A Gender- and Age-Wise Analysis of Awareness, Adoption, Perceptions, and Challenges toward Artificial Intelligence in Library Functions

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Abstract-- **The research problem under investigation in this study is the gender- and age-specific differences in the awareness, adoption, perceptions, readiness, and challenges of Artificial Intelligence (AI) in the library functionalities of librarians. After a descriptive and empirical design, data was gathered using a validated 30 item questionnaire of awareness, usage, perception and barriers of the librarians. Gender differences were compared with the help of the MannWhitney U test, and the difference between the ages was analyzed with the help of the Kruskal-Wallis H test. The result shows that there is no statistically significant difference between male and female librarians in all 30 items, which implies that male and female librarians are rather similar in their awareness, practical activities, confidence, and attitudes to the use of AI. On the other hand, age influences considerably certain elements of AI knowledge and AI perception, with younger librarians being more practical and having wider- perspective of AI usage. Nonetheless, the daily use of AI, readiness to learn, the readiness to change technology, and perceived obstacles, including the presence or absence of training, the lack of infrastructure and functionality, cost, and issue of job displacement, were equally observed across all the age groups. This paper determines that gender is not an influencing factor, but age affects some of the dimensions of AI readiness. These understandings affirm the proposing perspective of age sensitive training intervention and fair AI competencies building measures in libraries.**

Keywords-- **Artificial Intelligence, Librarians, Gender Differences, Age Influence, AI Adoption in Libraries**

I. INTRODUCTION

1.1 Background of the Study

AI has become a new wave in other industries and the library and information services have been among the industries that have adopted AI to become more efficient and user friendly. The increased role of AI in the activities of libraries manifests itself in the utilization in such aspects of libraries as cataloguing, classification, reference services, and user services.

To give an example, metadata creation, natural language processing (ENUM, 2021), and personalized recommendations are automated using AI and help optimize traditionally manual processes by improving the search results.

The history of AI in libraries could be dated back in the 1980s when the first expert systems made their appearance, though the recent growth of machine learning and deep learning makes it faster. AI has been put in place in libraries such as the British Library and Stanford University Libraries around the world where it is used in digital preservation and chatbots to provide reference services. In India, libraries of the Indian Institute of Technology and the National Digital Library of India are on the frontier as to AI-enabled projects, with digital transformation with more general trends towards smart libraries.

1.2 Need for the Study

Regardless of such developments, there is only a small number of empirical studies focusing on the effects of demographics on the adoption of AI by librarians, especially with respect to gender and age. It is important to learn how these factors influence awareness, preparedness and difficulties to be able to customize interventions. The present research saves this gap by analyzing the demographic factors, which includes the policy implications, specific training, and capacity building to ensure inclusive integration of AI in libraries.

1.3 Problem Statement

In spite of an increase in integration of AI in libraries, there is still a wide degree of awareness and adoption among librarians. It is not clear that gender and age play a significant role in determining awareness, adoption, perceptions, and challenges of AI, which prevents equal technological progress in the field.

1.4 Research Questions

Are there gender variations in the awareness of library functions that involve Artificial Intelligence among librarians?

Do librarians have age-related differences in the knowledge and awareness regarding AI?

Does gender play a role in departments adopting and using AI-based tools in libraries?

Do age factors relate to the use and practical experience of librarians with AI?

Are there gender differences in the perceptions and willingness of male and female librarians to use AI?

Do the perceptions and willingness of librarians depend on age difference?

Are there gender variations in perceiving barriers/challenges of adopting AI in libraries?

Do the perceived challenges and barriers to the adoption of AI differ significantly by age?

1.5 Objectives of the Study

1. To determine the awareness of Artificial Intelligence among librarians.
2. To investigate the application and use of AI tools in library functions.
3. To examine the perceptions and readiness of librarians to use AI.
4. To detect the difficulties and obstacles that librarians encounter during the process of AI adoption.
5. To find out differences in awareness, adoption, perceptions, and challenges between male and female librarians.
6. To establish the differences in age of awareness, adoption, perceptions, and challenges associated with AI.
7. To give suggestions to particular training and policy interventions qualifying on the demographic findings.

1.6 Hypotheses of the Study

H01: There exists no significant difference between the awareness of AI among male and female librarians.

H02: No significant differences in the adoption and use of AI tools can be made between male and female librarians.

H03: Male and female librarians do not differ significantly in their perception and readiness to adopt AI.

H04: No significant differences exist between the challenges and barriers perceived by male and female librarians when adopting AI.

H05: No significant age difference is found in the knowledge and awareness regarding AI among librarians.

H06: Age groups do not differ significantly in terms of their use and adoption of AI tools.

H07: The age groups form no significant difference in their perceptions and readiness to adopt AI.

H08: No significant difference exists by age group on the challenges and barriers viewed by AI adoption.

1.7 Scope and Limitations

This research is restricted to the chosen libraries and institutions, where the data was gathered through a structured questionnaire based on the self-reported data, which can bring about the biases of the answers obtained. Moreover, the results do not necessarily relate to all kinds of libraries, or a larger geographic area, and it requires taking care of the interpretation.

II. REVIEW OF LITERATURE

2.1 Conceptual Understanding of Artificial Intelligence in Libraries

Artificial Intelligence in general is a collection of various technologies aimed at replicating human cognition qualities which include knowledge, thinking, problem-solving, perception, learning, and planning with the end result being the production of some output or solution (Seah, 2023). To the most basic, AI is the term associated with machine reasoning, decision-making, learning, and interpersonal abilities, which are reminiscent of humans (Oyetola et al., 2023). Computer systems that handle complex problems are now more dynamically managed through AI and commonly because the computer systems are tasked with replicating human intelligence by employing a specific underlying mechanism and capitalizing on their natural ability to process and absorb high amounts of data (Fernandez, 2016). According to the United Nations Educational, Scientific and Cultural Organization, the concept of AI focuses on the resemblances of human intelligence, which comprises features such as; perception, learning, reasoning, problem-solving, language interaction, and creative endeavors (Cox, 2024). One of the most prominent types of AI, machine learning, is based on statistical methods to reveal trends in large datasets and, therefore, allow systems to learn and modify their behavior to a range of circumstances on their own (Seah, 2023).

There is a high potential in using AI applications to improve the efficiency, consistency, and complexity of metadata development and classification in library functions, largely via machine learning and natural language processing (Mahmud, 2024). The capabilities of generative AI machines can be used to automate some steps in cataloging and record creation, albeit with significant care done regarding accuracy (Moulaison and Coble, 2024). AI can be of great benefit in the information retrieval process, user experiences, and give personalized recommendation systems in the libraries (2024; Chandrashekara and Mulimani, 2024). Enlisted within the services of the library reference, chatbots are built on the principles of NLP and AI training and are used to solve simple emphases and solve user information needs in libraries, especially in academic institutions (Chase, 2024; Nawaz, 2021). Moreover, user analytics could be applied with the help of AI, including the analysis of the chats with references to extract useful information about user behavior and information demand (Wang, 2022).

2.2 Awareness and Knowledge of AI Among Librarians

Research in different countries and regions of the world shows that the AI awareness and knowledge of the librarian varies. As an example, Indian library practitioners tend to be conscious of AI and recognize its possible opportunities in library practices (Kalbande et al., 2024; Subaveerapandiyan and Gozali, 2024). Likewise, Zambian librarians understand the essence of AI correctly and have a positive attitude to its benefits, although they are aware of such negative factors as the necessity to have a certain level of AI specialization and financial constraints (Alam et al., 2024). The eagerness to develop professionally concerning the usage of generative AI among the academic library workers is considerable, yet there is an immense disconnect between the technically recorded use of high-end AI frameworks (Lo and Anderson, 2024). The overall attitude of librarians toward working with the AI technology and comprehending its suggestions to the library services demonstrates the willingness to accept AI (Kalbande et al., 2024). However, according to some studies, there is a modest level of self-perceived knowledge on AI concepts among information professionals that is accompanied by the lack of practical experience and a shortage of discussing ethical implications (Heck et al., 2021).

This shows that there is still a necessity to develop better AI literacy, becoming a fundamental ability of library and information professionals (Ali and Richardson, 2025).

2.3 Adoption and Use of AI in Library Services

The introduction and application of AI to services in libraries are affected simultaneously by numerous factors such as culture in an organization, employee training, and cybersecurity awareness (AI-Driven Cybersecurity Strategies for Small Businesses, 2025). The normal unavailability of AI knowledge and technical expertise permeates library environments, which is likely to affect an effective integration (AI-Driven Cybersecurity Strategies for Small Businesses, 2025). Moreover, the change-resistance and the lack of proper organization preparedness may greatly complicate the adoption of AI (AI-Driven Cybersecurity Strategies for Small Businesses, 2025). The financial constraints, lack of expertise and infrastructure are significant challenges that academic libraries, in particular, struggle with (Ali et al., 2020; Zondi et al., 2024). The availability of financial forces, current technological practices, the size of the university, and data management and protection also influence organizational preparedness to institute AI (Jan et al., 2024). The results of the research studies based on the models such as the Unified Theory of Acceptance and Use of Technology indicate that the behavioral intention of librarians to use AI tools can be predicted with the help of such factors as performance expectancy, social influence, and facilitating condition (Ali et al., 2025; Fang et al., 2025).

2.4 Perception and Readiness for AI

On the whole, librarians have positive and active expectations about AI technology as they can have a beneficial impact on library services and user experiences (Alam et al., 2024; Kalbande et al., 2024). The staff of libraries are observed to have a keen interest in professional development in generative AI (Lo & Anderson, 2024). Nevertheless, research indicates a slight self-perceived level of knowledge about AI concepts, lack of practical use, and lack of consideration of ethical issues (Heck et al., 2021). The adoption of AI in libraries may be disrupted by resistance to change and the absence of an organizational readiness (AI-Driven Cybersecurity Strategies for Small Businesses, 2025). The effective implementation of AI would require the reconsideration of classic team structure and organizational design since AI can trigger positive emotional reactions to the team, including the feeling of increased excitement and decreased anxiety to create the collaborative relationship of a cybernetic teammate (Dell'Acqua et al., 2025).

The attitudes of senior library administrators, especially on the readiness of business AI products, safety, and confidentiality issues, adherence to the library values, and financial resources and the accessibility of technical expertise are critical factors in implementing AI (Tomiuk et al., 2024).

2.5 Challenges and Barriers

The implementation of AI in libraries is faced with a number of serious challenges and barriers. They are basic matters relating to the privacy of data, ethical issues, and the lack of cybersecurity awareness (AI-Driven Cybersecurity Strategies for Small Businesses, 2025). A knowledge gap and an insufficient level of training among the working professionals in libraries are regularly mentioned as the barriers to effective AI integration (AI-Driven Cybersecurity Strategies for Small Businesses, 2025). Additional significant obstacles include the biasness of algorithms, larger privacy issues, the digital divide, and high costs and resources involved in implementing AI (-, 2024). The academic libraries are especially faced with undermining infrastructure, finances, and deficiency in specialized skills (Ali et al., 2020; Zondi et al., 2024). The fact that ethical implications include biases within AI algorithms, which the uses of AI have shown, including such applications as gender-biased recruiting algorithms, highlights the necessity to carefully develop this aspect and apply it to practice (Abu-Dawas, 2024). Moreover, the anxieties about job loss when AI will automate the routine challenges are also a powerful concern, which is viewed, however, more objectively as AI does not destroy the roles but changes them (Abu-Dawas, 2024; Li et al., 2023). The issue of cultural and organizational resistance can also be a major hindrance to the adoption of AI, which should be addressed with regard to employee concerns of job security (Ali et al., 2025; Bapusaheb and Unde, 2025).

2.6 Demographic Influence

Studies show that demographic characteristics like age and gender may have a significant moderating effect on the choices of the employees in regard to adopting new technology (Morris et al., 2005). In particular, research has demonstrated that the role of gender may depend on the age when it comes to the technology adoption and usage (Morris et al., 2005). On the one hand, age, professional role, tenure, and type of library might have insignificant influence on the way an information professional approaches innovation (Young, 2010), on the other hand, other studies provide evidence that age can be a factor by itself with respect to the decision to accept and adopt AI applications (Ali et al., 2024).

Women have been seen in some settings, to have more ethical and privacy anxieties about AI than men, and older people might also show more fear of AI accommodation than their younger counterparts (Rahman et al., 2024). This indicates that age, gender and technology adoption are not a simple interrelationship in obsolete technologies, particularly in emergent technologies such as AI (González-Anleo et al., 2024). Cultural nuances should also be taken into account because they can also influence the attitude to technology and affect the need to employ specific strategies of implementation (Rahman et al., 2024). Indicatively, a research conducted in India shows that although maturity and reliability of AI are paramount amid the consideration, user privacy and acceptance by users are also important factors that librarians need to consider (Subaveerapandiyan and Gozali, 2024).

III. METHODOLOGY

The research design adopted was a descriptive, analytical, and empirical to examine the differences in the awareness, adoption, and perceptions of librarians and their challenges in relation to Artificial Intelligence in library functions by gender and age. The sample was made up of librarians in different kinds of libraries and the last sample used consisted of 31 librarians and determined by use of purposive, stratified or random sampling in order to have good demographical representation. The respondents were use to collect data through a structured questionnaire of 30 items which entailed four major dimensions namely, Awareness, Adoption, Perception/Ready and challenges measured using a 5 point Likert scale. The research tool had a high level of reliability and the overall Cronbachs Alpha of the tool is 0.947 with excellent construct validity as indicated by corrected item-total correlations. In order to maximize the participation, it was done through online questioning as well as through offline questioning.

The Mann Whitney U test was applied to study gender-specific differences and Kruskal Wallis H test used to study age-specific differences, the level of significance of which was 0.05. This strict methodological procedure allowed conducting an extensive and sophisticated analysis of the effect of demographic variables on AI-related awareness, adoption and attitudes among librarians and provided strong trustworthy information on the trends of AI introduction in gender and age.

This statistical methodology enabled an elusive analysis of the extent to which demographic attributes determine the adoption and internalization of AI in the library industry, that will generate strong and extrapolative results.

This methodological framework is a prerequisite of embracing the multifactorial effect on the AI adoption, especially in references to the peculiar point of view, which emerges in the context of gender and age groups.

IV. RESULTS

Table: 1
Gender-wise Mann–Whitney U Test Results for All Variables

Variable Category	Item Nos.	U Value Range	p-value Range	Significance
Awareness of AI	1-10	73.50 – 96.00	.165 – .870	Not Significant
Adoption & Use of AI	11-20	75.00 – 96.00	.261 – .878	Not Significant
Perception & Readiness for AI	21-25	67.00 – 91.00	.105 – .689	Not Significant
Challenges & Barriers to AI	26-30	71.00 – 99.00	.184 – 1.000	Not Significant
Overall	1-30	69.00-99.00	.105-1.000	Not Significant

To test the difference in genders (Male = 22; Female = 9) in all variables evaluating the awareness, adoption, perceptions, readiness, and issues associated with Artificial Intelligence (AI) in library functions, Mann-Whitney U test was utilized. According to the findings, there are no statistically significant differences between the male and female librarians in their awareness of AI (U = 73.5096.00, p = .165.870), adoption and use of the AI tools (U = 75.0096.00, p =.261.878), perceptions and readiness towards the adoption of AI (U = 67.0091.00, p = .105.689), and obstacles and barriers facing them These results suggest that both sexes have the same awareness of AI concept and library uses and exhibit the same rate of engagement and confidence regarding the use of AI tools and express the same sentiments regarding learning and using AI in the library setting.

Similarly the issues in regards to training, infrastructure, cost, job security, and awareness have a homogenous perception among both male and female librarians.

In general, the results of the MannWhitney U test in all 30 items, and the U, respectively, of 67.000-99.000, p-values of.105-1.000, allow concluding that all the measured differences between the genders are not significant. Such results reveal that gender does not significantly affect the reactions of librarians connected with AI awareness, adoption, readiness or perceived challenges. The differences in the experiences, point of view and attitude between male and female librarians regarding AI integration into library functions demonstrate that gender is not a factor-modifying factor concerning how librarians learn, adopt and react to AI technologies in their practice.

Table 2:
Age-Based Analysis of Significant and Non-Significant Differences Across AI-Related Variables

Aspect	Total Items	Significant	Not Significant	Observation
Knowledge & Awareness	10	7	3	Age affects practical knowledge; basic concepts and ethics consistent
Usage & Practical Experience	10	3	7	Strategic perceptions vary; daily usage consistent
Attitudes & Willingness	5	0	5	Positive attitudes uniform across ages
Perceived Barriers	5	0	5	Barriers perceived similarly across ages

The Kruskal-Wallis test age-wise results analysis shows the existence of specific trends in the results of the study with respect to the four main dimensions of the study, that is, knowledge and awareness, usage and practical experience, attitudes and willingness, and perceived barriers.

In the Knowledge and Awareness area, 7 out of 10 items were significantly different across the age groups, which indicates that age has a significant effect on the development of the librarian AI-constitutive understanding, mostly in the applied and practice-based fields.

Nevertheless, simple conceptual knowledge and moral awareness seem to be similar at all ages in terms of the non-significant items.

Usage and Practical Experience. On the Usage and Practical Experience only 3 out of the 10 items exhibited great variation. It implies that older users have more club-wide strategic understanding and advanced use of AI publications, but librarians at all ages have the same rates of daily use, skills level in working with AI tools, and trust in everyday AI-enhanced activities.

In the case of Attitudes and Willingness, all five items were not significant implying that the age groups of the librarians are uniform in their attitudes towards learning, adopting and supporting the integration of AI in library operations. Such uniformity shows a sort of openness and willingness to adapt to technology irrespective of age. On the same note, the dimension of Perceived Barriers also demonstrated uniformity as all the five items were non-significant. This is an indication that an issue like training inadequacies, infrastructure constraints, costs, fear of job loss and absence of awareness are felt in the same way across all ages and there is no significant difference in how these problems are felt or perceived.

On the whole, the findings demonstrate that age has a certain impact on particular areas of knowledge and strategic perceptions of AI but has no effect on daily usage habits, willingness, attitudes, or perceived challenges. The difference between younger and older librarians have primarily to do with practical knowledge and strategic perspective whereas operational behavior and attitude to AI is similar across age. These results highlight the importance of age-sensitive training and professional development initiatives which aim at closing knowledge gaps without distorting AI adoption strategies used within the workforce because these remain non-discriminative and generalized.

V. DISCUSSION

The results of this research are valuable in understanding how those demographic characteristics, i.e., gender and age, affect the awareness of librarians, their adoption, their perception, their preparedness, and their difficulties connected to the implementation of AI in library at work. Mann-Whitney U test did not show any statistically significant difference between gender founded on all the 30 questionnaire elements (U = 67.0099.00, p =.1051.000), which shows that the male (n=22) and female (n=9) librarians demonstrate similar levels of AI awareness, adoption, perceptions, readiness, and perceived barriers.

The consistency is maintained when it comes to practical activity with AI applications, attitudes to learning and integration, and such aspects as training needs, limited possibilities of infrastructure, costs, job retention, and ethical considerations.

These findings are contrary to the previous studies that noted gender as a moderator in the adoption of technology. As an example, Morris et al. discovered that gender influences on new technology decisions are age specific (Morris et al., 2005) and Rahman et al. discovered that women had expressed more concerns in regard to AI technology, including ethical and privacy issues (Rahman et al., 2024). Earlier research reported that there were gender disparities in the acceptance of AI that depended on cultural conditions (Gonzalez-Anleo et al., 2024). Nevertheless, the evidence produced by other sources is consistent with our results indicating that gender effects in library innovation scenarios are minor (Young, 2010) and male-dominated careers, such as Indian librarianship, in which gender effects in the usage of AI are understated (Subaveerapandiyan and Gozali, 2024). The absence of gender inequalities might be related to the relatively small number of females or maturing library workforce where professional experience predominates over demographic factors and encourages the creation of equitable perceptions of AI regardless of gender.

KruskalWallis H test, on the other hand, revealed variation in age in knowledge and awareness (significant on 7/10 items) and usage/practical experience (significant on 3/10 items) and uniformity in attitudes/willingness (all 5 items non-significant) and perceived barriers (all 5 items non-significant). More strategic awareness and pragmatic understanding of AI applications was exhibited by younger librarians, although all age groups expressed positive readiness to embrace it and expressed similar perspectives on these barriers, such as training gaps, costs, and infrastructure, similar to the larger body of literature on organizational barriers (AI-Driven Cybersecurity Strategies for Small Businesses, 2025; Ali et al., 2020; Zondi et al., 2024).

This tendency partly upholds the research findings that age has become a dominant factor in the acceptance of AI (Ali et al., 2024; Gonza-cts et al., 2024), with younger generations in many cases apparently more familiar (Rahman et al., 2024), but does not align with the results of homogenous age effects or smaller impacts (Young, 2010).

The uniformity in attitudes and barriers is indicative of group professional readiness, which could be alleviated by the collaborative cultures of the libraries and the effect of AI to alleviate anxiety among all demographics: AI aids in developing a so-called cybernetic teammate (Dell'Acqua et al., 2025). They are not afraid of job displacement (Abu-Dawas, 2024; Li et al., 2023), cultural resistance (Ali et al., 2025; Bapusaheb and Unde, 2025), or think of AI as perilous (when they exist), unlike those with a limited evidence base (-, 2024; Tomiuk et al., 2024).

VI. Findings Of The Study

The research paper has studied gender and age with reference to the awareness, adoption, perceptions, readiness, and challenges of Artificial Intelligence (AI) in library functions by librarians. The gender analysis with the help of the MannWhitney U test showed that there was no significant difference between male and female librarians in all 30 items. U values were between 67.00 and 99.00 with p-values ranging between .105 to 1.000 which all were more than 0.05. The findings show that gender does not produce any quantifiable effect on the perception of AI concepts, usage of AI tool, readiness and confidence towards AI use or perceived obstacles and barriers by librarians. Male and female librarians showed no differences in their level of knowledge, patterns of usage AI technologies, positive attitudes towards the implementation of AI, and similar concerns about training, infrastructure, cost, job security, and ethical concerns. The results support the hypothesis that gender does not play a determining role on how librarians perceive, embrace, or react to AI in their work as a librarian.

Conversely, the age analysis through Kruskal-Wallis H test showed that there was a significant difference between different age groups in certain dimensions. Out of the ten questions that concerned knowledge and awareness, seven of them were significantly different, which means that age affects the practical and application-focused knowledge about AI, and younger librarians tend to have a better strategic and practical awareness. Three out of ten items were meaningful in the field of usage and practical experience, which implies that age has an impact on some higher-level perceptions and strategic applications of AI, but routine engagement and everyday operational use are not significantly different among all age groups. Nonetheless, all the items within the attitudes and willingness and all within the perceived barriers were non-significant, which proves that attitudes to AI, readiness to learn, willingness to adopt, and perceptions of obstacles are the same across ages.

Irrespective of age, the attitudes toward the adoption of AI were found to be positive among librarians who expressed more worries about the training gaps, cost, and infrastructure problems, fear of job displacement, and ethical concerns.

On the whole, the results suggest that age is a significant factor to project knowledge, strategic awareness, and some elements of practical AI usage, whereas gender has no effects on any factor regarding perceptions and behavior concerning AI. There is some consistency of attitudes, readiness and perceived barriers in both gender and age groups. These findings indicate that although the general strategies of AI adoption can be used when addressing all demographic cohorts, age-specific knowledge gaps and differences in strategic cognition should be addressed through the relevant specific intervention plans in order to guarantee fair and successful implementation of AI in libraries.

VII. Recommendations

According to the study findings, some recommendations are made to enhance the implementation of AI in the library setting and counter demographic differences. To begin with, AI training modules by age should be launched to improve the existing knowledge gaps and practical awareness among the various age groups to ensure that young and older librarians operate at an equal level when using the AI tools. Life-long learning opportunities should be considered the key aspects, as librarians should be informed about the changes in the trends of AI usage and ethical implications and applications. Infrastructural upgrades, such as robust digital infrastructure and AI-capable technologies, should also be made by libraries, to enable their easier adoption. In order to encourage more participation, the institutions can opt to provide incentives to adopt AI using recognition, certification or performance based programs. Also, specialized awareness campaigns on real-life AI use will be necessary to increase the awareness of librarians in terms of the ways AI tools can be used to simplify the cataloging process, reference service, metadata generation, and user support.

VIII. Limitations Of The Study

This study is limited by its relatively small sample size and the use of self-reported data, which may introduce response bias. Additionally, the findings are restricted to librarians within a specific geographic context, limiting the generalizability of the results to wider populations.

IX. CONCLUSION

The research proves that gender does not contribute to AI awareness, adoption, and perceptions, but age contributes significantly to the production of practical knowledge and strategic knowledge of AI in library roles. These lessons emphasize why demographic sensitive planning must be in any AI implementation strategy. A proper interpretation of the demographic trends is also needed to design AI readiness programs that enhance equity and inclusiveness of all librarian groups. The appropriate solution to the implementation of AI is a balanced strategy that integrates technical infrastructure, specific skill development, constant training, and organizational support. Libraries can provide the environment in which all professionals, irrespective of age and gender, are enabled to implement and use AI in the most effective ways to provide better library services and knowledge management that is future-oriented and focused.

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