THE FUTURE OF LIBRARIANSHIP: PARTNERING WITH ARTIFICIAL INTELLIGENCE

Paper Presentation

Nishant Kashyap Ghatowar
Shekharjyoti Neog

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INTRODUCTION

As AI technology evolves, libraries are leveraging its capabilities to improve various services, from cataloging to information retrieval.

This study explores the integration of AI in libraries, a rapidly evolving field that can enhance service delivery, streamline operations, and improve access to information.

LITERATURE REVIEW

- Numerous studies on AI in libraries have been conducted, including empirical research, conceptual papers, and literature review papers. This paper used Google Scholar to collect papers from March-April 2024, focusing on keywords “artificial intelligence AND library” in the time range of 2016-2024.
- Previous studies concentrated on literature review of artificial intelligence and machine learning for library professionals (Khanzode & Sarode, 2020), bibliometric analysis of AI trends in library services (Barsha & Munshi, 2023; Borgohain et al., 2022; Das & Islam, 2021; Echedom & Okuonghae, 2021; Gasparini & Kautonen, 2022; Harisanty et al., 2023; Hussain, 2023; Nugroho et al., 2023; Song et al., 2020; Vasishta et al., 2024; Yoganingrum et al., 2022).

RESEARCH OBJECTIVES

To explore and understand College Librarians' Literacy, Ethics, Self-efficacy, and Self-competency towards Artificial Intelligence (AI).

RESEARCH HYPOTHESES

H1 :
Majority of College Librarians in Assam are not engaged with AI;

H2 :
There are no significant differences between male and female College Librarians' engagement with Artificial Intelligence in Assam.

H3 :
There is no significant linear relationship between College Librarians' AI literacy, AI Ethics, AI self-efficacy, and AI self-competency in Assam.

RESEARCH METHODS

Questionnaire

Meta AI literacy scale
MAILS

7-likert scale

Reliability

Cronbach Alpha
0.9

Data Analysis software

IBM- SPSS
Version 16.0

54
College
Librarians
using
Google Form

Sample

1. AI Literacy
2. AI Ethics
3. AI Self-efficacy
4. AI Self-competency

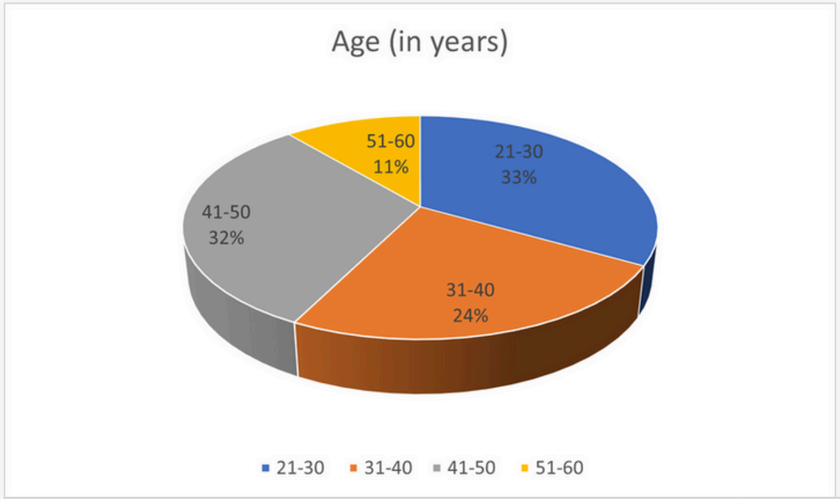
Domains

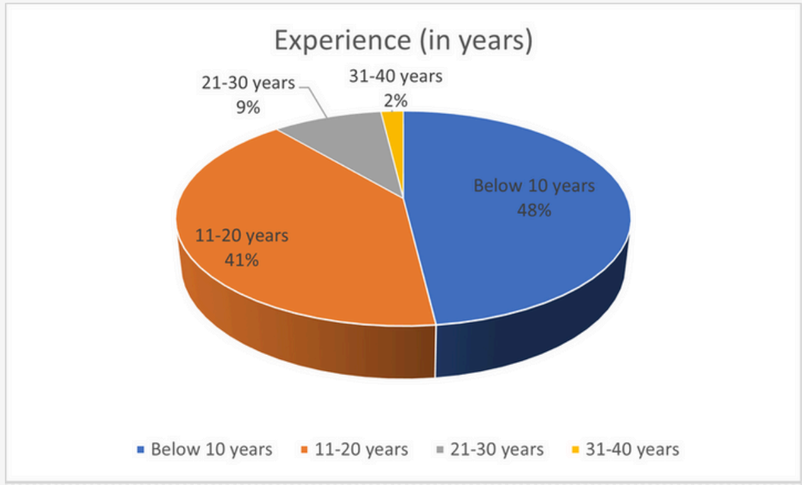
- **One sample t-test**
- **Two independent sample t-test**
- **Pearson Correlation Coefficient**

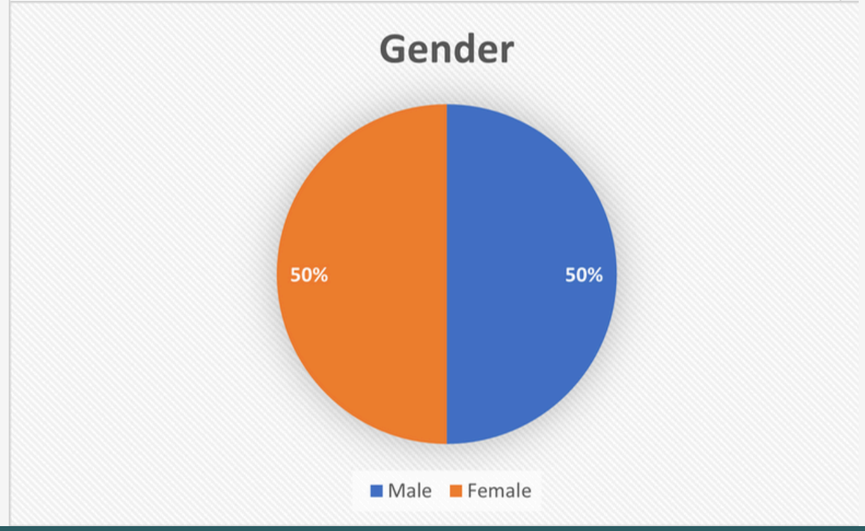
Statistical techniques

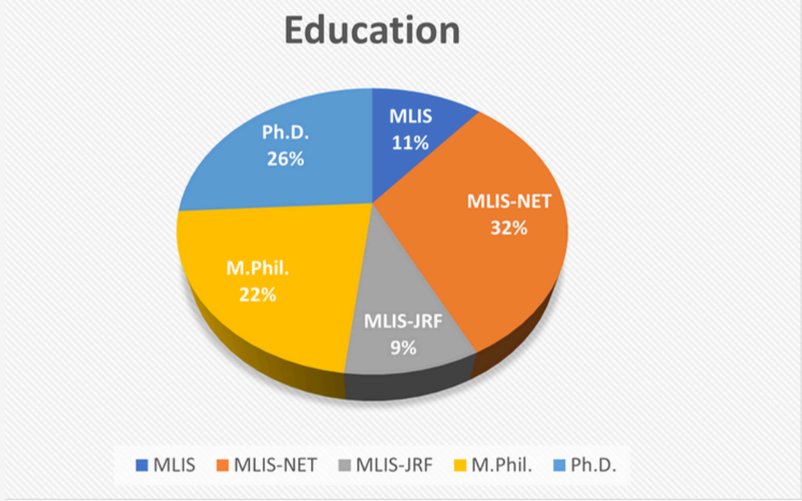
RESULTS

Sample









RESULTS

H1: College Librarian's Engagement with AI

One-sample t-test

t(53) = 2.367

p= 0.022

There was a statistically significant difference between means (p<.05).

Hypothesis- Rejected.

Result-
Majority of College Librarians in Assam are engaged with AI.

RESULTS

H2: Gender and College Librarians' Engagement with AI in Assam

Two independent sample t-test (Male & Female)

AI Literacy	AI Ethics	AI Self-efficacy	AI Self-competency
t(df)= -0.855	*t(df)= -0.439*	*t(df)= -0.563*	*t(df)= -1.650*
p= 0.397	*p=0.662*	*p= 0.576*	*p= 0.105*

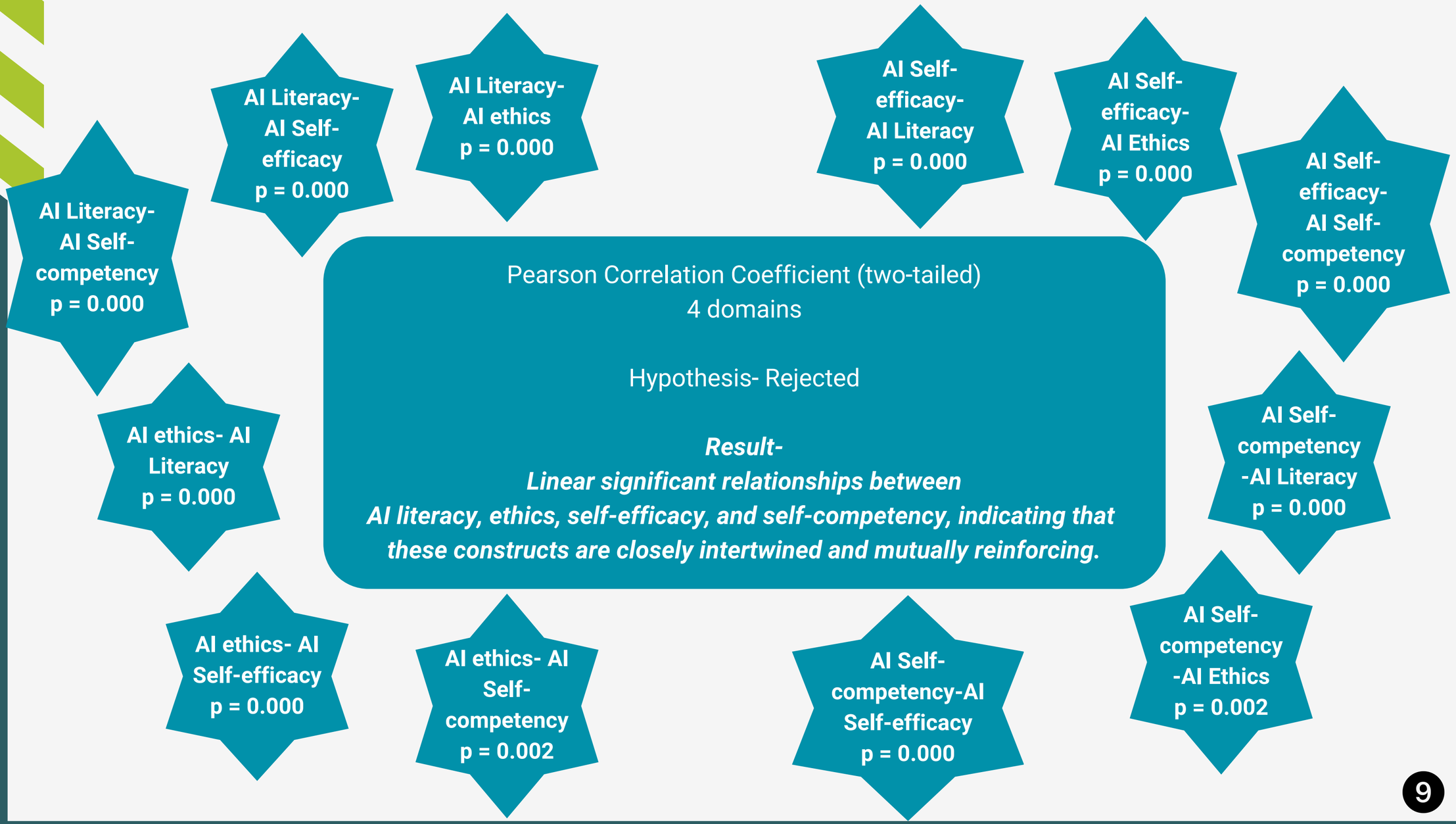
Hypothesis- Accepted

Result-

There is no difference between male and female college librarians' engagement with artificial intelligence in Assam (p<.05).

RESULTS

H3: Relationship between College Librarians' AI literacy, AI Ethics, AI self-efficacy, and AI self-competency in Assam.



DISCUSSION

College Librarian's Engagement with AI

1. AI Adoption by Librarians:
College librarians have actively embraced AI technologies, reflecting a positive shift towards technological innovation in academic libraries.

2. Ethical AI Use and Learning:
Librarians are enthusiastic about learning and adapting to AI while being mindful of ethical considerations.

3. Future Focus on Training and Collaboration:
To effectively utilize AI, librarians need ongoing training, collaboration, and knowledge-sharing networks as technology evolves.

Gender and College Librarians' Engagement with AI

1. No Significant Gender Influence:
Gender does not significantly affect college librarians' engagement with AI.

2. Other Influential Factors:
Educational background, professional experience, and institutional culture may play a larger role in shaping attitudes toward AI.

3. Ongoing Monitoring for Equity:
It remains important to monitor gender dynamics in AI adoption to ensure equal access and opportunities for all librarians.

Relationship between College Librarians' AI literacy, AI Ethics, AI self-efficacy, and AI self-competency

1. Positive Correlation Among AI Literacy, Ethics, and Self-Efficacy:
College librarians with higher AI literacy tend to have greater ethical awareness and self-efficacy in using AI tools.

2. Comprehensive AI Competency:
Higher AI literacy is linked to overall competency in navigating AI-related challenges.

3. Need for AI Education and Training:
The findings emphasize the importance of comprehensive AI education for librarians, covering technical skills, ethical considerations, and confidence in applying AI solutions.

LIMITATIONS AND FUTURE WORK

1. Study Limitations:
The study's sample was limited to college librarians in Assam, India, and did not use the full AI literacy questionnaire.

2. Future Research Focus:
Future studies should explore factors influencing AI adoption, gaps in AI-related skills, the impact of AI on library services and user experiences, and the ethical implications of AI in libraries.

THANK YOU

ABOUT AUTHORS

Nishant Kashyap Ghatowar
Library Assistant, Dr. Suryya Kumar Bhuyan Library, Cotton University, Guwahati, Assam
Email: n.k.ghatowar@gmail.com
ORCID: https://orcid.org/0000-0003-1416-6602

Shekharjyoti Neog
Assistant Librarian, Central Library, Majuli University of Culture, Majuli, Assam
Email: shekharjyotineog@gmail.com
ORCID: https://orcid.org/0000-0002-2462-5959