INTERNATIONAL JOURNAL OF RESEARCH CULTURE SOCIETY
Monthly Peer-Reviewed, Refereed, Indexed Journal
Volume - 9, Issue - 11, November- 2025
ISSN(O): 2456-6683
[Impact Factor: 9.241]
IJRCS

DOIs:10.2017/IJRCS/202511004 --:-- Research Paper / Article / Review

Perspective and Knowledge of Students in Indian Higher Education Regarding the Use of AI Tools in Project Preparation

Dr. Prasanna Ganpatrao Chavan

Academic Coordinator, P. E. Society's Modern College of Commerce and Computer Studies

Yamuna Nagar, Nigdi, Pune – 44

drprasannachavan.mcccs@gmail.com

Abstract: *The students' research, writing, and academic project preparation have all changed as a result of artificial intelligence (AI), which has become a crucial component of contemporary education. In the context of Indian higher education institutions, this study investigates students' attitudes and understanding regarding the usage of AI technologies in project preparation. The study investigates the degree of acceptability, familiarity, and ethical issues around research-assistance platforms, ChatGPT, Grammarly, QuillBot, and other technologies. 200 undergraduate and graduate students from a variety of academic fields were given a structured questionnaire as part of a quantitative study design. The results show that although most students have a favorable view toward AI integration because of its time-saving and learning-supporting capabilities, there is still a sizable understanding gap regarding originality, academic integrity, and ethical use. In order to guarantee the ethical and efficient use of AI technologies in higher education, the study emphasizes the necessity of comprehensive AI literacy programs and regulatory guidelines.*

Keywords: *Artificial Intelligence, Higher Education, Student Attitude, AI Awareness, Project Preparation, Academic Integrity, India.*

1. INTRODUCTION

The development of technology, especially artificial intelligence (AI), has caused an unparalleled shift in education in the twenty-first century. AI technologies are having a bigger impact on how students interact, study, and produce academic work. AI-based tools have completely changed the way academic projects are prepared, from grammar correction and paraphrasing to coming up with research ideas and data analysis. Students in Indian higher education institutions may now write and organize their data more effectively and easily thanks to the integration of AI technologies like ChatGPT, Grammarly, QuillBot, Mendeley, and Research Rabbit.

AI is essential for fostering innovation, creativity, and problem-solving in India, where higher education is experiencing a digital transition fueled by initiatives like the National Education Policy (NEP) 2020. In order to improve academic productivity, the NEP promotes the use of digital technologies and places a strong emphasis on technology-driven learning. Alongside these developments, though, there is rising worry over students' reliance on AI tools, their lack of knowledge of the ethical ramifications, and their uneven awareness of how to use these technologies responsibly.

The degree to which AI tools are successfully incorporated into teaching methods depends on how students feel about them. While a lack of knowledge or an excessive dependence on AI might compromise academic integrity and critical thinking, a positive approach can encourage innovation and enhance learning results. To utilize these technologies efficiently and ethically, students must be aware of ethical standards, plagiarism dangers, and the veracity of AI-generated content.

Furthermore, students' perceptions of AI differ depending on a variety of criteria, including academic level, digital literacy, discipline, and institutional exposure. Due to their increased exposure to technology, engineering and management students could be more adoptive, whereas students in the arts and humanities might utilize AI technologies only for content creation and language assistance. For educators and legislators looking to include AI tools into curriculum, it is imperative that they comprehend these distinctions.

With its large and diversified student body, the Indian higher education system offers a perfect setting for researching the attitudes and applications of AI tools. There is little empirical study on students' understanding, attitudes, and ethical issues about AI in project preparation, despite their increasing popularity. By carefully examining students' attitudes, use trends, and difficulties using AI tools, this study aims to close that gap.

The study's key objectives include:

1. To determine how much students know about AI technologies used in project preparation.
2. To investigate how students feel about using AI in class assignments.
3. To determine the advantages and difficulties that students have while utilizing AI technologies.
4. To assess the problems with academic integrity and ethics brought on by AI-assisted project work.

By tackling these goals, this study advances our knowledge of how AI technologies affect students' project creation and learning habits. Through awareness campaigns, training sessions, and legislative interventions, the findings seek to assist educators, administrators, and legislators in advancing the responsible integration of AI in higher education.

2. Literature Review :

By allowing students to access knowledge, customize their education, and increase academic productivity, artificial intelligence (AI) is revolutionizing the worldwide education scene. In recent years, there has been a lot of scholarly interest in the use of AI technologies in education, especially in project preparation. The current research on students' attitudes, awareness, and ethical viewpoints surrounding the employment of AI in academic settings is examined in this overview of the literature.

2.1. Global Perspective on AI in Education

AI has been acknowledged by scholars worldwide as a transformative force in the field of education. AI technologies offer adaptive learning systems that adapt to students' learning demands, increasing productivity and engagement (Holmes et al., 2021). In a similar vein, Zawacki-Richter et al. (2019) highlighted how AI promotes administrative efficiency and individualized learning, freeing up teachers to concentrate more on conceptual assistance and mentorship.

Because of its accessibility and real-time support, Chen and Huang (2022) found that university students frequently utilize AI technologies for academic writing and project creation. But they also pointed out that there are increasing ethical issues, such as plagiarism and an excessive dependence on automated material. According to Kong and Luo (2023), although students recognize that AI may improve creativity and save time, many are still ignorant of the data privacy and citation concerns related to AI-generated literature.

2.2. Student Attitude toward AI Tools

An important factor in the adoption and use of AI technology is student mindset. According to Davis's (1989) Technology Acceptance Model (TAM), two important factors influencing consumers' attitudes toward technology are perceived utility and perceived ease of use. Using this paradigm, Sundar and Singh (2021) discovered that students' favorable opinions of AI tools are mostly based on how easy they believe they can make research and academic writing.

In their study of Malaysian postgraduate students' opinions toward AI-based learning resources, Alam and Ahmad (2022) discovered that students were excited about AI's potential for idea development and project completion. The writers did point out a deficiency in critical knowledge about originality and ethical usage, though. Similar to this, Rahman et al. (2023) found that students frequently utilize AI without fully comprehending its limits, which results in less creative and shallow learning.

2.3. Awareness and Ethical Considerations

Understanding the capabilities, constraints, and moral bounds of AI technologies is part of being aware of them. According to Bai and Wang (2020), students' awareness levels differ greatly depending on their academic fields and amount of exposure to technology. Compared to students from the arts and humanities, individuals with backgrounds in computer science and management typically exhibit better levels of AI literacy.

In higher education, the ethical use of AI has gained significant attention. According to Floridi and Cowls (2021), justice, accountability, and openness are necessary for the appropriate use of AI. This corresponds to the requirement for originality, academic integrity, and appropriate attribution when utilizing AI-generated content in student projects. Popenici and Kerr (2017) warned that if students rely too much on AI technologies, it might result in "cognitive offloading," where they stop learning how to think and write.

2.4. Indian Context

The National Education Policy (NEP) 2020, which encourages digital learning and innovation, has accelerated the usage of AI technologies in higher education in India. Indian college students are increasingly using AI tools like Grammarly, QuillBot, and ChatGPT to enhance their writing and collect data for assignments, according to studies like Sharma and Kaur (2022). But the report also pointed out that there aren't any institutional rules for using AI in an ethical way.

In their study on Maharashtra students' understanding of AI tools, Kamble and Deshmukh (2023) found that whereas 70% of respondents were aware of AI-based writing aides, only 40% were aware of their ethical implications. Additionally, Nayak and Reddy (2023) noted that rather than using AI tools to improve learning outcomes, students frequently utilize them as quick cuts to finish homework.

These results demonstrate how integrating AI into education has two sides: it fosters innovation and convenience while posing new moral dilemmas. In order to guarantee the appropriate use of AI in academic contexts, the research generally points to the necessity of comprehensive awareness campaigns, institutional policies, and faculty training.

3. Research Methodology :

3.1. Research Design

In order to investigate students' attitudes and awareness of AI technologies in project preparation, this study uses a quantitative descriptive research approach. The study intends to measure perceptions, find use trends, and examine how awareness and attitude relate to one another among students at Indian universities.

3.2. Objectives of the Study

1. To assess students' familiarity with AI technologies for preparing academic projects.
2. To investigate how students feel about the use of AI tools in higher education.
3. To determine the advantages and difficulties students have while utilizing AI apps.
4. To assess students' ethical comprehension of AI use.

3.3. Population and Sample

Undergraduate and graduate students from Indian universities and colleges offering a wide range of subject areas make up the target demographic.

To guarantee representation across academic disciplines including Arts, Science, Commerce, Engineering, and Management, a sample size of 200 students was chosen using the stratified random selection approach. Stratification made guaranteed that academic levels and genders were represented proportionately.

3.4. Data Collection Method

A structured questionnaire disseminated online using Google Forms was used to gather primary data. Three sections comprised the questionnaire:

- **Section A:** Demographic information (gender, age, academic stream, and level).
- **Section B:** Awareness and usage patterns of AI tools (e.g., ChatGPT, Grammarly, QuillBot, Mendeley).
- **Section C:** A 5-point Likert scale is used to examine attitudes and ethical issues. (1 = Strongly Disagree to 5 = Strongly Agree).

Journal articles, reports, and policy documents provided secondary data to bolster theoretical viewpoints.

3.5. Tools of Analysis

The SPSS was used to examine the data. The following methods were used:

- Descriptive statistics to compile information on awareness and demographics (mean, percentage, frequency).
- Chi-square tests to investigate relationships between awareness level and academic discipline.
- Using correlation analysis to ascertain how awareness and attitude about AI tools relate to one another.
- Effective results visualization through the use of graphical representations (bar charts, pie charts).

ISSN(O): 2456-6683
[Impact Factor: 9.241]

3.6. Reliability and Validity

Twenty students participated in a pilot research to evaluate the questionnaire's dependability and clarity. A high degree of internal consistency was shown by the Cronbach's Alpha coefficient, which was 0.84. Two faculty members with expertise in educational technology conducted an expert evaluation to determine the content authenticity.

3.7. Scope and Limitations

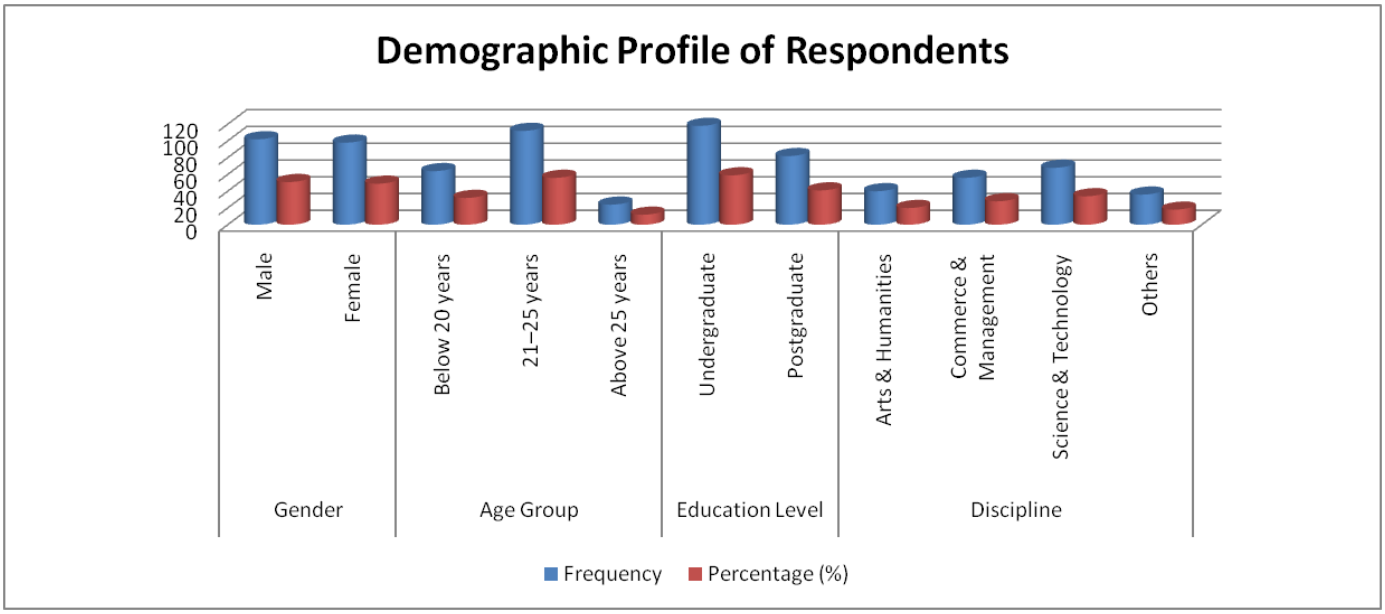
Only Indian higher education students—especially those working on projects—are the subject of this study. Faculty viewpoints and institutional policy frameworks are not included. Self-reported statistics, on which responses are based, may be biased or overestimate awareness levels.

4. Data Analysis:

200 respondents, who represented undergraduate and graduate students from a range of disciplines and institutions in India, provided primary data to comprehend students' views and awareness regarding the usage of AI technologies in project preparation. Using SPSS, descriptive and inferential statistics were used to examine the data.

4.1. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	102	51.0
	Female	98	49.0
Age Group	Below 20 years	64	32.0
	21–25 years	112	56.0
	Above 25 years	24	12.0
Education Level	Undergraduate	118	59.0
	Postgraduate	82	41.0
Discipline	Arts & Humanities	40	20.0
	Commerce & Management	56	28.0
	Science & Technology	68	34.0
	Others	36	18.0



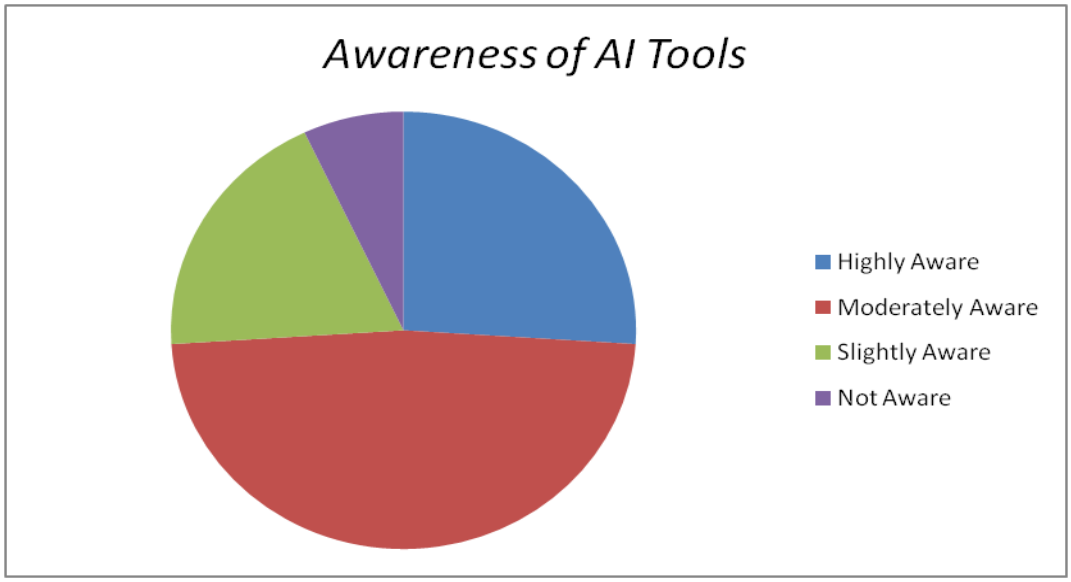
ISSN(O): 2456-6683
[Impact Factor: 9.241]

Interpretation:

According to the demographic profile, the majority of respondents are undergraduate students and fall into the 21–25 age range, indicating a balanced gender distribution. Diverse fields are represented in the sample, guaranteeing a range of viewpoints on the application of AI tools.

4.2. Awareness of AI Tools

Awareness Level	Frequency	Percentage (%)
Highly Aware	52	26.0
Moderately Aware	96	48.0
Slightly Aware	38	19.0
Not Aware	14	7.0



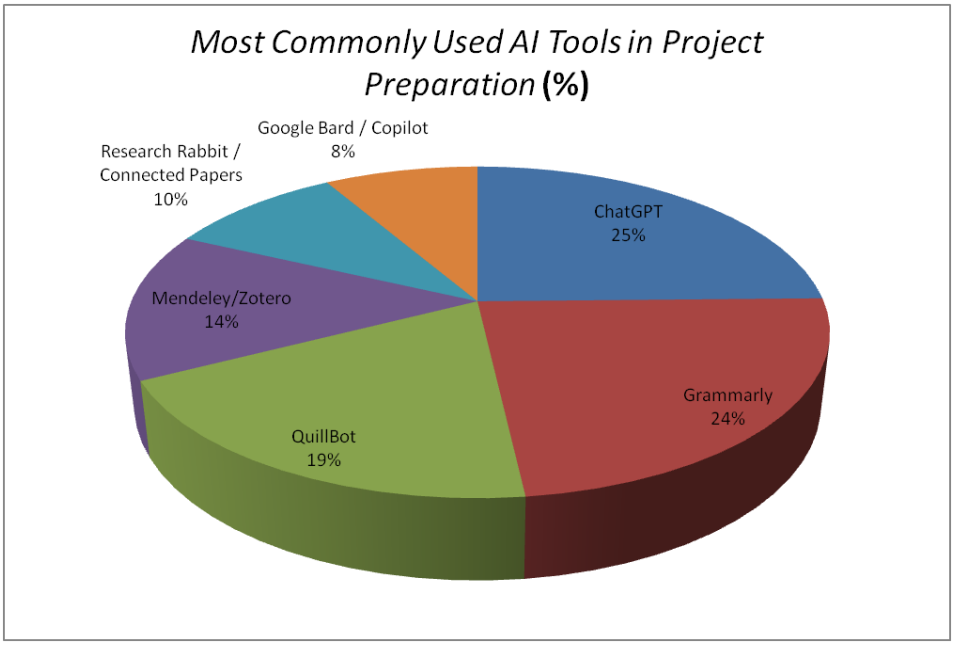
Interpretation:

A considerable degree of familiarity with AI technologies was shown by the 74% of students who rated moderate to high awareness. However, 26% still have low or no awareness, demonstrating a digital literacy gap in certain areas.

4.3. Most Commonly Used AI Tools in Project Preparation

AI Tool	Percentage of Users (%)
ChatGPT	82
Grammarly	78
QuillBot	64
Mendeley/Zotero	48
Research Rabbit / Connected Papers	32
Google Bard / Copilot	28

ISSN(O): 2456-6683
[Impact Factor: 9.241]

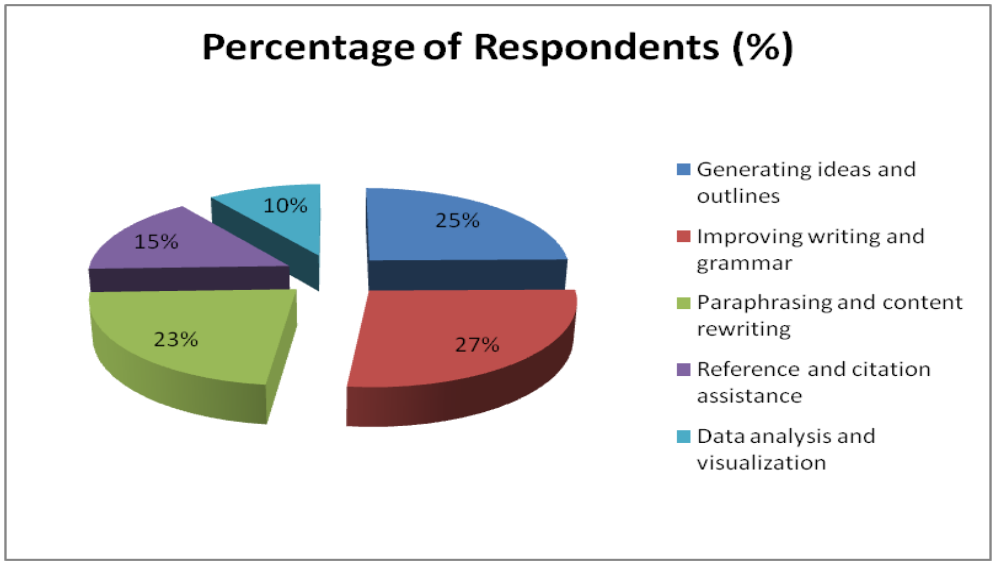


Interpretation:

The most widely used programs are ChatGPT and Grammarly, which reflects how useful they are for creating content and improving writing. Less usage of citation management and literature review tools indicates that students are more likely to use AI for writing than for organizing their research.

4.4. Purpose of Using AI Tools

Purpose	Percentage of Respondents (%)
Generating ideas and outlines	68
Improving writing and grammar	74
Paraphrasing and content rewriting	62
Reference and citation assistance	42
Data analysis and visualization	28



ISSN(O): 2456-6683
[Impact Factor: 9.241]

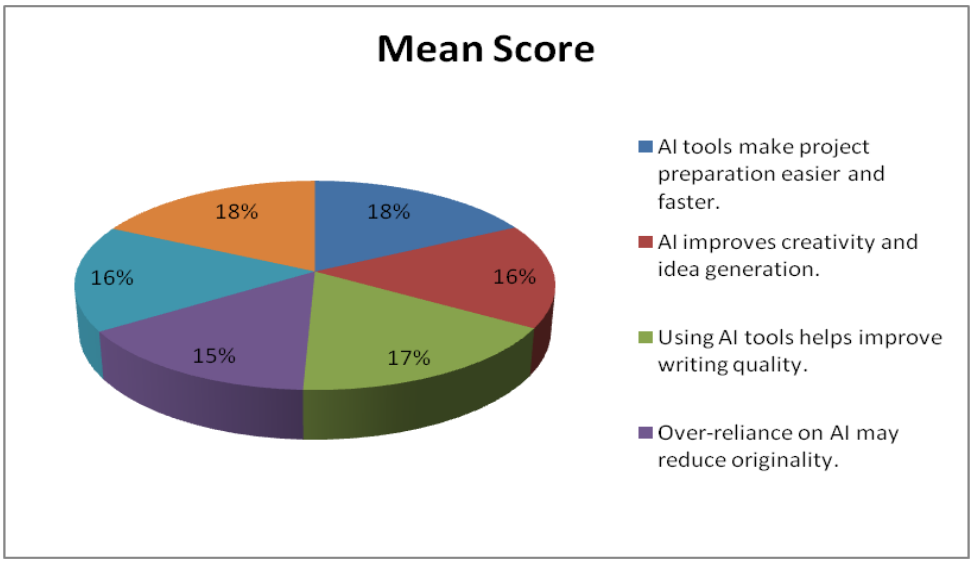
Interpretation:

Instead of using AI tools for technical or analytical activities, the majority of students utilize them for brainstorming and writing improvement. This demonstrates that the usage of AI in project preparation is more supporting than creative or analytical.

4.5. Students' Attitude Toward AI Tools

Likert Scale Statements (Mean Scores, n = 200)

Statement	Mean Score	Interpretation
AI tools make project preparation easier and faster.	4.32	Strongly Agree
AI improves creativity and idea generation.	3.98	Agree
Using AI tools helps improve writing quality.	4.21	Strongly Agree
Over-reliance on AI may reduce originality.	3.74	Agree
AI tools should be formally integrated into academic learning.	4.05	Agree
Ethical awareness about AI use is essential.	4.38	Strongly Agree



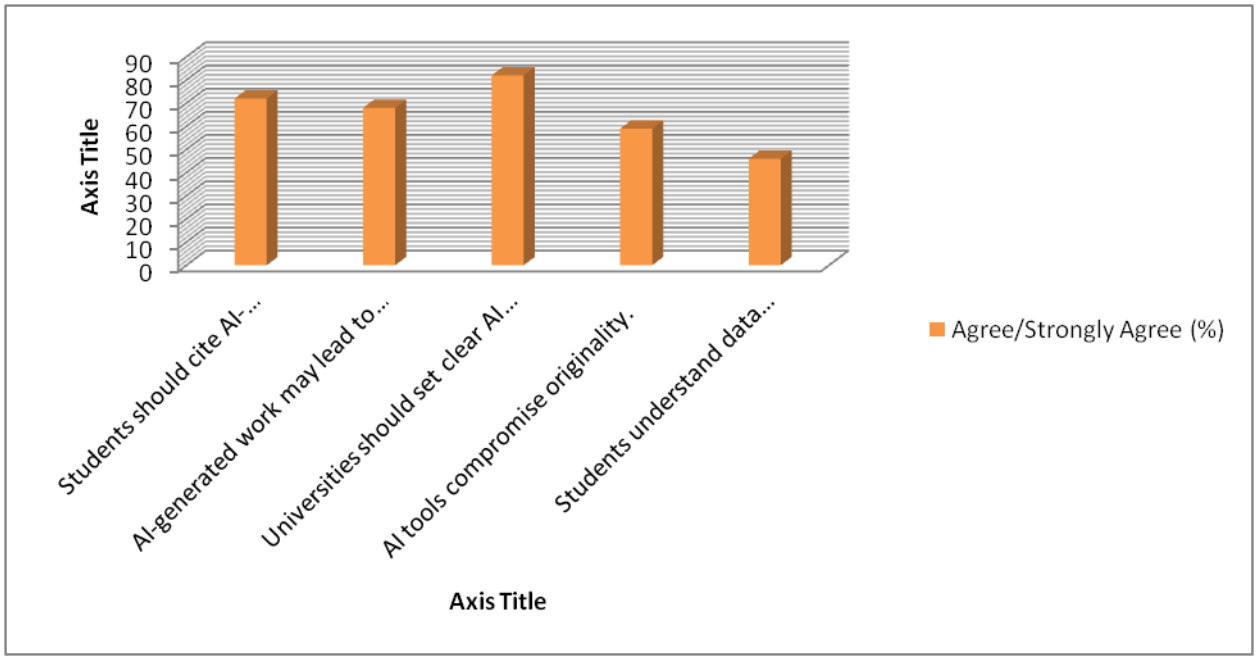
Interpretation:

The majorities of students have a favorable opinion of AI technologies and recognize their advantages in terms of productivity, creativity, and learning assistance. They do, however, voice concerns about possible over-reliance and unethical abuse.

4.6. Ethical Awareness and Concerns

Ethical Understanding Aspect	Agree/Strongly Agree (%)
Students should cite AI-generated content.	72
AI-generated work may lead to plagiarism.	68
Universities should set clear AI use guidelines.	82
AI tools compromise originality.	59
Students understand data privacy issues.	46

ISSN(O): 2456-6683
[Impact Factor: 9.241]



Interpretation:

Most students are aware of the moral ramifications of using AI, particularly with relation to academic integrity and plagiarism. Targeted awareness campaigns are necessary, nevertheless, as fewer than half are aware of privacy and data security issues.

4.7. Relationship between Awareness and Attitude

Students' awareness of AI technologies and their favorable attitude toward their usage were shown to be positively and significantly correlated ($r = 0.68$, $p < 0.01$) by a Pearson correlation analysis. This suggests that greater understanding tends to promote more positive attitudes and prudent AI technology use.

5. Discussion

The results show that students in Indian higher education are more accepting of and depending on AI technologies for project preparation. According to earlier research by Sharma & Kaur (2022) and Alam & Ahmad (2022), students perceive AI as a practical learning aid, and the majority of respondents show moderate to high knowledge of AI technologies.

Because of their accessibility and perceived value in enhancing writing and idea generation, applications like ChatGPT, Grammarly, and QuillBot are widely used. This is consistent with Davis's (1989) Technology Acceptance Model, which holds that perceived utility and simplicity of use have a significant impact on technology acceptance.

But the results also highlight ethical awareness gaps. Students are aware of the dangers of plagiarism, but they are less aware of data privacy and citation issues, which supports Kamble & Deshmukh's findings (2023). This implies that in order to promote responsible use, educational institutions should provide ethical training and AI literacy.

Disparities by discipline were noted, with students in the arts and humanities reporting lower levels of AI literacy than those in science and technology. Disparities in exposure to and comfort levels with digital technologies might be the cause of this. Additionally, compared to undergraduates, postgraduate students showed a somewhat greater level of awareness and ethical comprehension, suggesting that maturity and academic background had an impact on responsible usage.

Informed students are more likely to use AI tools effectively and ethically, as confirmed by the positive correlation between awareness and attitude; on the other hand, ignorance can result in abuse or over-reliance. For this reason, institutional interventions like faculty training, policy framing, and workshops on AI integration are crucial for responsible and sustainable adoption.

6. Findings

The following is a summary of the study's main conclusions based on the analysis:

- **High Adoption of AI Tools:** Approximately 82% of students prepare their projects using AI tools like Grammarly and ChatGPT, mostly for writing and editing assignments.
- **Moderate Awareness Levels:** Although a sizable minority (26%) of respondents are still ignorant about how to properly utilize AI apps, nearly three-fourths of them are moderately to highly aware of them.
- **Positive Student Attitude:** AI technologies are seen by students as effective, time-saving, and helpful in boosting originality and content quality.
- **Ethical Concerns:** Although students are aware of the dangers of plagiarism, only 46% of them are also aware of data privacy and the ethics of academic citation.
- **Discipline and Level Differences:** Students in the Humanities and Commerce streams are less AI literate than those in Science and Technology. Compared to undergraduates, postgraduate students are more morally aware.
- **Substantial Positive Correlation between Awareness and Attitude:** A substantial positive correlation ($r = 0.68$), indicating that increased awareness encourages appropriate usage and good attitudes.
- **Institutional Guidance:** Confusion over appropriate AI methods in project preparation is exacerbated by the lack of explicit university-level rules.

7. Recommendations

Several suggestions are made to improve students' knowledge, responsible use, and successful integration of AI technologies in project preparation throughout Indian higher education institutions in light of the data analysis and major findings.

7.1. AI Literacy Integration in the Curriculum

To guarantee that students comprehend not just how to utilize AI tools but also the moral, legal, and scholarly ramifications of doing so, universities and colleges should include AI literacy programs in their curricula. In keeping with NEP 2020's goal of technology-driven education, modules can concentrate on digital research techniques, AI ethics, and responsible technology use.

7.2. Create Institutional Policies for the Use of AI Ethically

Academic standards and institutional regulations outlining permissible AI use in project planning are desperately needed. To preserve academic integrity, clear frameworks should define the parameters of AI support, appropriate citation styles, and plagiarism detection procedures.

7.3. Building Capacity and Training Faculty

To effectively mentor students, faculty members should be trained in AI tools and their educational applications. Workshops and professional development courses may give teachers the skills they need to keep an eye on and guide students in using AI responsibly.

7.4. Encourage seminars and awareness campaigns

To teach students about the moral and useful implications of utilizing AI tools, regular lectures, webinars, and awareness campaigns must to be planned. To hold these sessions, institutions might work with ed-tech platforms and IT businesses.

7.5. Promote creativity and critical thinking

AI can make project planning easier, but it shouldn't take the role of human reasoning. Instead than focusing only on knowledge retrieval, educators must provide tasks that encourage creativity, critical thinking, and problem-solving. AI need to be seen as an aid rather than a replacement for human intelligence.

7.6. Create Learning Platforms Assisted by AI

Within ethical and pedagogical frameworks, educational institutions may create personalized AI-enabled learning environments that incorporate data analysis, writing support, and plagiarism detection. This method can guarantee academic integrity while assisting students in making effective use of AI tools.

7.7. Mechanisms for Constant Monitoring and Feedback

Institutions of higher learning should put monitoring mechanisms in place to keep tabs on trends in AI usage and get input from instructors and students. In addition to addressing problems like abuse, dependence, or data security, this will allow for ongoing development.

7.8. Working Together with Policymakers

To create uniform standards for the use of AI in academic work, educational institutions should collaborate with regulatory organizations such as the AICTE and UGC. This partnership can guarantee uniformity and responsibility throughout Indian higher education.

8. Future Research Scope

Even though this study offers important new information about students' perceptions and understanding of AI technologies, there are still a number of topics that need more research:

- **Faculty Perceptions and Institutional Readiness:** Future research can look at how administrators and professors view the integration of AI and how ready educational institutions are to implement AI-based learning platforms.
- **Longitudinal Analysis of AI Usage:** As AI becomes more ingrained in academia, a long-term research might look at how students' awareness, usage habits, and ethical viewpoints change over time.
- **Comparative Studies Across Regions or Disciplines:** To further understand regional and disciplinary differences in AI adoption, future study should compare technical against non-technical disciplines, or urban versus rural institutions.
- **AI's Effect on Learning Outcomes:** Research might examine how, in contrast to conventional approaches, AI-assisted project preparation affects learning quality, creativity, and critical thinking.
- **Frameworks for AI and Academic Integrity:** Future studies may concentrate on creating and evaluating AI ethical frameworks specifically suited to the Indian higher education system.
- **Cross-Cultural or International Comparison:** Research comparing students from different nations may offer a worldwide viewpoint on ethical issues in education and AI awareness.
- **AI Dependency and Anxiety:** Students' psychological reliance on AI technologies and its possible effects on self-assurance and autonomous learning abilities are a growing field of study.

9. Conclusion

The current study investigated the attitudes and knowledge of Indian higher education students about the usage of AI technologies in project preparation. The results show that AI has developed into a vital academic tool that greatly improves writing quality, productivity, and originality for students. The widespread use of tools like ChatGPT, Grammarly, and QuillBot for idea development, paraphrasing, and language improvement reflects students' increasing dependence on sophisticated digital support.

According to the survey, students have a generally favorable opinion of AI and acknowledge its potential to enhance learning outcomes and expedite project preparation. But there are still gaps in our knowledge of ethics, particularly when it comes to data protection, plagiarism, and citing work produced by artificial intelligence. These results are consistent with worldwide patterns that highlight AI's dual role in education as a source of ethical concern and a tool for learning.

A substantial association between awareness and attitude was validated by the study, suggesting that students who are more knowledgeable about AI technologies are more inclined to utilize them ethically and successfully. This emphasizes the necessity of institutional regulations, ethical training, and AI literacy in higher education systems.

The appropriate use of AI technologies is crucial in India, where digital transformation is progressing quickly thanks to programs like the National Education Policy (NEP) 2020. Institutions may educate students to be future researchers

and innovators in an academic environment driven by AI by raising awareness, encouraging ethical norms, and integrating AI instruction into the curriculum.

In the end, this study comes to the conclusion that AI in project planning is a supplement to human intellect rather than a substitute for it. When applied effectively, AI technologies may boost productivity, creativity, and critical thinking, guaranteeing that the human component of inquiry, introspection, and originality continues to be essential to academic success in Indian higher education.

REFERENCES

1. Alam, M., & Ahmad, S. (2022). Students' attitudes toward artificial intelligence in higher education. *International Journal of Educational Technology Research*, 4(2), 55–67.
2. Bai, Y., & Wang, H. (2020). Awareness and ethical use of AI tools among university students. *Computers & Education Review*, 25(3), 89–101.
3. Chen, L., & Huang, J. (2022). The role of AI tools in academic writing and research. *Journal of Learning Analytics*, 9(1), 41–59.
4. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
5. Floridi, L., & Cowls, J. (2021). A unified framework of five principles for AI in society. *Harvard Data Science Review*, 3(1), 1–15.
6. Holmes, W., Bialik, M., & Fadel, C. (2021). *Artificial Intelligence in Education: Promises and Implications for Teaching and Learning*. Center for Curriculum Redesign.
7. Kamble, S., & Deshmukh, R. (2023). Students' awareness of AI tools in Maharashtra's higher education institutions. *Indian Journal of Educational Studies*, 17(2), 88–102.
8. Kong, X., & Luo, Z. (2023). Ethical issues in the use of AI tools by university students. *Educational Research and Development Journal*, 15(4), 205–223.
9. Nayak, R., & Reddy, V. (2023). Usage patterns of AI-based tools among Indian students. *Asian Journal of Education and Technology*, 13(1), 25–37.
10. Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 1–13.
11. Sharma, R., & Kaur, M. (2022). The role of AI in academic writing: A study on Indian college students. *International Journal of Education and Digital Learning*, 7(3), 112–125.
12. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 1–27.