, tabulated data also described that 33.3 percent of the students are also engaged in 1st semester for the study purpose. The primary data analysis describes that 53.3 percent of the students have 6 to 8 members. The next higher proportions of the family size of the students have been mentioned as 20 percent having up to 5 members. The analysis concluded that 10 percent of the students have 12 and above members. The primary data mention that 70.8 percent of the student's gender is female and only 29.2 percent belong to the gender category of male. It is concluded that the majority (70.8%) of the students are female enrolled in the university for study purposes. Similarly, the higher proportion of the students 60 percent of the students belong to a rural area. The lowest proportion of the students 40 percent belong to the urban area.

Table 2 also indicates the age of the students and illustrates that 57.7 percent of the student belong to the age (of 20-21 years). Similarly, the next higher proportion 29.1 percent of the student here the in years from (22-23 years). The analysis also reveals that there is only a smaller proportion of the students 2.5 percent who have the age of 24 and above here; the analysis concludes that to highest 57.7 of the students have the (20-21years). The data analysis points out that the higher proportion 55.0 percent of the students' monthly income is between 45000 and above Pakistani rupees. Similarly, tabulated data also described that 29.2 percent of the students' family income is up to 20000 rupees. The lowest proportion 05.8 percent of the student's family income is between 20001 to 35000 rupees. Similarly, the higher proportion of the students (58.3%) belongs to nuclear families. The lowest proportion of the students (05.0%) belongs to extended families.

Table 2

Distribution of the Students by Their Socio-demographic Characteristics

Semester	*f*	%	Family Size	*f*	%
1st Semester	06	05.0	Up to 5	24	20
3rd Semester	40	33.3	6-8	64	53.3
5th Semester	43	35.8	9-11	20	16.6
7th Semester	31	25.8	11 +	12	10
Total	120	100.0	Total	120	100.0
Gender of the Students			Residential Area		
Male	35	29.2	Rural	72	60
Female	85	70.8	Urban	48	40
Total	120	100.0	Total	120	100.0
Age (Years) of the Students			Family Monthly Income (PKR)		
18-19	13	10.8	Up to 20000	35	29.2
20-21	69	57.7	20001-35000	07	05.8
22-23	35	29.1	35001-45000	12	10.0
24 and above	03	2.5	45000+	66	55.0
Total	120	100.0	Total	120	100.0
Family Type					
Nuclear Family		70		58.3	
Joint Family		44		36.7	
Extended Family		06		05.0	
Total		120		100.0	

Table 3

Descriptive Statistical Analysis of the Variables

Variables	Range	Min.	Max.	Mean	Std. Dev.	Var.
Age (Years)	6	18	24	20.96	1.312	1.721
Family Size	25	0	25	6.66	4.107	16.865
Collection of Print Material	18	6	24	17.2000	3.35967	11.287
Online Available Resources	18	6	24	15.3333	3.75585	14.106
Library Services	17	6	23	15.2417	2.99017	8.941
Study Spaces	17	7	24	17.5000	3.17024	10.050
Library Catalogues Facilities	18	6	24	16.6917	3.68005	13.543
Critical Thinking	18	6	24	18.3333	3.97118	15.770
Civic Engagement	18	6	24	15.3083	4.35175	18.938
Browsing of data	18	6	24	17.9750	3.25773	10.613
Sessional Work	18	6	24	19.3667	3.94699	15.579
Role of Academic Library	75	38	113	81.9667	12.14612	147.528
Students Learning	53	41	94	70.9833	10.52886	110.857

Table 3 illustrates the descriptive analysis of the variable. The analysis reveals that the variable age has 1.721 variances, 1.312 standard deviations, 20.96 means value, 24 maximum, 18 minimum, and 6 range values. Similarly, the analysis reveals that the variable family size has 16.865 variances, 4.107 standard deviations, 6.66 means value, 25 maximum, 0 minimum, and 25 range value. Likewise, the analysis reveals that the variable collection of print material has 11.287 variances, 3.35967 standard deviations, 17.2000 means value, 24 maximum, 6

minimum, and 18 range values. In the same fashion, the analysis reveals that the variable online available resources have 14.106 variances, 3.75585 standard deviations, 15.4444 means value, 24 maximum, 6 minimum, and 18 range value. In the same way, the analysis reveals that the variable library services have 8.941 variances, 2.99017 standard deviations, 15.2417 means value, 23 maximum, 6 minimum, and 17 range value. However, the analysis reveals that the variable study spaces have 10.050 variances, 3.17024 standard deviations, 17.5000 means value, 24 maximum, 7 minimum, and 17 range value. Similarly, the analysis reveals that the variable library catalogs facilities have 13.543 variances, 3.68005 standard deviations, 16.6917 means value, 24 maximum, 6 minimum, and 18 range values. In the same fashion, the analysis reveals that the variable critical thinking has 15.770 variances, 3.97118 standard deviations, 18.3333 means value, 24 maximum, 6 minimum, and 18 range values. Likewise, the analysis reveals that the variable civic engagement has 18.938 variances, 4.35175 standard deviations, 15.3083 means values, 24 maximum, 6 minimum, and 18 range values. In the same way, the analysis reveals that the variable browsing of data has 10.613 variances, 3.25773 standard deviations, 17.9750 means value, 24 maximum, 6 minimum, and 18 range value. However, the analysis reveals that the variable sessional work has 15.579 variances, 3.94699 standard deviations, 19.3667 means value, 24 maximum, 6 minimum, and 18 range values. Similarly, the analysis reveals that the variable role of the academic library has 147.5328 variances, 12.14612 standard deviations, 81.9667 means value, 113 maximum, 38 minimum, and 75 range value. In the same fashion, the analysis reveals that the variable students learning has 110.857 variances, 10.52886 standard deviations, 70.9833 means value, 94 maximum, 41 minimum, and 53 range value.

Table 4

Pearson Correlation Statistical Test between the Variables

Var.	COPM	ONAR	LISE	STSP	LICF
COPM	1	.157	.411**	.261**	.453**
ONAR		1	.484**	.202*	.244**
LISE			1	.502**	.639**
STSP				1	.627**
LICF					1

Table 4 presents Pearson correlation statistical analysis of the variable. The analysis depicts that there is a weak positive correlation of the collection of print material with online available resources (r=.157) and study spaces (r=.261). However, there is a moderate positive correlation between a collection of print material and library services. Similarly, the analysis depicts that there is a weak positive correlation of online available resources with study spaces (r=.202 and library services (r=.244). however there is a moderate positive correlation between online

available resources and library services (r=.484) In the same fashion, the analysis depicts that there is a moderate positive correlation of library services with study spaces (r=.502) and library catalog facilities (r=.639) likewise, the analysis depict that there is a moderate positive correlation between study spaces and library catalog facilities (r=.627)

Table 5
Pearson Correlation Statistical Test between the Variables

Var.	CRTH	CIEN	BROD	SEWO
CRTH	1	.188[*]	.453[**]	.378[**]
CIEN		1	.229[*]	.033
BROD			1	.477[**]
SEWO				1

Table 5 points out that the analysis depicts that there is a moderate positive correlation between critical thinking and browsing of data (r=.453) and sessional work (r=.378). However, there is a weak positive correlation between critical thinking. Similarly, the analysis depicts that there is a weak positive correlation between civic engagement with browsing of data (r=.229) and sessional work (r=0.33). In the same way, the analysis depicts that there is a moderate positive correlation between browsing of data with sessional work (r=.477)

Table 6
Multiple Regression Analysis Predicting Students' Learning at University Level (Standard Errors and Parameter Estimates)

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Age (Years)	1.446	.594	.180	2.436	.016
Study Spaces	.966	.313	.291	3.088	.003
Library Catalogues Facilities	.979	.271	.342	3.605	.000
(Constant)	7.443	12.931		.576	.566
R=.615, R Square=.378, Adjusted R Square= .362, Std. Error of the Estimate= 8.40794, Sum of Square= 499.535, df=3, F=23.536, Sig.=.000					

Table 6 indicates the multiple regression analysis that predicts students learning at the university level. The analysis reveals that age, study spaces, and library catalog facilities have favorable significant acts on student learning at the university level. The hypothesis has been confirmed with p-values less than 0.05. Hence, it is argued that study spaces and library catalog facilities have favorable effects on students' learning at the university level by controlling the age of students.
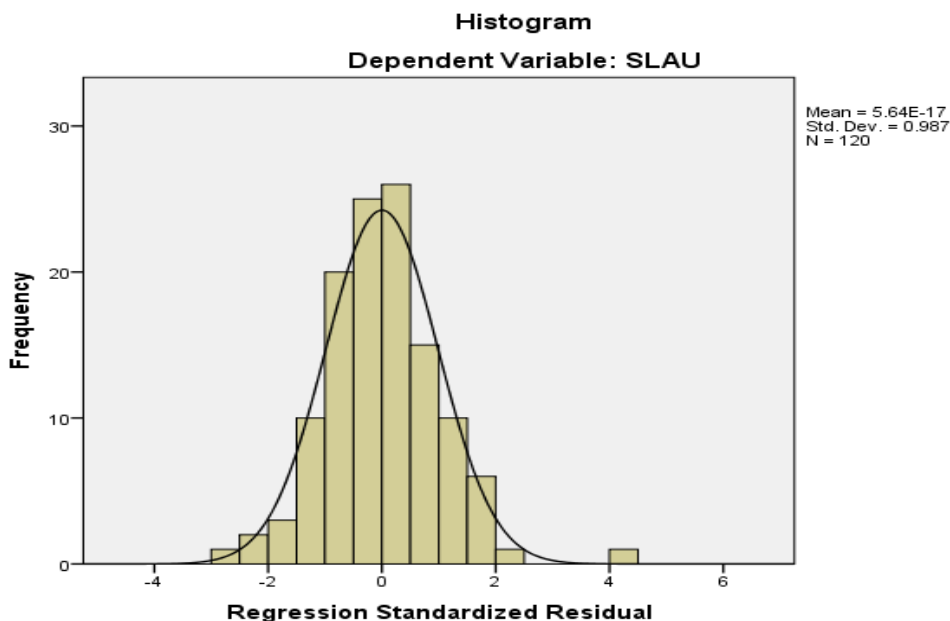
Figure 1: Showing Histogram

DISCUSSION

The study findings are aligned with the study findings that print material is more beneficial for students (Perkins, 2020). Similarly, the results are similar to the study concluded that library provides new arrival displayed (Shoaib et al., 2021f). Likewise, the present results are also similar to the result of the study on the availability of periodicals are available at the academic library (Crawford et al., 2020). The study findings report that the collection of print material has favorable effects on students' critical thinking (Hall et al., 2021). Therefore, academic libraries have also to compile print and online resources to facilitate the students for their academic activity. Similarly, the primary data asserts that an online available resource has positive effects on civic engagement. Likewise, the crux of the study shows that a library service has a significant contribution to on browsing of data (Cirelli and Long, 2020). In the same way, it is worth mentioning to state that libraries have online resources as well as online databases (Ahmad et al., 2021b; Ali et al., 2021c). In the same fashion, the summary of the main argument highlighted that study spaces have been affecting and enhancing sessional work. It is pertinent to here mention that library catalogs facilities have also been provided to the students. However, libraries facilitate students with reading material on the student's demand (Shoaib et al., 2021f). In the same way, these libraries provide a comfortable zone to students for their academic purpose. However, the study findings are aligned with the study findings that the collection of print material affects the students' learning (Ali et al., 2021b). Similarly, the results are similar to the study that concluded that academic libraries improve

students' learning (Ahmad et al., 2021c). Likewise, the present result is similar to the results of the study that online resources in the academic library are helpful for students learning (Shoaib, 2021).

The primary data analysis indicates that libraries help to improve critical thinking and self-reflection of the library users and students as well. Similarly, academic libraries have also to compile civic engagement and browsing of data to facilitate the students for academic activity. However, in Pakistan academic libraries have also been affecting students' order skills and critical thinking (Shoaib et al., 2021a). These libraries provide print material to library users for their academic purpose. The key findings of the study revealed that libraries help to improve students' participation in daily activities. Similarly, academic libraries have also to compile civic engagement and browsing of data to facilitate the students for creating assignments on social work. However, in Pakistan academic libraries have also been affecting students' participation and other co-curricular activities. The study findings report that academic libraries help to improve students browsing of data for exam preparation. Similarly, academic libraries have also provided online available resources for students learning and helped to find data for assignments (Shoaib et al., 2021h; Shoaib et al., 2021g). However, in Pakistan academic libraries have also been affecting students learning to browse data. These libraries provide online periodicals to library users for their academic purpose. The primary data analysis points out that libraries help to improve sessional work by providing academic library services. Similarly, academic libraries have also to compile civic engagement and browsing of data to facilitate the students for their sessional work. However, in Pakistan, academic libraries have also been affecting students learning to complete sessional work like quizzes and assignments (Shoaib et al., 2021f).

CONCLUSION

The study concludes that role of the academic library has a favorable significant effect on students learning. The study also summarized that the academic library has been playing a vital role to facilitate university students. They are provided with different resources and data available along with different databases. Therefore, university students have been utilizing these learning resources for academic activities to enhance their critical thinking, browsing of data, sessional work, and civic engagement. Hence, the overall conclusion that we reached out that that study spaces and library catalog facilities have favorable effects on students' learning at the university level by controlling the age of students.

Research Implications

This research provides insights on the issue of academic libraries and the learning issue of the students. This research document will become part of existing body literature in the field of sociology of education and information sciences.

Future Research

Future research may be conducted by using Mixed Method Research (MMR) approach to examine the same nature of the study. Similarly, in future research different variables and themes on the role of academic library and student learning at the university level may be used to analyze the phenomena. Advanced statistical analysis may be employed to draw a conclusion and the best utilization of the available data.

Limitations of the Study

This research has been limited to quantitative study design and has been conducted in one university only. Similarly, only a few variables have been extracted from a review of literature on the subject.

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Appendix A

Role of Academic Library and Students' Learning at University Level
(Questionnaire)

A) Identification of the Students
  i)   Semester_____   ii) Program_____
  iii)   Subject_____   iv) Faculty_____

B) Socio-demographic Characteristic of the Respondents
  Q1.   Gender   a) Male   b) Female
  Q2.   Age (completed years) _____
  Q3.   Family type a) Nuclear   b) Joint   c) Extended
  Q4.   Family size_____
  Q5.   Family income (PKR) _____
  Q6.   A residential area   a) Rural   b) Urban

C) Role of Academic Library

Strongly Disagree=SD to Strongly Agree=SA

Sr. No.	Statement	SD	D	A	SA
C.1 Collection of Print Material					
i	Print material is more beneficial for students	1	2	3	4
ii	The academic library provides books to students	1	2	3	4
iii	Library provides new arrival displayed	1	2	3	4
iv	Library facilitate to students to provide articles	1	2	3	4
v	Periodicals are available at an academic library	1	2	3	4
vi	Newspapers are displayed in the reading section	1	2	3	4
C.2 Online Available Resources					
i	Library provides you online books	1	2	3	4
ii	The library facilitates to provides online journals	1	2	3	4
iii	Library provides you required online periodicals	1	2	3	4
iv	Library facilitate referencing resources	1	2	3	4
v	Library provides you online newspaper	1	2	3	4
vi	The library has an online catalog facility	1	2	3	4
C.3 Library Services					
i	Library provides you circulation services without delay	1	2	3	4
ii	The library allows preordering the missing books	1	2	3	4
iii	The library facilitates photocopying services	1	2	3	4
iv	Library provides reading material for students on demand	1	2	3	4
v	The library creates orientation sessions for students	1	2	3	4
vi	Library provides you inter-library loan services	1	2	3	4
C.4 Study Spaces					
i	The library promotes gendered study space to students	1	2	3	4
ii	The library allows studying during office hours	1	2	3	4
iii	Library provides you discussion space	1	2	3	4
iv	Study spaces in the library are comfortable zone	1	2	3	4
v	Library provides you distraction-free space	1	2	3	4
vi	The library allows you to use your own electronic devices	1	2	3	4

Appendix A

C.5 Library Catalogues Facilities					
i	Your library provides you with a complete list of books	1	2	3	4
ii	Library catalog easily book locater for students	1	2	3	4
iii	Books are arranged on all the shelves with catalog	1	2	3	4
iv	Complete thesis catalog is available at your library	1	2	3	4
v	You find the required material through the catalog	1	2	3	4
vi	Online catalog facility is available to you	1	2	3	4

D) Students' learning at the university level

Strongly Disagree=SD to Strongly Agree=SA

Sr. No.	Statement	SD	D	A	SA
D.1 Critical Thinking					
i	Critical thinking promotes your academic improvement	1	2	3	4
ii	Critical thinking is crucial for your self-reflection	1	2	3	4
iii	Critical thinking explores possibilities for you	1	2	3	4
iv	Critical thinking helps you to cultivate higher-order skills	1	2	3	4
v	You explore alternatives with critical thinking	1	2	3	4
vi	You make a better judgment	1	2	3	4
D.2 **Civic Engagement**					
i	You engaged yourself in the sports activity	1	2	3	4
ii	You participate in daily activities	1	2	3	4
iii	You worked as a volunteer at university	1	2	3	4
iv	You create assignments regarding social work	1	2	3	4
v	You participate in extra circular activities	1	2	3	4
vi	You are a member of the students' society	1	2	3	4
D.3 Browsing of Data					
i	You easily browse data for sessional work	1	2	3	4
ii	You browsing data for class participation	1	2	3	4
iii	You consult online data for exam preparation	1	2	3	4
iv	You know browsing of data	1	2	3	4
v	You give a presentation after browsing of data	1	2	3	4
vi	You facilitate students to browse data	1	2	3	4
D.4 Sessional Work					
i	You complete your assignment on time	1	2	3	4
ii	You prepare your quiz on time	1	2	3	4
iii	You give a good presentation	1	2	3	4
iv	You completed sessional work due to the deadline	1	2	3	4
v	You support other students' sessional work	1	2	3	4
vi	You complete sessional work in a group	1	2	3	4

Suggestions to improve academic library and students learning at university level

1) _____

2) _____

Name (optional):_____   Date:_____