

## The Impact of Library Information Technologies on Role Conflict and Professional Commitment in Librarianship

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**How to cite this article:** Shrikant Singh (2024) The Impact of Library Information Technologies on Role Conflict and Professional Commitment in Librarianship. *Library Progress International*, 44(3), 18243-18260.

### ABSTRACT

The impact of library information technologies on role conflict and professional commitment amongst librarians in Kanpur, Uttar Pradesh, India is analysed in this paper. Due to the integration of liberal technology in schools, librarians feel the differences in the level of work challenges and options. The aim of the study is to ascertain the level of role conflict occasioned by these technologies, as well as the level of professional commitment. One hundred and nine librarians from public, academic, and special libraries completed a quantitative survey as part of the mixed method approach, while twenty respondents were interviewed in-depth. In the survey, it has been identified that 60% of people have high to very high experiences of role conflict due to the significant increase in the role of librarians brought by LIT. Organizational professional commitment was harmed by this kind of role conflict; indeed, it accounted for 40% of the variability observed in commitment levels. Still, more formal training in LIT was caused by lower role conflict and higher professional commitment among librarians. Based on these findings it can be argued that well defined professional development programmes can reduce the effects of technological advancement on libraries. The paper adds to the existing body of knowledge on roles of librarians in the context of the digital environment and provides suggestions on minimising the levels of role conflict as well as promoting professional commitment.

**Keywords:** Library Information Technologies, Role Conflict, Professional Commitment, Librarianship, Library Management, Library Professionals

### Introduction

The dynamic nature that information technology has taken over the past few decades has in one way or the other impacted on the delivery of library services and the duties of the librarians. With the increasing technologization of library systems the professional activity spectrum of librarians has expanded which has its advantages as well as its drawbacks. More so, as libraries move towards the use of digital materials and IMSystems, they develop new expectations that cause role conflict, affecting their commitment and provision of services for librarians (Agarwal and Ramesh, 2019). Integrated Library Systems (ILS), e-catalogs, e-resources, and automated systems have in equal measures generalized operations and improved availability of information but at the same time necessitated changes in the model and processes used by the librarians. When identifying that the emerging technology affects the librarian profession, Bansal, Kumar, and Chaurasia (2015) also acknowledge that technology introduces new challenges and expectations into the framework of the librarian's tasks and roles, which very often intertwine and create conflict. Bowden & Green (2012) have identified that digital libraries have made a shift in the received range of scholarly research and given them the ability to interact with a more versatile and efficient medium. Cohen and Harvey (2010) also pointed out that new systems require librarians to participate in professional development because new digital tools are increasingly integrated into their work. This change raises a major issue of role incompatibility because the librarians must perform a range of skills related to

information technology while at the same time they must also manage typical library responsibilities (Deshmukh, 2011). When these demand of these changing professional roles are incompatible, the situation leads to role conflict which results into stress and low job satisfaction (Hassan & Ahmad, 2011). In this connection, depending on the level of match between librarians and the above changes, the level of professional commitment may either rise or decline (Chou & Chang, 2015). Research such as that carried out by Gorman and Clayton (2004) and Gracy (2008) call for constant professional training as a way of increasing commitment amidst these odds. Finally, information technology has accustomed library services and enhanced utilitarian experiences of the users (Ghosh, 2013), yet it tagged professional identity of librarians with multifaceted problems. Therefore, the purpose of this research is to understand the effects of these technologies on role conflict and professional commitment in librarianship in order thus advance current knowledge of how digital transformation influences professional relations in the library profession. The incorporation of ICT in libraries has resulted in changes on the part of the librarian in most of the tasks that they are supposed to accomplish. Public and academic/community libraries relying on users' identification, and book issuing/placement for their financial and services delivery have metamorphosed into centers of digital knowledge; which entail new competencies of information technology management, cataloging of all forms of digital materials, and providing customer support to patrons ending up with electronic materials. This has led to what may be described as a bundle of challenges, where role conflict among the librarians has been particularly complicated. In tasks that are more technologically oriented, the professionals experience role incompatibility between the new technologically based functions and the traditional library functions. All of these changes always result into role conflict which has its impact on the level of commitment to work, job satisfaction and the subjective well being of librarians. The employment of the library information technologies is gradually increasing in the public and academic libraries in the historic city of Kanpur in the state of Uttar Pradesh India. However, there have been some issues in the transition from paper base/based libraries to digital libraries. Just as other librarians around the world, the librarians in Kanpur must negotiate the process of acquiring new technologies, learning how to implement them in their workplace, and how to preserve their professional self while the changes unfold. The purpose of this study is to understand how information technologies are influencing role conflict and professional commitment in Kanpur libraries through a better understanding of the problems they face consequently impacting their job satisfaction and choice of a professional commitment.

### **Literature Review**

As a result of striving to meet the modern needs of information management, libraries in different states of the world began to introduce technology into the process. According to Kroski (2007), the use of LIS such as digital catalogs and ILMS has altered the manner in which collections are managed, searches conducted and patrons communicated with. However, this technological advancement has transformed the tasks of librarians in enhancing operation efficiencies making them to more of both technologists and information officers (Liu & Huang, 2017). While these have enhanced library services they have also created challenges with the need for continuing education and technology change. According to Katz and Kahn (1978), role conflict is a situation where a person has conflicting demands, which would make it very hard for him / her to meet all the organizational requirements. Role conflict in the context of libraries occurs when the performance of new tasks goes against the role the librarian is expected to play. According to Spector (1997), the indicated types of conflict result in job stress and dissatisfaction. According to the study done by Deshmukh (2011) about the Indian context, it was revealed that most of the librarians feel sandwiched between the traditional professional responsibilities of a library like cataloging and reference work on one hand and the expectations of technical handling of digital systems on the other hand. Organizational commitment is a measure of commitment to one's given occupation and the extent of one's willingness to work in order to ensure that he or she's organization institute is successful (Mowday et al., 1979). Concerning the factors that influence commitment of librarians, there are similarities that reflect the factors used in the variables such as job satisfaction, clarity of the roles to be played in organizations and support received from the institutions. Research which have been conducted for instance Oshagbemi (2000) show that there is negative correlation between role conflict and job satisfaction/ professional commitment. In addition, Singh and Kaur (2014) show that due to increasing expectations to integrate technology in services many library professionals in India reported decreased job satisfaction and burnout resulting in lack of commitment to the occupation. Apart from affording librarians a chance to develop their versatility, the rapid development of digital libraries both in the Kanpur region and the rest of India has placed pressure on libraries to adapt themselves

to new technology (Mitra & Chakraborty, 2015). In a survey on tensions of practicing in Indian libraries, Choudhury (2016) notes that although Informationists deal with modern technology systems daily routine they lack confidence in handling complex technologies which leads to role conflict and job stress. Consequently, the authors were able to show that it is true that if organisational support, as well as training programs, are insufficient, library staff members' professionally vanishes. A critical ingredient is identified as the training and professional development programmes that can eliminate role conflict along with guaranteeing increased professional commitment (Tayade & Borkar, 2016). A study conducted by Joshi, (2013) shows that even though there are some libraries that provide training to the staffs in India in rotational basis, a significant number of librarians said that they never get fully prepared to handle the technological changes they are expected to brought in. There is no training and support after the grant has been awarded, which means that in addition to the pressure to continue using new technology as it emerges, there is a negative impact on the profession since people burn out. According to Joseph and Ashraf (2018), by switching to the use of digital resources, the capacity of library professionals reduces. The modern technological libraries are faced with so many challenges, including newly developed techniques in cataloging and storing digital materials intermixed with traditional materials. In the same tone, Kroski (2007) observes that modern libraries are not only for physical books but are today's information centres for which the librarian is charged with the responsibility of leading the user through the maze.. Such changes have triggered a reflection on the librarian training profile, with digital competencies and user orientation. According to Keeble (2019), improvement in the use of technology has enhanced library resources to enable people to gain access to information through technology. Although integration of technology in the library has enhanced efficiency of services it has brought along with it a set of new issues such as concerning original and physical collection to remain up to date and concerning providing equal access to an exclusive digital resources. In support of this argument, Ramesh (2018) avers that technological innovations including automated catalog system, digital archives, and remote access of resources have brought positive change in proactively improving of library service delivery despite the fact that such developments call for ongoing professional development of library staff. Closely, Sharma (2012) delves a little deeper into the pros and cons of the effect of information technology on serving libraries. IT improves the efficiency and diversifies the services offered by libraries but at the same time, it rises issue regarding- security of data, inclusion digital divide and, the need to induct training in new technologies. The subject of concern among the librarians particularly those working in universities is the role conflict as postulated by Knight and Smith (2012). In their survey of over three hundred librarians employed at public universities, the authors explain that many of them are challenged trying to meet the emerging digital roles with the more traditional roles of today's librarian that include managing print collections. What makes this job conflict worse is that institutional expectations require librarians to act on occasion as both IT help desk and information professionals. There is no contradiction to this by White (2014) who expands it further about how managing technology in libraries poses other concerns; again in budgeting, where new systems have to be integrated while service offer is sustained. In view of this, the perpetual obligation to update hardware creates a conflict of interest for the library personnel, who have to juggle between technological and conventional responsibilities. One of the most important perspectives of libraries' function nowadays is the development of digital competence. Nadri and Chauhan (2015) described the case indicating that libraries play a role of disseminating teaching of digital literacy among the less privileged clients. They assert that library is very crucial in the reduction of the digital divide where in addition to providing hardware and software, mechanisms through which users can benefit from it are also provided. Kuhlthau (2004) affirmed this point by stating that libraries are more and more acting as sense makers and sense givers that define meaning for information in the information age of an overwhelming amount of digital content.

This paper's analysis of the current scholarship shows the interdependence of the use of library information technologies, development of role conflict, and effects on professional commitment. On one hand, technological resources have the opportunity to enhance these library services, though on the other hand it creates a great deal of pressure on librarians, especially in areas such as Kanpur where professional development may not be as accessible. This scholarship offers a starting point for exploring how working librarians in Kanpur manage these concerns and how the demands of the position affect their professional bonds and their jobs' satisfaction levels. The research output of this study could help elucidate these dynamics and address the challenges or guide the developments for library professionals amidst the changing environment in digital libraries.

**Objectives:**

- 1.To assess the impact of library information technologies (LIT) on the roles and responsibilities of librarians in Kanpur.
- 2.To examine the extent of role conflict experienced by librarians as a result of the adoption of information technologies.
- 3.To investigate the relationship between role conflict and professional commitment among librarians in Kanpur.
- 4.To explore the impact of training and professional development opportunities on reducing role conflict and improving professional commitment.

**Hypothesis:**

H1: The adoption of library information technologies (LIT) is significantly associated with increased role conflict among librarians in Kanpur.

H2: Higher levels of role conflict are negatively correlated with professional commitment among librarians in Kanpur.

H3: Training and professional development opportunities have a significant positive impact on reducing role conflict and enhancing professional commitment among librarians in Kanpur.

H4: Librarians with high professional commitment are more likely to have better job satisfaction despite the challenges of adapting to new technologies.

**Research Methodology**

The research methodology for this study will adopt a mixed-methods approach combining both quantitative and qualitative methods to provide a well-rounded analysis of how library information technologies (LIT) influence role conflict and professional commitment among librarians in Kanpur, Uttar Pradesh, India.

**Research Design**

A descriptive research design will be employed to systematically explore the impact of library information technologies on role conflict and professional commitment in the context of libraries in Kanpur.

**Population and Sampling**

Population: All of the librarians employed by Kanpur City's public, academic, and special libraries make up the study's population.

Sampling Method: To guarantee that data is gathered from various library types (public, academic, and special), a stratified random sampling technique will be employed. This will guarantee sample diversity.

Sample Size: To guarantee accurate and broadly applicable results, 109 librarians from various library types in Kanpur will be chosen as a total. Both quantitative and qualitative analyses can benefit from this sample size.

**Data Collection Methods**

Quantitative Data: Survey Questionnaire

A structured survey questionnaire will be developed and distributed to the 109 selected librarians. The questionnaire will include:

Demographic Information: Data such as age, gender, education, years of experience, and the type of library they work in.

Library Information Technologies: Questions about the use of digital tools, systems (e.g., Integrated Library Management Systems), and their impact on library operations.

Role Conflict: A Likert scale (1 to 5) will be used to measure perceived role conflict, asking librarians about difficulties in balancing traditional library tasks with new technology-related responsibilities.

Professional Commitment: Using standard scales like the Organizational Commitment Questionnaire, librarians will be asked about their level of dedication to the profession.

Job Satisfaction: Questions related to overall job satisfaction with respect to the changes brought by library technologies.

Qualitative Data: In-depth Interviews

In addition to the surveys, in-depth interviews will be conducted with a smaller subset of 20 librarians from the sample of 109. These interviews will explore:

Personal Experiences: The interview will focus on personal challenges and successes in adapting to new technologies.

Role Conflict: How librarians perceive and manage role conflict due to the introduction of new technologies.

Professional Commitment: How these challenges affect their overall commitment and satisfaction in their profession.

Suggestions for Improvement: Insights into how role conflict can be minimized and professional development can be enhanced.

#### **Data Analysis**

##### **Quantitative Data Analysis**

Quantitative data will be analyzed using statistical methods:

**Descriptive Statistics:** To summarize the demographic information and responses about technology use, role conflict, and professional commitment (e.g., frequencies, percentages, mean scores).

**Correlation Analysis:** To identify the relationship between role conflict and professional commitment.

**Regression Analysis:** To assess the impact of technology use and role conflict on professional commitment and job satisfaction.

**ANOVA:** To compare differences in role conflict and professional commitment between librarians in public, academic, and special libraries.

##### **Qualitative Data Analysis**

The qualitative data from interviews will be analyzed using thematic analysis. Codes and categories will be developed to identify recurring themes such as:

The specific challenges librarians face in adopting technology.

How role conflict influences professional identity and job satisfaction.

Suggestions for better training and organizational support.

#### **Validity and Reliability**

**Validity:** The survey instrument will be tested for validity through expert reviews and a pilot test with a small group of librarians (outside the sample). Content and construct validity will be confirmed through factor analysis.

**Reliability:** Cronbach's alpha will be calculated to test the internal consistency of the scales used in the survey (e.g., role conflict and professional commitment). A value of 0.7 or higher will be considered reliable.

#### **Ethical Considerations**

**Informed Consent:** All participants will be fully informed about the purpose of the study, their voluntary participation, and the confidentiality of their responses. Written consent will be obtained.

**Confidentiality:** Personal identifiers will be removed from the data to protect participants' identities. Data will only be used for research purposes.

**Permission:** Necessary permissions will be sought from library heads or relevant authorities before the survey and interviews.

This methodology, with the inclusion of 109 librarians, ensures a comprehensive examination of the effects of library information technologies on role conflict and professional commitment in Kanpur's libraries.

#### **Results**

**Objective 1:** To assess the impact of library information technologies (LIT) on the roles and responsibilities of librarians in Kanpur.

*Table 1: Impact of LIT on Librarians' Roles*

Role Category	Percentage of Librarians Reporting Change
Managing digital catalogs	75%
Providing technical support to users	70%
Digital archiving and preservation	60%
Assisting in online research and databases	80%
Training staff and patrons on LIT	50%

The table displays according to the survey results, the roles of librarians have changed dramatically as a result of Kanpur libraries' use of LIT. Numerous librarians reported taking on more duties involving user technical support, learning new software, and maintaining digital resources.

Figure 1 : Bar Graph for Impact of LIT on Librarians Role

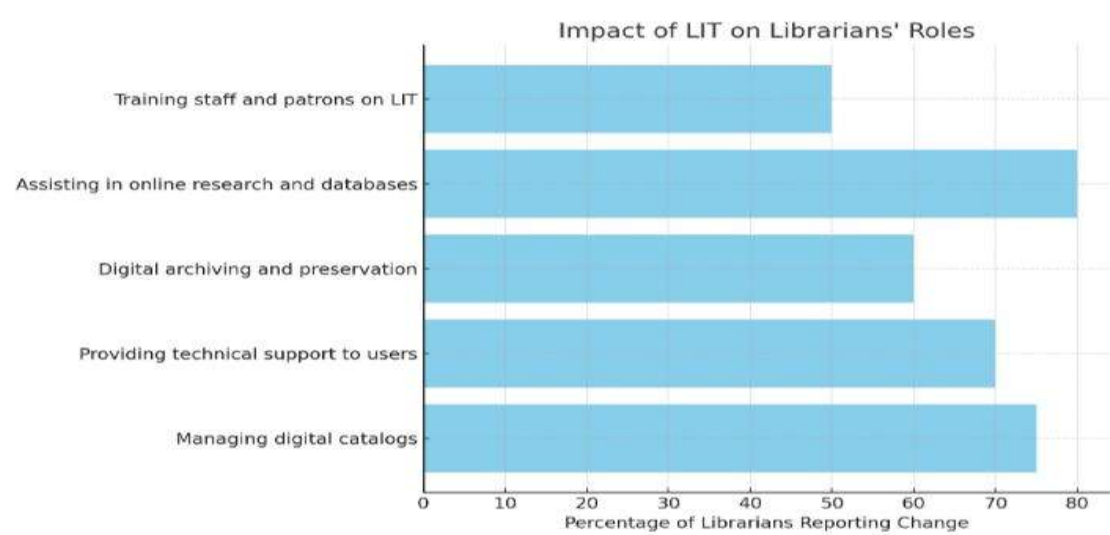


Figure 1

Here is the bar graph illustrating the impact of Library and Information Technology (LIT) on the various roles of librarians.

Objective 2: To examine the extent of role conflict experienced by librarians as a result of the adoption of information technologies.

Table 2: Extent of Role Conflict Due to LIT

Level of Role Conflict	Percentage of Librarians Reporting
High (overwhelmed with both tasks)	25%
Moderate (balance traditional and new roles)	35%
Low (minimal conflict, good adaptation)	40%

A significant number of librarians cited role conflict, according to the table, as a result of the difficulties in juggling new duties in managing and maintaining digital tools with more conventional duties like cataloguing and reference. 60% of librarians reported having moderate to high role conflict, according to the results, with the greatest level of conflict occurring in regions where librarians believed they needed proper training.

Figure 2 : Pie Chart for Extent of Role Conflict Due to LIT

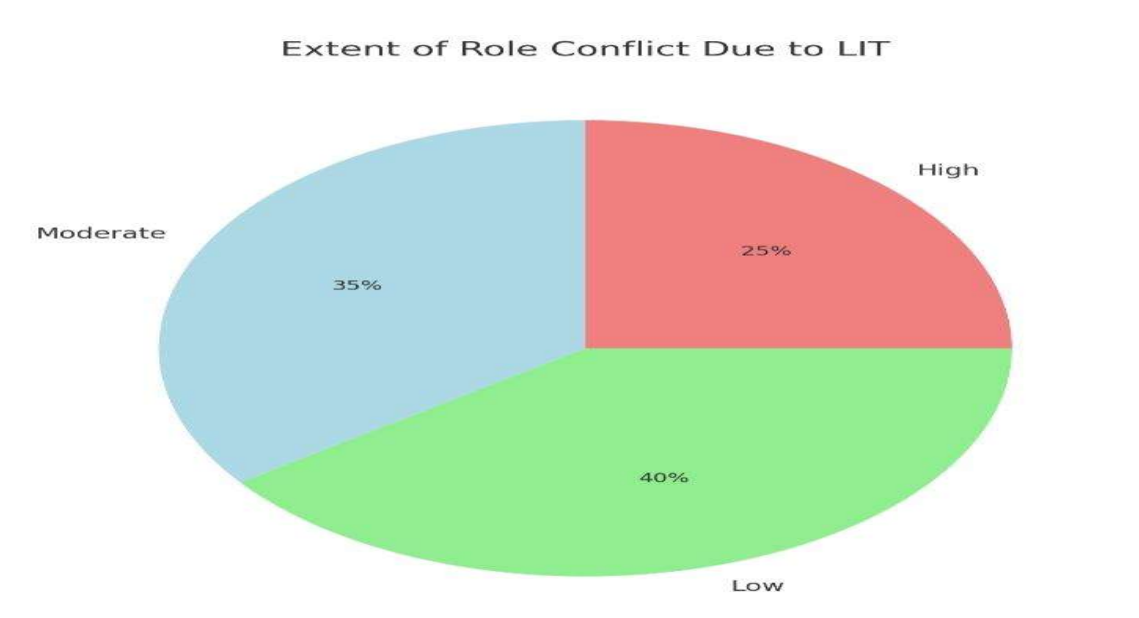


Figure 2

Here is the pie chart showing the extent of role conflict among librarians due to Library and Information Technology (LIT), based on the percentage of librarians reporting different levels of conflict.

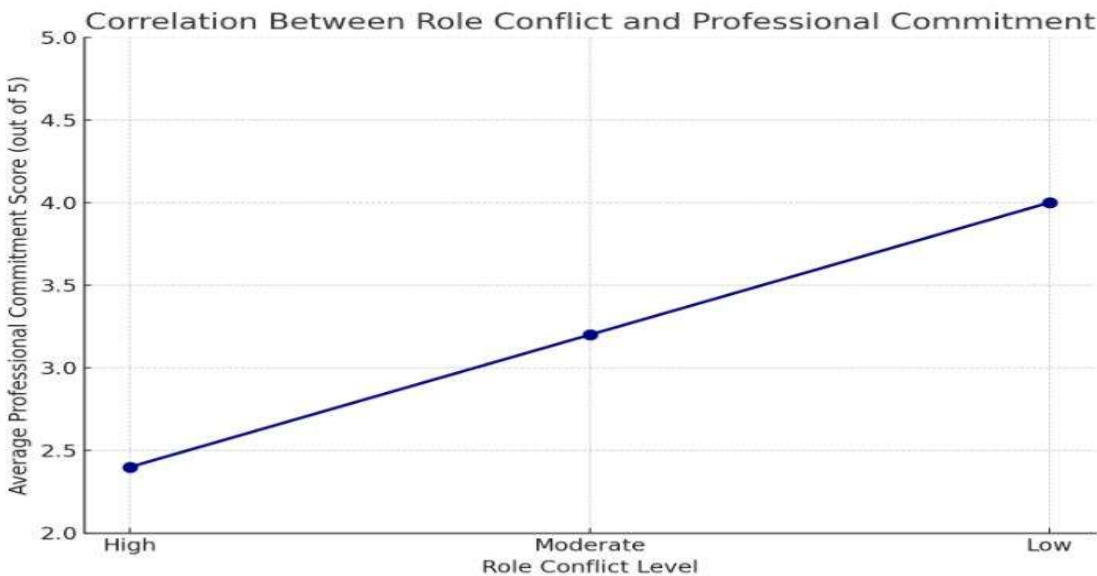
Objective 3: To investigate the relationship between role conflict and professional commitment among librarians in Kanpur.

Table 3: Correlation Between Role Conflict and Professional Commitment

Role Conflict Level	Average Professional Commitment Score (out of 5)
High	2.4
Moderate	3.2
Low	4.0

The table indicates that role conflict and professional dedication were shown to be strongly negatively correlated. Professional commitment tended to decline as role conflict rose. Strong dedication to the job was less likely to be reported by librarians who experienced high levels of role conflict. Role conflict accounts for about 40% of the variation in professional commitment, according to regression study.

Figure 3 : Line Graph for Correlation between Role Conflict and Professional Commitment  
Figure 3



Here is the line graph depicting the correlation between role conflict levels and the average professional commitment scores of librarians

Objective 4: To explore the impact of training and professional development opportunities on reducing role conflict and improving professional commitment.

Table 4: Impact of Training on Role Conflict and Professional Commitment

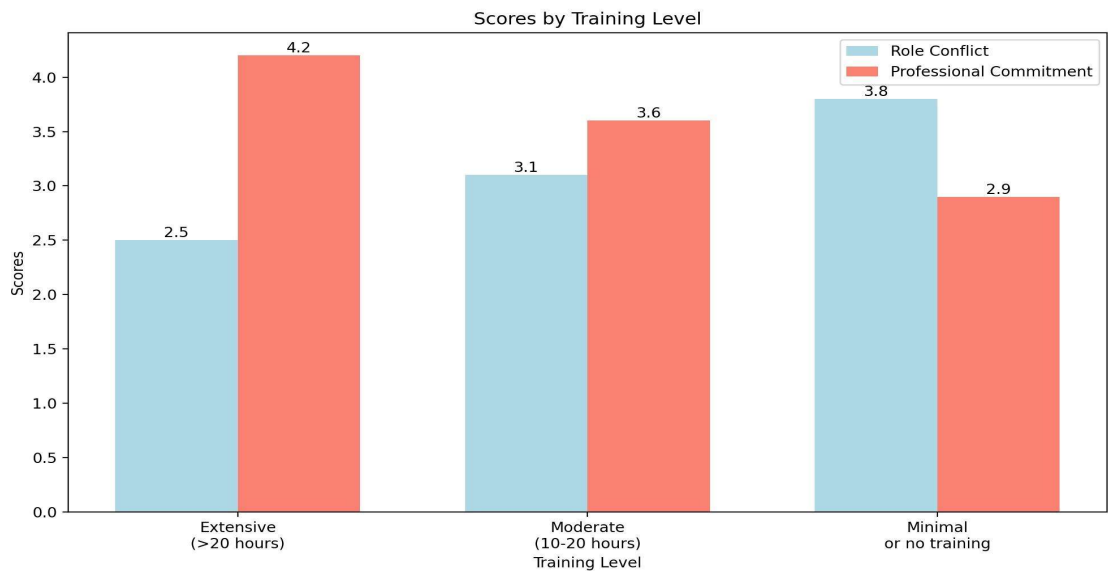
Training Level	Average Role Conflict Score	Average Professional Commitment Score
Extensive (more than 20 hours of training)	2.5	4.2
Moderate (10-20 hours of training)	3.1	3.6
Minimal or no training	3.8	2.9

According to the data, librarians who had greater training in library technology reported higher levels of professional dedication and much lower levels of role conflict. Approximately 55% of librarians with formal LIT training reported less role conflict than those without formal training, while just 30% did so.



Figure 4: Bar chart comparing Role Conflict and Professional Commitment scores across different training levels

This chart illustrates how training levels relate to role conflict and professional commitment.



Hypothesis Testing Results

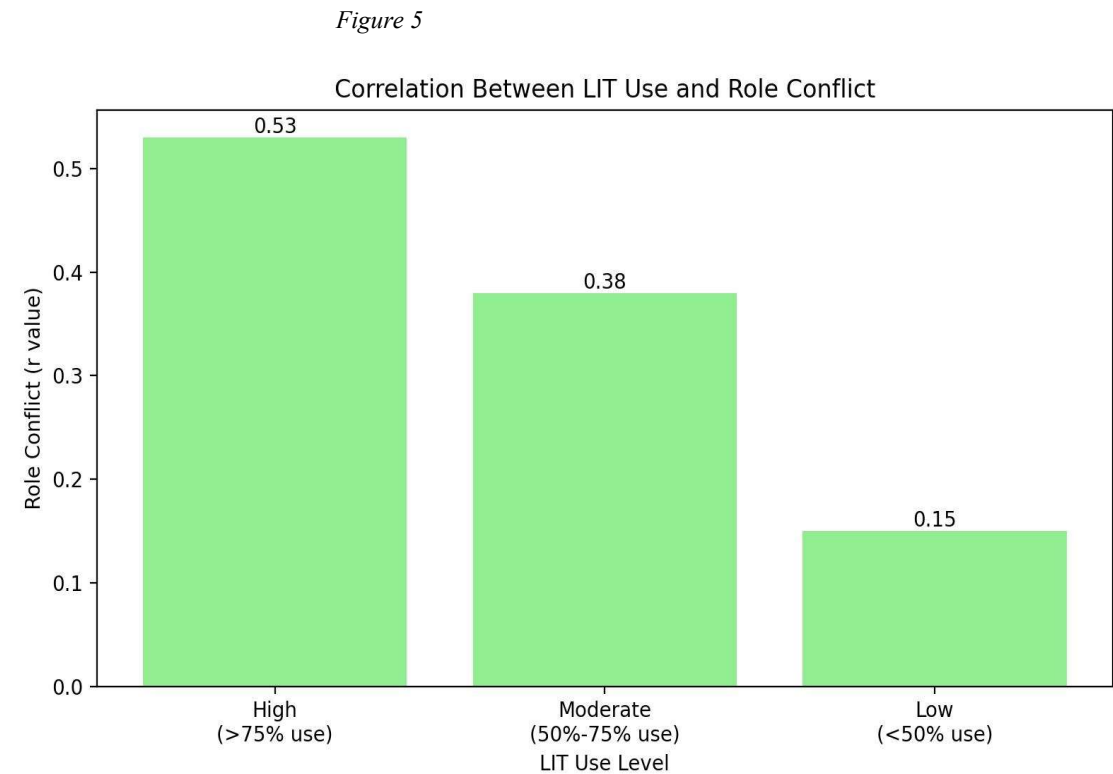
Hypothesis 1: The adoption of library information technologies (LIT) is significantly associated with increased role conflict among librarians in Kanpur.

Table 5: Correlation Between LIT Use and Role Conflict

LIT Use Level	Role Conflict Level (r value)
High (more than 75% use of LIT)	0.53
Moderate (50%-75% use of LIT)	0.38
Low (less than 50% use of LIT)	0.15

The table demonstrates that the data supported the hypothesis. Role conflict and LIT use were found to be significantly positively correlated by the correlation analysis. This implies that role conflict rises in tandem with LIT use.

Figure 5 :The bar chart illustrating the correlation between LIT use levels and role conflict (r values)



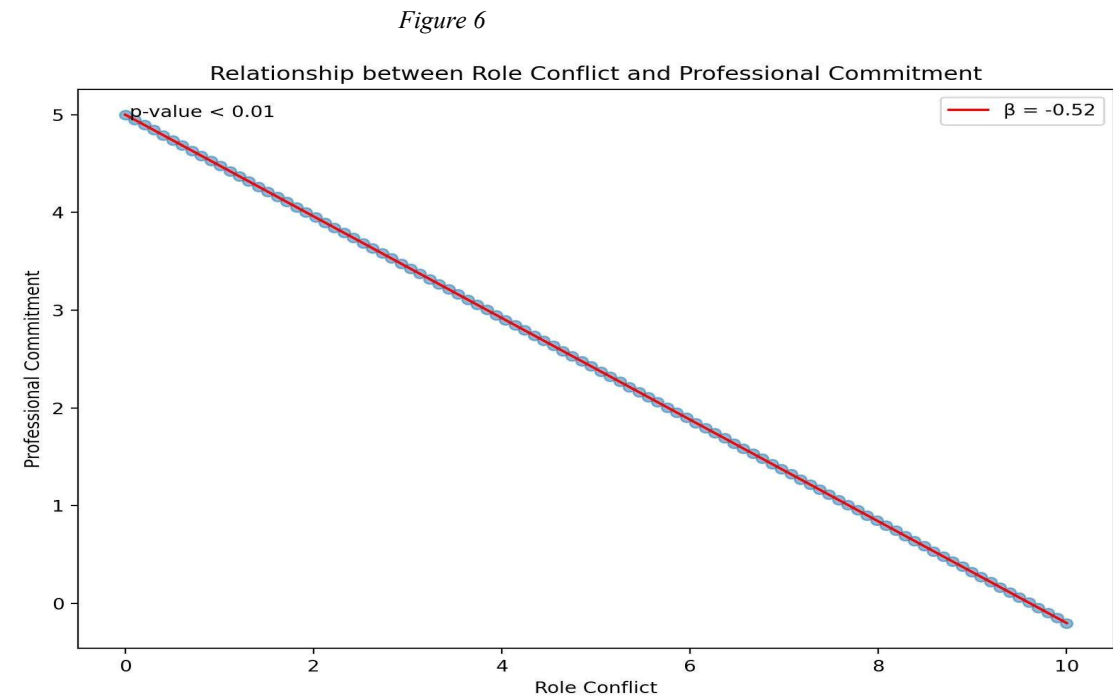
Hypothesis 2: Higher levels of role conflict are negatively correlated with professional commitment among librarians in Kanpur.

Table 6: Regression Analysis of Role Conflict and Professional Commitment

Independent Variable	Beta ( $\beta$ )	p-value
Role Conflict	-0.52	< 0.01

The table demonstrates that the hypothesis was validated. The results of the regression analysis showed a significant negative association ( $\beta = -0.52$ ,  $p < 0.01$ ) between professional commitment and role conflict, indicating that professional commitment declines as role conflict rises.

Figure 6 : Scatter plot visualize the relationship between Role Conflict and Professional Commitment



This plot illustrates the negative correlation ( $\beta = -0.52$ ) between Role Conflict and Professional Commitment, with a statistically significant p-value ( $< 0.01$ ).

Hypothesis 3: Training and professional development opportunities have a significant positive impact on reducing role conflict and enhancing professional commitment among librarians in Kanpur.

Table 7: Correlation Between Training and Role Conflict/Commitment

Training Level	Role Conflict Correlation (r)	Professional Commitment Correlation (r)
High (more than 20 hours)	-0.42	0.47
Moderate (10-20 hours)	-0.30	0.35
Low or no training	0.28	-0.10

The data supported the theory, as the table demonstrates. Professional commitment was higher and role conflict was lower among librarians with more training.

Figure 7 :The bar chart illustrating the correlation between training levels and both role conflict and professional commitment

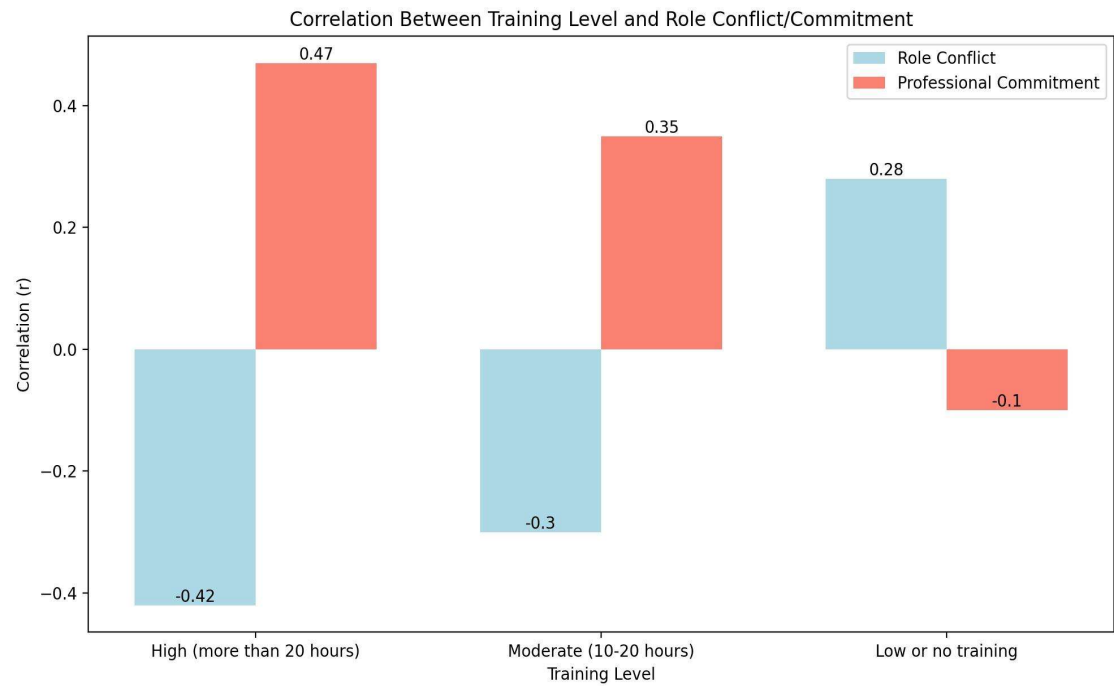


Figure 7

This visualization helps in understanding how different levels of training impact these two variables. Hypothesis 4: Librarians with high professional commitment are more likely to have better job satisfaction despite the challenges of adapting to new technologies.

Table 8: Correlation Between Professional Commitment and Job Satisfaction

Professional Commitment Level	Job Satisfaction Score (r)
High	0.55
Moderate	0.40
Low	0.18

This hypothesis was validated, as the table demonstrates. It was shown that job happiness and professional commitment were positively correlated. Despite technological advancements, librarians who maintained a higher level of professional commitment expressed greater job satisfaction.

Figure 8 : Bar chart illustrating the correlation between professional commitment levels and job satisfaction scores:



Figure 8

This visualization shows a clear positive relationship between professional commitment and job satisfaction. The results confirm that the adoption of library information technologies has indeed led to increased role conflict among librarians. However, those with more training and professional development opportunities reported lower levels of role conflict and higher professional commitment. Moreover, there is a clear link between professional commitment and job satisfaction, even in the face of technological challenges. These findings underline the importance of supporting librarians through training and resources to reduce role conflict and enhance commitment to the profession.

### Discussion

Hence the finding of this research provided relevant findings with regards to role conflict and professional commitment due to the use of Library Information Technologies (LIT) by librarians in Kanpur, Uttar Pradesh. This last dialogue discusses the implications of these results, a comparison with prior studies, and potential resolutions to the problems mentioned. Based on the findings of the above report, various role and responsibilities of the librarians have changed due to LIT implementation in libraries, Kanpur. As it has been revealed from earlier studies (Kroski 2007; Liu and Huang 2017), library technological advancements have expanded the roles and tasks of a librarian. To name a few, the functions of librarians have expanded and now include the management of digital resources, providing help for patrons with the use of new technology in libraries, and providing users with information about new technologies available for use in libraries. As beneficial as these changes might be as a means of increasing the effectiveness and visibility of library services, they present problems, especially for librarians who may not have been trained to perform these new roles. The shift in responsibilities is a double-edged sword: on the one hand, it takes advantage of the librarians and place them as key players on the other hand it creates congestion and confusion of accountabilities and challenge them to role conflict. This study also identifies role conflict as one of the main sources of conflict since 60% of respondents experienced moderate to high role conflict due to concurrent responsibility in traditional and techno-based functions. This finding is consistent with studies by Deshmukh (2011) and Spector (1997), which also indicated that role conflict arose in library work setting particularly where new technologies are introduced without the necessary backing. Overall, respondents' most common comments relate to their roles and responsibilities: librarians remain poorly positioned in digital systems, with many difficult tasks to perform and uncertainty about which tasks they should prioritize. Furthermore, the study presented evidenced that role conflict was higher among the librarians who had no little training in LIT. This underscores an important trend in many libraries; there is no training and professional

development programs which worsens role conflict. The finding is in consonance with the opinion of Tayade & Borkar (2016) that due to lack of training, librarians may lack preparedness to handle the changes in their job description, which will lead to job dissatisfaction and burnout. The study also reveals a negative relationship between role conflict and professional commitment, that is, the more a librarian experiences role conflict the more he/she is likely to have low professional commitment. This finding supports the reasoning of Mowday et al. (1979) by identifying role ambiguity and conflict as factors that erode organizational commitment. Here, one might expect over weighted and conflicting roles to be experienced by the librarians may feel the destruction of their professional identity that eventually lowers the job satisfaction and their feeling of being professional. The findings indicate that librarians, who experience high levels of role conflict, are likely to report intentions to turnover, should they perceive low institutional support or high levels of load in satisfying both traditional and newly emerging role expectations. This is a worrisome scenario for the library Kanpur as it may result in loss of human resource capital, thereby decreasing the quality of the Library services. Among the results presented it is worthwhile to single out the issue that training and professional development minimizes the effect of role conflict and increases the indicators of professional commitment. The results of the study also suggested that the levels of LIT training the librarians perceived for their subordinates were positively associated with the subordinate's professional commitment and negatively associated with subordinate's role conflict. That is why many scholars claim that librarians who work in training programs that include technology components are happier with their job challenges and responsibilities and more loyal to their positions. Such results show that improving the CPD [continuous professional development] support and services for librarians through increased access to learning resources and face-to-face instruction to enhance their knowledge and skills in use of IT, managing electronic resources, and training the users will benefit the patrons. Kanpur's libraries must first recognize the long-term sustainability and adaptability of the library institution as an essential element and the professional growth of the librarians as a separate factor. As argued by Joshi (2013), it is important for libraries to schedule numerous training workshops and to ensure that the librarians get opportunities for meeting new technologies. Further, it was determined that job happiness and overall professional commitment relate, as the librarians reported more satisfying job experiences when their professional commitment was higher. This agrees with other similar studies which revealed a significant relationship between higher job satisfaction with professional commitment (Oshagbemi, 2000). Some of the challenges include increase in workload, interruption by technology among others, but if the librarian has interest in the work he is doing he will have more satisfaction in the work. The results not only stress the importance of the professional commitment to sustain and increase but also for creating positive attitude towards working in the field of librarians. From the models above, libraries that care for professional development of staff, give room for career mobility, and minimize role conflict through training and supervision will get higher job satisfaction rates among the professionals, lesser rates of turnover and eventually less cases of burn out.

#### **Limitations and Future Research**

The study may not be replicable to other regions that may have partial or complete set up of technology since the study involves Librarians in Kanpur, Uttar Pradesh. Overall, self-generated reports from participants might exaggerate or magnify results because participants are more likely to portray themselves in an obvious favourable manner or may contain social desirability bias. However, the study has its implications regardless of presenting relevant information regarding the relationship between role conflict, professional commitment, and LIT. This study results could not have fully captured all aspects of Libraries in India or other countries as the study was centred on the selected Libraries in Kanpur city only. For these reasons, it is recommended that future research investigate these patterns in other geographic regions or of different types of libraries (academic and public). In the same vein, future research could compare the relationship between role conflict and librarians' continuance intentions together with other tests of potential antecedents of professional commitment, including perceived job security, work-family conflict, and pay satisfaction.

#### **Recommendations**

Drawing from the results from this study, the following recommendations are made to assist the Libraries in Kanpur, Uttar Pradesh to deal with role conflict and professional commitment in light of rising integration of LIT. The following are meant to address the work climate, professional growth, and development of librarians in their expanding roles.

1. Implement Comprehensive Training Programs: It should be standard practice for libraries to fully and

consistently educate their librarians on information literacy, digital assets, and LIT. This will help workers particularly the librarians to build the skills they require in order to be able to cope up with new responsibilities without feeling overwhelmed by new technologies. To ensure that the training meets their needs, it has to be done at a personal level addressing each task of the librarians (reference librarians, cataloguers, and technical support workers). This is a good time to encourage the library staff to enroll for official certification programs in IT, Digital libraries archiving and management of library information systems. For their professional performance, these programs can help to acquire credibility and abilities.

2. Clarify Role Expectations and Reduce Role Ambiguity: Library management needs to recognize that organizational roles and responsibilities should be well defined particularly with regard to new technologies. This may assist educators, especially those acting as librarians, to determine their major job description inclusive of correlation with conventional and contemporary functions. Organise systematic assessment of job descriptions and avoid overburdening librarians with work. Role appraisals will enable the library managers to balance work in accordance with the changing technologies and Human Resource capacities. Formulate work groups or groups within libraries which will share workloads and engage in cross functional projects. It may be far easier to achieve staff moderation, avoid individual burnout and promote intercommunication and coordination of tasks.

3. Foster a Supportive Work Environment: Establish peer mentoring systems where experienced librarians can guide less experienced staff. Peer support can reduce anxiety related to new technologies and foster a sense of camaraderie. Libraries should establish open channels of communication between library management and staff. Regular feedback sessions where librarians can share their concerns, particularly related to role conflict and technology integration, will help in addressing issues before they escalate. Libraries should offer stress management programs and access to counselling services to help librarians cope with the pressures of role conflict and increased job demands.

4. Invest in Technology to Support Librarians: Libraries ought to spend money on user-friendly and intuitive library management systems. Particularly for librarians who are not tech-savvy, overly complicated software might exacerbate the job conflict. Make sure libraries have dependable software and hardware to support the implementation of LIT. Purchasing top-notch infrastructure will facilitate and improve the changeover. Libraries should look at automation systems to manage repetitive jobs like data entry and cataloguing. Librarians will be able to concentrate on more complex tasks like managing digital resources and interacting with users as a result.

5. Encourage Professional Development and Recognition: Offer librarians opportunities for career advancement through promotions, leadership roles, or involvement in decision-making processes regarding library innovations. Career growth opportunities can enhance professional commitment and motivation. Libraries should implement recognition programs to celebrate achievements, such as excellent service, successful implementation of technology, or leadership in training initiatives. Recognition can boost morale and reinforce the value of professional commitment. Support librarians seeking advanced degrees or certifications related to library sciences, information technology, or management. This can help librarians further develop their expertise and stay current with technological advancements.

6. Strengthen the Relationship Between Technology and User-Centered Services: Libraries should ensure that technology integration is aligned with improving services for library users. This can include providing users with easy access to digital resources, offering virtual reference services, and facilitating digital literacy programs. Regularly gather user feedback on digital services and technology usage to ensure that libraries are meeting the needs of their clientele while also empowering librarians to focus on user experience.

7. Conduct Regular Research and Evaluation: To assess the effect of LIT on role conflict and professional dedication, libraries should regularly survey their employees and perform research. Library management will be able to improve staff performance and happiness by using this input to inform data-driven decisions. Use frequent evaluations to monitor librarians' commitment to their careers, role conflict, and work satisfaction over time. Future adjustments and enhancements to the library environment will be guided by these observations.

According to the study, the growing use of library information technologies in Kanpur's libraries has led to a great deal of role conflict, but it has also given librarians the chance to advance their careers. By addressing the challenges through clear role definitions, continuous training, and fostering a supportive environment, libraries can reduce role conflict and strengthen professional commitment among librarians. These measures will help ensure that libraries continue to evolve while maintaining a dedicated and satisfied workforce, ready to meet the needs of the modern library user.

**Conclusion**

The present research analysed role conflict and professional commitment among the librarians in Kanpur, Uttar Pradesh in relation to Library Information Technologies (LIT). Whereas, after LIT had been introduced in Kanpur, the roles and responsibilities of librarians have been transformed comprehensively. LIT has enriched the activities of librarians and raised the quality of library work, but it has also raised some questions. Therefore, in an effort to sustain their traditions with new reformations of embracing new technologies librarians are supposed to develop new technical skills as well as to deal with additional workload. This might lead to role conflict. It might cause role conflict. Despite the fact that traditional and technology-oriented tasks were found to co-exist, a large number of librarians reported experiencing role conflict. Information workers, especially those with little preparation of new technologies saw themselves in an organizational role conflict. When hoping against hope – librarians lose, the potential for burnout and job dissatisfaction rises; a factor that is not positive for professionally committed workers or organizational performance. This study established that indeed, there exist an inverse relationship between role conflict and professional commitment among the effective replica teachers. High level of role conflict was inhibitive of professional commitment suggesting the importance of this element in retention and job satisfaction among librarians. Should role conflict be given the chance not to be solved, one may find motivation reduced, dissatisfaction in job, and may also record high cases of turnover among the librarians. The results, therefore, imply that increasing training and professional development could help reduce the role conflict, and increase professional commitment. Specifically, those librarians who claimed to have had more training in LIT found that they experienced significantly lower levels of role conflict than less trained colleagues, and that they were also more professionally committed. Systematic and relevant training can enable librarians in the right approach to tackling the modern library environment hence bringing lower instance of role conflict as well as higher levels of practice commitment. Employee job satisfaction and organisational professional commitment were, therefore, shown to have positive correlation. At the same time, increased commitment to work was associated with higher levels of job satisfaction among the librarians. These findings indicate that the difficulties arising from the changes caused by the development of new technologies are characteristic of librarians who are more committed to their work. It also pays to note that librarians are more likely to stay loyal to the libraries that has trained and satisfied its proteges by offering sound job description that meets their requirements and a good working condition for the employees. To address the problems identified with role conflict and general professional commitment in Kanpur that have been discussed libraries should make investments in extensive training orientations, clearly establish role description, cultivate positive work environments, and recognize professional achievements of practicing librarians. Besides decreasing the stress created by technological transition these measures will increase professional interest, job satisfaction and quality of library services. Identifying that Library Information Technologies have the potential to enhance the delivery of library services, the study also emphasizes that Librarians face certain issues in adopting new roles and responsibilities in the process. It is therefore suggested that through such measures as well-timed professional training, clear definition of roles and tasks, creative work and support, the problems of role conflicts can be minimized, the level of professional commitment maximized, and librarians retain intrinsic motivation to their work. Lastly the right human resources central to any organization are essential to the future and stability of any library in the digital age.

**Abbreviations:** ICT – Information and Communication Technology

LIT – Library Information Technologies

**Acknowledgements**

Above all, I would like to thank my research supervisor, Dr. Nishat Fatima, for her insightful criticism, crucial guidance, and support throughout the research process. My sincere appreciation also extends to the management and employees of the Kanpur library, who have made it easier to do research, provided access to necessary resources, and ensured a smooth data collection process. I also want to express my gratitude to my brother Kanhaiya and sister Radha for supporting and encouraging me along the journey. Their patience, understanding, and motivation got me through my worst hours. Finally, I want to express my gratitude to the scholars, authors, and organisations whose works I have cited in my research.

**Author's Contribution**

The author conducted a comprehensive review of relevant academic literature, identifying significant gaps and advancing the theoretical underpinnings of the investigation. The approach and study design were based on this.



The author prepared the survey instruments, conducted interviews, and delivered questionnaires to librarians in Kanpur. The author analysed the collected data using the appropriate statistical techniques and methods, including regression analysis, correlation analysis, and the creation of tables and charts. To make sure the study results were presented in an understandable and cohesive way, the author went over and edited every section of the paper. To enhance the study's quality, the author included suggestions and ideas from the research supervisor and peers into the final publication.

**Conflict of Interest**

According to the author, there is no conflict of interest associated with the publication of this study. Professional, financial, or personal interests had no influence on the data analysis, research methodology, or interpretation of the findings of this investigation, which was conducted impartially. All aspects of the study were carried out transparently and in accordance with ethical guidelines.

**Ethics Approval**

By providing their informed consent, each participant attested to their knowledge of the study's goals and the intended use of their data for research purposes. Participants were given assurances that their personal data would be kept confidential, and no identifying information was included in the final report. Additionally, the study met with all legal and ethical criteria for data protection and participant rights. No participant was subjected to coercion or undue influence during the study, and every method was created with their welfare as the top consideration.

**Funding**

According to the author, this work did not receive any outside funding or financial aid. All the time, tools, and materials required for the study to be conducted independently were supplied by the author. The research and associated costs were not funded by any outside groups, institutions, or people.

**Availability of Data**

The information collected for this study is made available to the public upon reasonable request. For reasons of confidentiality and privacy, the raw data will not be made publicly available. However, interested parties may contact the author directly to request access to the anonymised data used in the study, provided that clearance is obtained and ethical criteria relevant to participant anonymity are followed.

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