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# Library Services and Facilities in Higher Education Institutions in Pakistan: Satisfaction of Patrons

Muhammad Shoaib Assistant Professor, Department of Sociology, University of Gujrat, Gujrat, Pakistan, shoaibsoc@uog.edu.pk

Rustum Ali M. Phil Student, Department of Sociology, Government College University, Faisalabad, Pakistan, rustumalisoc@gmail.com

Arisha Akbar Department of Sociology, University of Gujrat, Gujrat, Pakistan, arishaaliofficial@gmail.com

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### Library Services and Facilities in Higher Education Institutions in Pakistan: Satisfaction of Patrons

First and Corresponding Author Dr. Muhammad Shoaib Assistant Professor, Department of Sociology, University of Gujrat, Gujrat, Pakistan Email: <u>shoaibsoc@uog.edu.pk</u>

Second Author **Rustum Ali** M. Phil Student, Department of Sociology, Government College University, Faisalabad, Pakistan

> *Third Author* **Arisha Akbar** Department of Sociology, University of Gujrat, Gujrat, Pakistan

#### ABSTRACT

This paper attempted to examine the academic library facilities and satisfaction of university library patrons at higher education institution in Pakistan. It is evident that library staff has also been trying their best level to facilitate the library users through different procedures in global south and global north. A quantitative study design had been opted to conduct a cross-sectional survey from two public sector university students of BS (4 years) programme. A structured questionnaire had been administered to measure the response 1275 library patrons sampled through proportionate random sampling technique. A pilot testing had been done to check the reliability of the questionnaire that ranged from .702 to .798 (overall .889 for 66 items). Descriptive statistics, Pearson correlation and multiple regression analysis had been employed to draw results and conclusions. The study findings showed that university library patrons had been satisfied with the services and facilities provided by library including circulation services, article indexing, compilation of bibliographies, new arrival displays, library references, inter-library loans, selected topic/content references, library orientations, and library automation.

**Keywords:** Circulation Services, Article Indexing, Compilation of Bibliographies, Library References, Inter-Library Loans, University Library

#### **INTRODUCTION**

Academic library at university has been playing a vital role to provide different academic facilities and library services to the patrons in all over the world (Brine & Knight, 2021; Jansen, 2021; Mugo & Mathu, 2021; Ogungbeni & Nwosu, 2021). It is evident that library staff has also been trying their best level to facilitate the library users through different

procedures in global south and global north (Ayık & Yılmaz, 2021; Khan & Bhatti, 2021; Saddler, 2021; Wahler, Spuller, Ressler, Bolan, & Burnard, 2021). These services includes circulation services, article indexing, compilation of bibliographies as required, new arrival displays, library reference and inter-library loans, selected topic or content references, and more important library orientations to new enrolled students in terms of library facilities usage (Baxter et al., 2021; Khan & Bhatti, 2021; Sewell & Coghill, 2021; Weyant, Wallace, & Woodward, 2021). It is pertinent to mention here that these academic libraries have different features or resources to facilitate library patrons. These library features includes work process, financial resources, human resources, physical resources, e-resources, excellence services, and standard operating procedures (Machendranath, 2021; Sharkey, Elkins, & Johnson, 2021; Soltani-Nejad et al., 2021; Thomas & Shouse, 2021). It has been argued that academic libraries are facilitating to support the curriculum, academic activities, and research support services to the library patrons generally and teachers along with students particularly.

#### **Objective** of the study

This study intends to examine the academic library facilities to the university library patrons at higher education institution.

#### LITERATURE REVIEW

Several studies has been conducted to examine the academic library facilities through different lenses across the globe (G. O. Adigun & Tella, 2021; Tella & Ibinaiye, 2020; Twum, Adams, Budu, & Budu, 2020). Similarly, empirical evidences showed that academic libraries are trying to facilitate the university library patrons through different services and facilities (Giesler, 2021; Jayasundara, 2021; Kont, 2021). A study of Henninger (2016) and Dube (2021) examined that libraries are source of information and communication technology. Similarly, study also asserted that through ICT, libraries use the techniques and different methods of handling the information in a more reliable way (Azonobi, Uwaifo, & Tella, 2020; Dwivedi et al., 2020). Likewise, information and communication technology includes computers, software's and electronic textbooks (Okike, 2020; Popoola & Olajide, 2021). Further, these ICTs libraries store the information and transmit the information to the electronic gadgets within the library (Hardy & McKenzie, 2020; Smith, 2020; Trujillo & Tallman, 2021). A study of G. O. Adigun and Tella (2021) revealed that academic libraries plan to facilitate the users of library in the form of providing facility of infrastructure like designing the library in a more essential and structured way so that library users enjoy the facilitates of the library. A study of Dube (2021) reported that library trends are increasing Library Philosophy and Practice, 1-19

day by day so that quality libraries are also trending more and more. Instead of library facilities people are able to find jobs like architects, librarian, library in-charge and many other interlinked library administration jobs (Chikazhe, Makanyeza, & Kakava, 2020; Tella & Ibinaiye, 2020; Xia & Li, 2015). A study of Nazim, Beg, and Sarkar (2021) analyzed that libraries also facilitate in the form of shared library facilities. Similarly, academic libraries shared development collection, and cooperative efforts like inter library loans databases that are shared in the literature are well documented (Appleton, 2020; Fraser-Arnott, 2020; Huber, Embree, Gay, & Gilman, 2021; Ye, 2019). Furthermore, this shared academic library facilities information grows more efficiently around the globe (Brown, Alvey, Danilova, Morgan, & Thomas, 2018; Fagan, Ostermiller, Price, & Sapp, 2020; Mani, Cawley, Henley, Triumph, & Williams, 2021; Vogus, 2020).

A study of Brown et al. (2018) described that academic library facilities facilitate through creating knowledge for work. A planning of staff based on work represents public and technical services (Cox, 2017; Tella & Ibinaiye, 2020; Williamson et al., 2021). However, libraries also bring new opportunities for new level of users that results in computing academic services in to the renovated form of library (Ho, 2020; Mangrum & Foster, 2020; Williamson et al., 2021). A study of Gonzalez et al. (2020) pointed out that students positive attitudes towards library facilities are raising day by day. With this increasing positivity the knowledge and information also increases (Hallam, Thomas, & Beach, 2018; Hardy & McKenzie, 2020; Smith, 2020; Wan, 2021). Users seek the ability to create new knowledge that further become the most important skill of individuals in order to be promoted and succeeded (Azonobi et al., 2020; Dwivedi et al., 2020; Popoola & Olajide, 2021). It is pertinent to mention here that several studies has also been conducted to highlight the importance of academic library along with other interlinked academic domain at higher education institutions includes research support services (Shoaib, Rasool, & Anwar, 2021), digitalization of academic library during COVID-19 pandemic (Shoaib, Iqbal, & Tahira, 2021), learning outcomes and academic performance at higher education institutions (Shoaib, Ali, Anwar, & Shaukat, 2021; Shoaib & Ullah, 2021b), importance of teaching and learning (Shoaib, Ali, Anwar, Rasool, et al., 2021), classroom and students' participation (Shoaib, Ahmad, Ali, & Abdullah, 2021), and academic learning (Shoaib, Abdullah, & Ali, 2021), classroom environment (Shoaib & Ullah, 2021a). However, several studies have been conducted to use different study design including qualitative and quantitative to measure the results and draw conclusion (Abdullah & Shoaib, 2021; A. Ahmad, Shoaib, & Abdullah, 2021; Anwar, Shoaib, & Javed, 2013; Shoaib & Abdullah, 2021; Shoaib, Khan, & Shaukat, 2012; Shoaib, Khan, & Abid, 2011; Shoaib, Khan, & Ashraf, 2011; Shoaib, Khan, & Khan, 2011; Shoaib, Munir, Masood, Ali, & Sher, 2012; Shoaib & Shah, 2012). Hence, this study uses quantitative study design to evaluate the satisfaction of university library patrons towards different services and facilities provided to them at higher education institutions.

#### THE DATA AND METHODS

This section provides the data and procedures used to conduct the study. The following procedures has been opted to conduct the study;

**Study design:** A quantitative study design had been opted to conduct this study. As this study had been designed to explain the facilities and services provided to the university library patrons within the library premises. Hence, an explanatory nature of study had been conducted.

**Population and target population:** For this research paper, enrolled students of two public sector universities had been selected includes: a) University of Gujrat, Gujrat, Pakistan and b) Government College University, Faisalabad, Pakistan. Further, students of BS (4 years) programmes was constituted the target population of the present study.

Unit of analysis and inclusion criteria: All the enrolled students in BS (4 years) programmes in above mentioned two public sector universities constitute the unit or element of the study. However, the inclusion criteria had also been based on the parameters including students consulting Quaid-e-Azam Library at Hafiz Hayat Campus, University of Gujrat and Armstrong Library, Government College University, Faisalabad.

**Sampling procedures and sample size:** Proportionate random sampling technique of probability had been opted to conduct this study. As the list of library users was available of the days of data collection. Hence, this sampling technique is more appropriate to employ to draw a sample from the target population. A sample size of 1275 enrolled students had been selected from the target population of the two public sector universities in the Punjab as mentioned above.

**Technique and tool of data collection:** A cross-sectional survey method has been opted as a technique of data collection. This technique was selected as per the nature of the study design i.e., quantitative. Further, a well-structured questionnaire had been constructed including different sections based on background variables, dependent, and independent variables.

#### Table 1

| Reliability S | Statistical Test |
|---------------|------------------|
|---------------|------------------|

| List of Variables                                 | No. of | Cronbach |
|---|--------|----------|
|   | Items  | Alpha    |
| Circulation Services (CISE)                       | 7      | .729     |
| Article Indexing (ARIN)                           | 6      | .742     |
| Compilation of Bibliographies (COBI)              | 6      | .768     |
| New Arrival Displays (NEAD)                       | 7      | .731     |
| Library References (LIRE)                         | 6      | .789     |
| Inter-library Loans (INLL)                        | 6      | .702     |
| Selected Topic/Content References (STCR)          | 7      | .770     |
| Library Orientations (LIOR)                       | 7      | .769     |
| Library Automation (LIAU)                         | 6      | .747     |
| Satisfaction of University Library Patrons (SULP) | 8      | .798     |
| Overall   | 66     | .889     |

**Data analysis:** The data analysis and presentation had been made using quantitative analysis technique. Data was presented showing demographic characteristics, bivariate table, Pearson correlation, and multiple regression statistical test in section of results and discussion.

#### RESULTS

Table 2

This section deals with the primary data analysis and discussions on the subject under considerations. It is divided into different sections including socio-demographic characteristic

#### Category % Category f % Fathers' Occupation of the Respondent Family Size and Type of the Respondent Farmer/agriculturist 305 23.9 1-3 12 00.9 369 Businessman 334 26.2 2-6 28.9 7-9 Government employ 136 10.7 541 42.4 10 and above 27.7 Private job 63 04.9 353 Abroad/foreign 93 07.3 Total 1275 100.0 Old/retired/late 64 Nuclear 51.9 05.0 662 Labourer Joint 424 33.3 268 21.0 Not informed 12 00.9 Extended 189 14.8 Total 1275 100.0 Total 1275 100.0

Demographic Characteristics of the Library Patrons

Table 2 insights the demographic characteristics of the university library patrons. Analysis indicated that 26.2 percent of the library users' family occupation was businessman and 23.9 percent of the university library patrons' family occupation was farming. Similarly, 10.7 percent of the respondents' family earning was based on government job and 4.9 percent of the library users reported private job dependency. However, 21 percent of the university library users' familial occupation was labour. It is pertinent to mention here that only five

Table 3

percent of the respondents' familial expenditures was managed through foreign remittances and about one percent of the library patrons of the university were not interested to provide information regarding their familial occupation. However, it is concluded that about half of the university library patrons informed the familial occupation as farming and business.

| Cross-tabulation of Family Size and Family Type of the Library Patrons |                  |                       |                |                             |              |  |  |  |
|--|------------------|-----------------------|----------------|-----------------------------|--------------|--|--|--|
| Fomily   |                  | Family Size           |                |                             |              |  |  |  |
| Family   | f(%)             | f(%)                  | f(%)           | f(%)                        | - Total      |  |  |  |
| Type   | 1-3              | 2-6                   | 7-9            | 10 and above                | <i>f</i> (%) |  |  |  |
| Nuclear  | 12 (00.9)        | 310 (24.3)            | 319 (25.0)     | 21 (01.6)                   | 662 (51.9)   |  |  |  |
| Joint  | 0 (00.0)         | 42 (03.3)             | 182 (14.3)     | 200 (15.7)                  | 424 (33.3)   |  |  |  |
| Extended   | 0 (00.0)         | 17 (01.3)             | 40 (03.1)      | 132 (10.4)                  | 189 (14.8)   |  |  |  |
| Total  | 12 (00.9)        | 369 (28.9)            | 541 (42.4)     | 353 (27.7)                  | 1275 (100.0) |  |  |  |
|  | Pearson Chi-Squa | $are = 511.835^{a}$ , | df = 6, Asymp. | Sig. $(2\text{-sided}) = .$ | 000          |  |  |  |

| Cross-tabulation of Family Size and Family | Type of the Library Patrons |
|--|-----------------------------|
|  |                             |

Table 3 indicates the bivariate table showing the trend of data on family size and type of the university library users. Analysis revealed that 25 percent of the respondents belonged to nuclear family and had seven to nine family members. Similarly, same proportion has been reported in nuclear family with family size of two to six members. However, small proportion of nuclear family had been reported up to three family members (0.9 %) and more than nine family members (1.6 %). Data reflected that 15.7 percent of the library patrons residing in joint family system had ten and above family members. However, similar proportion of library users belonged to joint family system had seven to nine family members. It is important to mention here that only smaller proportion (3.3 %) of the library users of joint family system had two to six family members. The analysis also pointed out that 10.4 percent of the library users belonged to extended family system had 10 and above family members. The overall analysis described that 51.9 percent of the library users had nuclear family and 42.4 percent of the library patrons had seven to nine family members.

| Descriptive Statistics (n=12/5)            |      |      |       |           |        |  |  |  |
|--|------|------|-------|-----------|--------|--|--|--|
| Variables                                  | Min. | Max. | Mean  | Std. Dev. | Var.   |  |  |  |
| Circulation services                       | 8    | 20   | 14.99 | 2.335     | 5.453  |  |  |  |
| Article indexing                           | 7    | 20   | 17.63 | 2.275     | 5.177  |  |  |  |
| Compilation of bibliographies              | 10   | 24   | 20.83 | 3.113     | 9.689  |  |  |  |
| New arrival displays                       | 5    | 20   | 15.92 | 2.729     | 7.449  |  |  |  |
| Library references                         | 5    | 20   | 16.05 | 3.578     | 12.802 |  |  |  |
| Inter-library loans                        | 8    | 20   | 17.53 | 2.391     | 5.717  |  |  |  |
| Selected topic/content references          | 9    | 20   | 17.87 | 2.337     | 5.460  |  |  |  |
| Library orientations                       | 7    | 16   | 14.24 | 1.817     | 3.303  |  |  |  |
| Library automation                         | 11   | 20   | 17.71 | 2.262     | 5.118  |  |  |  |
| Satisfaction of university library patrons | 12   | 24   | 21.54 | 2.472     | 6.109  |  |  |  |

#### Descriptive Statistics (n-1275)

Table 4

Table 4 pointed out the descriptive statistics of the variables used in this research article. It is stated that the variable circulation services minimum score was eight and maximum score was 20 along with mean value of 14.99, 2.335 standard deviation, and 5.453 variance. Similarly, the minimum score of article indexing variable was seven and maximum reported as 20 along with mean value of 17.63, 2.275 standard deviation, and 5.177 variance. It is important to mention here that the dependent variable named as satisfaction of university library patrons had 12 minimum score, 24 maximum score, 21.54 mean value, 2.472 standard deviation, and 6.109 variance. Further, the descriptive statistics of variables includes Compilation of bibliographies new arrival displays, library references, inter-library loans, selected topic/content references, library orientations, and library automation had also been provided in the table.

| Table 5 |                  |               |          |
|---------|------------------|---------------|----------|
| Pearson | Correlation Stat | tistical Test | (n=1275) |

| Var. | CISE | ARIN   | COBI        | NEAD   | LIRE   | INLL   | STCR        | LIOR   | LIAU   | SULP   |
|------|------|--------|-------------|--------|--------|--------|-------------|--------|--------|--------|
| CISE | 1    | .262** | .297**      | .225** | .138** | .261** | .378**      | .157** | .247** | .203** |
| ARIN |      | 1      | $.580^{**}$ | .529** | .252** | .551** | .292**      | .240** | .433** | .345** |
| COBI |      |        | 1           | .411** | .334** | .509** | .477**      | .324** | .456** | .365** |
| NEAD |      |        |             | 1      | .333** | .489** | .253**      | .204** | .349** | .307** |
| LIRE |      |        |             |        | 1      | .504** | .315**      | .104** | .320** | .279** |
| INLL |      |        |             |        |        | 1      | $.450^{**}$ | .221** | .467** | .452** |
| STCR |      |        |             |        |        |        | 1           | .456** | .587** | .629** |
| LIOR |      |        |             |        |        |        |             | 1      | .425** | .459** |
| LIAU |      |        |             |        |        |        |             |        | 1      | .619** |
| SULP |      |        |             |        |        |        |             |        |        | 1      |

Table 5 depicts the Pearson correlation statistical test. The analysis revealed that circulation services had a weak positive correlation with article indexing, compilation of bibliographies, new arrival displays, library references, inter-library loans, library orientations, library automation, and satisfaction of university library patrons. However, data showed moderate positive correlation between circulation services and selected topic/content references. It had been reported that article indexing had moderate positive correlation with compilation of bibliographies, new arrival displays, inter-library loans, library automation, and satisfaction of university loans, library automation, and satisfaction of bibliographies, new arrival displays, inter-library loans, library automation, and satisfaction of university library patrons. However, there was a weak correlation of article indexing with library references, selected topic/content references, and library orientations. It is worth to mention here that the strong correlation (r = .629) had been reported between selected

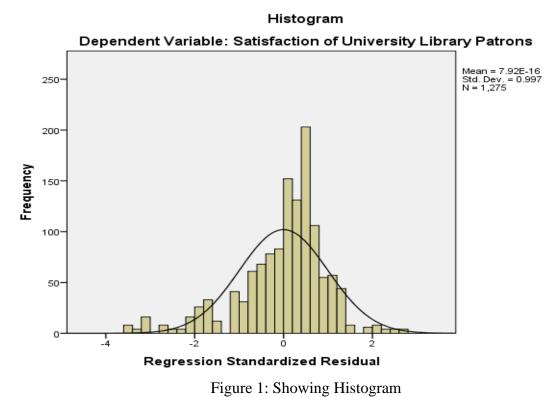
topic/content references and satisfaction of university library patrons. However, there was also strong correlation (r = .619) between library automation and satisfaction of university library patrons. Likewise, the analysis asserted that there was positive correlation between all variables.

#### Table 6

| Independent Variables                 | Unsta     | andardized<br>efficients | Standardized<br>Coefficients | t            | Sig.                |
|---------------------------------------|-----------|--------------------------|------------------------------|--------------|---------------------|
|                                       | В         | Std. Error               | Beta                         |              |                     |
| Circulation services                  | .064      | .022                     | .060                         | 2.847        | .004                |
| Compilation of bibliographies         | .056      | .020                     | .070                         | 2.837        | .005                |
| New arrival displays                  | .048      | .021                     | .053                         | 2.301        | .022                |
| Inter-library loans                   | .143      | .026                     | .139                         | 5.475        | .000                |
| Selected topic/content                | .381      | .029                     | .360                         | 13.302       | .000                |
| references                            |           |                          |                              |              |                     |
| Library orientations                  | .212      | .031                     | .156                         | 6.958        | .000                |
| Library automation                    | .333      | .028                     | .304                         | 11.759       | .000                |
| (Constant)                            | 4.665     | .521                     |                              | 8.956        | .000                |
| $R = .726^{a}$ , R Square = .528, Adj | usted R S | quare = .525             | df = 7, F = 202              | .132, Sig. = | = .000 <sup>b</sup> |

Multiple Regression Analysis Predicting Satisfaction of University library patrons (n=1275)

Table 6 revealed the multiple regression analysis predicting satisfaction of university library patrons. The table showed the independent variable list including circulation services, compilation of bibliographies, new arrival displays, inter-library loans, selected topic/content references, library orientations, and library automation. The analysis revealed that university library patrons were satisfied towards circulation series and compilation of bibliographies provided them form university libraries. Similarly, university libraries were providing and facilitating new arrival displays, inter-library load, and content references to the university library patrons. It is pertinent to mention here that library patrons were satisfied towards library automation services provided by the library staff in the university.



#### DISCUSSIONS

It is important to mention here that all users avail the facility of having enough furniture in the library like tables, chairs, and bag keeping cabinets (Castro, Spina, & Xu, 2019). The quantity of furniture in the library is enough for students and visitors that they sit anywhere they want and study the book in peaceful environment of library (Brown et al., 2018). Similarly, library offers computer facilities with access of internet to the users (Du-Toit-Brits, 2020). In the academic library, computer facilities are provided for the academic activities (J. Adigun, Onihunwa, Irunokhai, Sada, & Adesina, 2015; Akin, 2013; Xin et al., 2020). Users find out journals, books, articles, newspapers and other academic documents on the computer. However, library halls are quite ventilated consisted of chillers and windows as well. They are quite lightened because of windows. Users of library enjoy their study feeling less exhausted. The environment of library seems to be attracted for users because of ventilation (Brown et al., 2018). Further, libraries have facility of unlimited research books (Shoaib, Rasool, et al., 2021). The books in library are kept in sequence of alphabets and series in the storage cupboard. In library, sequence of books are mentioned outside the corner of storage cupboard through which users can easily detect the demanding book and do not feel any difficulty in searching for books (McHale, 2020; Stearns, Revitt, & Leonard, 2020; Vogus, 2020).

Library also provides the facility of conducting workshops and seminars in the auditorium hall (Ladan, Haruna, & Madu, 2020; Okike, 2020). The hall of library has quite enough space

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and sitting arrangement for hundreds of people. It has been reported that several workshops and international seminars are also conducted in the library hall (Kirkpatrick & Dixson, 2020). Similarly, library facilitates the users with specified reading zones. Library patrons use any section for reading the books and articles. They use the reading zones in a unique reading environment that are peaceful as well for study and research purpose (J. Ahmad, Ahmad, Shoaib, & Shaukat, 2021; J. Ahmad, Shoaib, & Shaukat, 2021). In the same way, library have the facility of enough print material for its users. Libraries facilitate and accommodate the patrons that they take academic benefit from these materials. The print materials are in the form of books, journals, articles, maps, researches and other prints as well (Shoaib, Rasool, et al., 2021). However, libraries facilitate the users through access to internet and computer as well. University library patrons use computer and internet in a suitable way of exploring the concerned information (Ali, Shoaib, & Syed, 2021).

Library is considered to be the most important part of life of students in higher education institutes (Ogungbeni & Nwosu, 2021; Palmer, 2021; Saddler, 2021). It is important for library administration to have a satisfactory and enough material in the library to enhance academic activities and research skills as well (Sharkey et al., 2021; Trujillo & Tallman, 2021; Weyant et al., 2021). University library patron feels happy and comfortable to have their required need of academic activities. It develops enthusiasm and willingness of performing better task to reach their destination. It is the responsibility of university and library management to overcome the problems faced by users including internet connectivity, study spaces, gendered based environment for study, rest rooms, and other linked facilities and services to the library patrons (Kiriakova, 2021; Omar, Salleh, & Arshad, 2021; Saddler, 2021). Besides, provision of facilities in the library, the staff of library has also been reported as cooperative with the visitors of library to facilitate (Shoaib, Rasool, et al., 2021). There are multiple issues faced by university library users as well to be tackled (J. Ahmad, A. Ahmad, et al., 2021; J. Ahmad, M. Shoaib, et al., 2021). Although library staff have been facilitating the patrons but facing the problems as well that cannot be ignored including old edition of books, not having access to latest journals and text materials, lack of coordinative staff and not having the option of any photocopy within the library spaces.

#### CONCLUSION

We reached on the conclusion based on the study findings that university library patrons had been satisfied with the services and facilities provided by library including circulation services, article indexing, compilation of bibliographies, new arrival displays, library references, inter-library loans, selected topic/content references, library orientations, and library automation. Library administration had been trying to provide and facilitate their patrons to support their academic activities. The study also concluded that there had a strong correlation between selected topic/content references and satisfaction of university library patrons. However, there was also strong correlation reported between library automation and satisfaction of university library patrons. Likewise, the analysis asserted that there was positive correlation between all variables. Hence, it had been argued that academic libraries had been trying to provide different services and facilities to their patrons to academic activities.

#### Limitations

This study has been limited to qualitative study design and only one university library has been consulted for the purpose of data collection. Further, only library patrons has been interviewed.

#### **Future Research**

Future research may be conducted using mixed method approach including qualitative and quantitative study design. Similarly, different set of variable can be used to check the satisfaction of university library patrons including staff support, study spaces, learning environment, and other interlinked variables of academic environment at higher education institutions.

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**Corresponding Author:** Dr. Muhammad Shoaib has more than sixteen years' experience in teaching/research in the field of Sociology in both public and private sector. Currently, he is working as Assistant Professor at Department of Sociology, University of Gujrat. He worked as a visiting research scholar and adjunct faculty member at The University of Queensland, Australia for Spring-2020 and also at Arizona State University, USA for Fall-2013 Semester respectively. He visited Australia, China, United States, and Nepal. He can be contacted at: <a href="mailto:shoaibsoc@uog.edu.pk">shoaibsoc@uog.edu.pk</a>