



Study on The Attitude of the Students of the Higher Education Institutions of Ramakrishna Mission (W.B.) towards the Use of ChatGPT and AI

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<p>Received: 24.06.2026</p> <p>Accepted: 30.06.2026</p> <p>Published: 09.07.2026</p>	<p>Abstract</p> <p><i>The rapid growth of Artificial Intelligence (AI) has significantly influenced the educational sector, transforming traditional learning practices and introducing innovative digital learning tools. Among these advancements, ChatGPT has emerged as a widely used AI-powered language model with the potential to support academic learning, research, and personalized educational experiences. In this context, the present study investigates the attitudes of students of Higher Education Institutions of Ramakrishna Mission, West Bengal, towards the use of ChatGPT and Artificial Intelligence in their academic activities.</i></p> <p><i>The study adopted a quantitative research approach using a descriptive survey method. A sample of 235 students was selected from various higher education institutions of Ramakrishna Mission in West Bengal through stratified random sampling. Data were collected using a standardized attitude scale questionnaire and analyzed through descriptive statistics, Independent Sample t-test, and One-Way ANOVA to examine differences among groups based on academic stream, residential status, and level of study.</i></p> <p><i>The findings revealed that there was no statistically significant difference in students' attitudes towards ChatGPT and AI between Science and Humanities students, nor between Residential and Day Scholar students. However, a significant difference was observed among students belonging to different academic levels. Undergraduate and Postgraduate students demonstrated comparatively more positive attitudes towards the use of ChatGPT and AI than students enrolled in Teacher Education programmes.</i></p> <p><i>The study concludes that AI technologies such as ChatGPT are increasingly accepted in higher education environments, though variations in perception exist across academic levels. The findings highlight the need for greater AI literacy, curriculum integration, and technological awareness, particularly in Teacher Education programmes, to ensure effective and responsible adoption of AI in contemporary education.</i></p> <p>Keywords: Artificial Intelligence, ChatGPT, Higher Education, Student Attitude, Educational Technology, Ramakrishna Mission, West Bengal</p>
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Introduction

The rapid advancement of artificial intelligence (AI) and its integration into various sectors has brought about significant changes in the way we approach learning, work, and daily life. Among the many AI tools emerging in the educational sector, ChatGPT, an advanced language model

developed by Open AI, stands out due to its versatile capabilities in understanding and generating human-like text. This study aims to explore the attitudes of students from the Higher Education Institutions (HEIs) of the Ramakrishna Mission in West Bengal (WB) towards the use of ChatGPT and other AI technologies in their academic and personal lives. The Ramakrishna Mission, with its deep-rooted values in holistic education and character building, operates several HEIs across West Bengal. These institutions are known for their emphasis on a blend of traditional education and modern advancements. As AI technologies like ChatGPT become more prevalent, it is crucial to understand how students in these institutions perceive and utilize such tools.

Background of the study

Artificial Intelligence (AI) technologies, particularly language models like ChatGPT, have revolutionized various sectors, including education. ChatGPT, developed by OpenAI, is designed to generate human-like text based on the input it receives, making it a valuable tool for educational support, content creation, and personalized learning experiences. Understanding the attitudes of students towards these technologies is crucial, as their perceptions and acceptance will significantly influence the integration and effectiveness of AI in educational settings.

ChatGPT has been explored for various software engineering tasks, such as ambiguity resolution, method name suggestion, and code review. It has also been studied in the context of scientific inquiry, virtual assistants, and the Internet of Things (IoT). The technology behind ChatGPT has been extensively reviewed, discussing its origins, applications, challenges, and future directions. Additionally, ChatGPT has been evaluated for text-based personality recognition and has shown impressive abilities in personality recognition and natural language explanations. In the field of occupational health medicine, ChatGPT has been assessed for answering complex medical questions and has been found to provide complete answers when given legislative context. Additionally, the unsupervised generative pre training and the fine tuning methods allow ChatGPT to generate more relevant and accurate text for specific tasks (Hashana et al... 2023, Ray, 2023). This study is to find out the attitude of higher studies group students of Ramkrishna Mission towards the use of ChatGPT and AI. This study investigates the impact of activity based learning and utilization of ChatGPT on students' academic performance within the educational framework.

Emergence of the problem

The rapid advancement of Artificial Intelligence (AI) technologies has profoundly impacted various sectors, including education. Among these advancements, language models like ChatGPT, developed by OpenAI, have gained significant attention for their potential to transform educational practices. ChatGPT, capable of generating human-like text based on prompts, offers a wide range of applications, from providing personalized tutoring to assisting with research and enhancing learning experiences. So it is the most burning issues in the contemporary era.

The present research analyses the study of students' attitude towards the use of ChatGPT & AI. Samples will be collected from the higher education institutions of Ramakrishna Mission of West Bengal. Therefore the present study is stated as "Study on the attitude of students of higher studies group Ramakrishna Mission towards the use of ChatGPT & AI"

Objectives of the study

The study is focus on the following specific objectives -

- i. To discover the differences among the students towards the usage of ChatGPT & AI with reference to their streams (Science or Humanities background).
- ii. To discover the differences among the students towards the usage of ChatGPT & AI with reference to their residential status (Residential students or day scholars).
- iii. To compare the differences among the students towards the usage of ChatGPT & AI with reference to their study levels (Under Graduation Level (B.A. /B.Sc.). Post-Graduation Level (M.A. /M.Sc.). and Teacher Education Level (B.Ed./M.Ed.)

Hypotheses

H₀₁: There is no significant difference in attitude towards ChatGPT & AI between Science & Humanities students.

H₀₂: There is no significant difference in attitude towards ChatGPT & AI between Residential students & Day scholars.

H₀₃: There is no significant difference in attitude towards ChatGPT & AI among Under Graduate (UG), Post graduate (PG) and Teacher Education (TE) students.

Significance of the study

The present study, “Study on the Attitude of the Students of the Higher Education Institutions of Ramakrishna Mission (W.B.) Towards the Use of ChatGPT and AI,” is significant in understanding the growing role of Artificial Intelligence in education. It examines students’ attitudes towards AI tools like ChatGPT and identifies differences among students from Science, Humanities, and Teacher Education backgrounds.

The study helps identify patterns of AI usage by classifying students into high, moderate, and low users, which can support the development of effective training and awareness programs. It also compares attitudes based on academic stream, residential status, and level of education, providing insights into factors influencing technology adoption.

The findings can help educational institutions improve curriculum planning, teacher training, and digital resource management for better AI integration. The study also contributes to existing literature by focusing on students of Ramakrishna Mission institutions, addressing a research gap in the Indian higher education context. Furthermore, it can support the development of ethical guidelines and digital literacy policies for responsible use of AI in education.

Delimitation of the Study

The present study is limited to the Ramakrishna Mission Sikshanamandira higher educational institutions. The students of West Bengal will be considered as sample for this study. This sample is limited to 235 students.

Review of Related Literature for this study

The review of related literature is here to bring out the related work area and to decide the research gap.

Das and Madhusudan, (2024), conducted a study titled “ Preparations of Higher Education Students towards ChatGPT Usage” . This study surveyed 162 UG, PG and Doctoral students to explore their perceptions of ChatGPT in academics. Findings indicate a general positive outlook on ChatGPT in academics applications, benefits, limitations and ethical concerns with perceptions not significantly influenced by gender, academic programs or streams.

Baqir and Nayeb (2024) conducted a study on “ Exploring students’ Attitudes towards Using Chatgpt in English Language Classroom at University level”. Through semi- structured interviews with English language learners, this study found that students had positive attitude towards ChatGPT, citing its user-friendliness and support in speaking, writing grammar clarification and comprehension challenges included misinterpretation of queries and lack of contextual understanding.

Zafar, Shaheen and Rahen (2024), conducted a study on " Use of ChatGPT and Generative AI in Higher Education: Opportunities, Obstacles and Impact on student performance”. Surveying 354 graduate and postgraduate students, the study found that 51% used ChatGPT regularly, perceiving it as effective for complementing academic tasks and providing personalised tutoring. However, concerns were raised about over-reliance limiting critical thinking and academic honesty.

Shahzad, Xu and Javed (2024), conducted a study on " Analyzing data from 320 Chinese university students using the Technology Acceptance Model, the Study found that awareness of CgatGPT significantly influences its adoption, with perceived ease of use, usefulness, and intelligence mediating this relationship. Trust was identified as a significant moderator.

Jo (2024). conducted a study on "From Concerns to Benefits : A Comprehensive study of ChatGPT Usage in education”. This study explored behavioural determinants influencing ChatGPT usage among university students. While personalization and novelty value positively impacted behavioural intentions, barrers such as privacy concerns technophobia were significant detractors.

Chukwuere (2024), conducted a study on "The Future of Generative AI Chatbots in higher education”. A narrative literature review highlighting the transformative potential of generative AI chaobots in higher education, emphasizing opportunities for enhanced student support and administrative efficiency, while also addressing challenges like academic integrity and resource allocation.

Sullivan (2023), conducted a study on "ChatGPT in higher education: Considerations for academic integrity and student learning". This paper delves into various pivotal themes, encompassing the responses of universities, issues related to academic integrity, the constraints and drawbacks of AI tool outputs, and the potential avenues for enhancing student learning. The data highlights a diverse spectrum of discussions within the public domain and diverse responses from universities, with a predominant emphasis on addressing academic integrity concerns and exploring innovative approaches to assessment design.

Strzelecki (2023), Conducted a study on "To use or not to use ChatGPT in higher education". This study focuses on how students perceive and Str use technology, with a particular emphasis on (20 ChatGPT's function in the field of education. Although ChatGPT has the potential to be an

engaging and useful educational tool, users must be cautious and selective when incorporating it into their learning processes.

Rawas (2023), Conducted a study on "Empowering lifelong learning in the digital age of higher education using ChatGPT". The report suggests future directions for ChatGPT research in higher education. Based on the conclusions drawn from this study, ChatGPT presents higher education institutions with a significant chance to improve the quality and accessibility of education. However, in order to apply it successfully, caution is required, along with a clear understanding of the opportunities and difficulties it brings.

Grassini (2023), Conducted a study on "Shaping the future of education using ChatGPT". ChatGPT Has demonstrated impressive capabilities, including passing the US bar law exam and quickly accumulating over a million subscribers upon its release. Nevertheless, its influence on the education sector has generated diverse opinions. Some educators view it as a forward-thinking development, while others express concerns about its possible consequences, such as diminishing analytical abilities and fostering misconduct.

Aithal and Aithal (2023) Conducted a study on "Effects of AI-Based ChatGPT on Higher Education Libraries". After conducting an analysis, comparison, and evaluation of ChatGPT in relation to traditional and digital library systems, this paper offers recommendations for the integration of AI-GPTS in higher education.

Firaina and Sulisworo (2023), conducted a study on "Exploring the usage of ChatGPT in higher education". Although using ChatGPT for learning offers a fascinating and possibly effective option, users must employ caution and discretion when doing so. Additional interviews and case studies should be prioritized in future study to gain a deeper understanding of ChatGPT's involvement in learning. Respondents to the study appreciate its ability to increase productivity and learning effectiveness despite its inherent limitations.

Hassan (2023), Conducted a study on "Attitude towards Artificial Intelligence change in educational Era." Education is one area where artificial intelligence is poised to make significant improvements. Students should develop a positive attitude toward professional skills learning, as attitudes toward AI can be an important factor in the success or failure of AI education. The use of AI in education has offered parents, instructors, students, and of course, educational institutions an entirely new way to see education.

Baidoo- Anu and Ansah (2023), conducted a study on "Education in the genetic artificial intelligence". The paper underscores certain inherent limitations of ChatGPT, such as the potential to produce inaccurate information, amplify existing biases present in its training data, and raise privacy concerns. However, the study also provides suggestions on how ChatGPT can be utilized to optimize teaching and learning processes. It delves into the ways in which these evolving generative AI tools can be employed in a secure and constructive manner to enhance education and facilitate students' learning experiences.

Dempere et al. (2023), conducted a study on "The impact of ChatGPT on Higher Education". The transformative framework of ChatGPT and its broad applicability in the sphere of education were highlighted by the research. It also highlighted possible advantages, such as increased student services, streamlined enrollment procedures, improved teaching strategies, research support, and higher retention rates.

Fauzi et al. (2023), conducted a study on "The Impact of ChatGPT on Higher Education". This study aims to analyze ChatGPT's role in enhancing student productivity quality, ultimately finding that ChatGPT can indeed make a substantial contribution in this regard. This versatile language model offers multifaceted assistance to students by furnishing valuable information and resources, enhancing language proficiency, fostering collaboration, optimizing time management and effectiveness, as well as offering essential support and motivation.

Abdullah (2022), conducted a study on "Fundamentals, applications and social impacts of ChatGPT". ChatGPT has the capacity to fuel conversational AI applications, serving as a foundational technology for virtual assistants and chatbots. This paper explores both the model's capabilities and its potential social implications.

Since the launch of ChatGPT on November 30, 2022, numerous research studies have examined its educational and technological implications. Zhai (2023) found that ChatGPT can address complex challenges in science education through automated assessment, grading, and learning support. Similarly, Lund and Agbaji (2023) reported that the intention to use ChatGPT for community benefit was linked to information and privacy literacy.

Susnjak (2022) highlighted concerns that ChatGPT can replicate human-written text, threatening the security of online examinations. Biswas (2023) emphasized its usefulness in improving climate projections and supporting public health decision-making. Additionally, Sobania et al. (2023) showed that ChatGPT performs effectively in automated bug fixing, matching advanced deep learning methods. These studies demonstrate the growing potential and challenges of AI integration across diverse fields.

Critical Appraisal of the Literature Review

So far, the review represented a moderate analysis of studies that relate to the framework for some basic concepts that are fundamental to the study. Moreover, the review explores different works on the field of the study with a view to determine the gap which this study is filled in terms of contribution to knowledge. The review has provided the concept of ChatGPT and AI in a broad aspect. This has given me the opportunity to find out the research gap.

Identification of Research Gap

There is no particular research on the students of Ramkrishna Mission in the section of higher education.

Proposed area of study

In the light of review of the literature and past studies, the present study has been conducted from studies examining the data collected from the students who are used to ChatGPT and AI of Ramakrishna Mission Higher Studies Institute (WB).

Research Design

The study adopts a quantitative research approach, aiming to quantify students' attitudes towards ChatGPT and AI through numerical data. This approach allows for the identification of trends, patterns, and statistical relationships among variables. A descriptive survey design is employed to

gather standardized data across a wide population, which helps in understanding general attitudes, perceptions, and levels of acceptance.

Sources of Data

Students of Ramakrishna Mission Higher studies institutes (W.B).

Population of the study

The population for this study includes Undergraduate, Postgraduate and Teacher educator students from various disciplines in higher education institutions of Ramakrishna Mission higher studies institute (WB).

The sample and sampling techniques

A stratified random sampling technique is used to ensure representation across diverse academic streams (e.g., sciences, social sciences). Students are selected proportionally from each stratum.

Sample size of the study

A sample of 235 students is collected to ensure adequate statistical power and generalizability of the results.

Variables of the Study

In this study, variables are classified into two main categories: independent variables and dependent variables.

Independent Variables- These are the factors that may influence students' attitudes toward ChatGPT and AI. The independent variables in this study include: Age, Gender, Academic discipline (e.g., science, social science etc.), Level of study (graduate, postgraduate, Teacher educator)

Dependent Variable- Attitude towards using ChatGPT and AI

This is the primary outcome variable. It reflects the students' overall perceptions, acceptance, and disposition towards the use of ChatGPT and AI in their academic activities.

Tools used for the study

To collect and analyze data systematically, the tool has been used in the study- Questionnaire- The primary tool for data collection is a **structured questionnaire** designed to measure students' attitudes toward ChatGPT and AI. The questionnaire was developed based on existing literature and adapted to the context of higher education and AI use. It includes the following sections- **Demographic Information, Usage of ChatGPT and AI, Attitude Scale** (A 5-point Likert scale (Strongly Agree to Strongly Disagree) measuring various dimensions. The questionnaire was validated through expert reviews and a pilot test. Its reliability was confirmed using **Cronbach's alpha**.

Validity of the tool

Experts in the field of Educational Technology evaluated the content validity. Validity refers to the degree to which the tool measures, what it is meant to measure. Validity refers to whether the instrument or scale is quantifying what it claims. The scale was given to the teaching faculties of various colleges to test the validity of the items. Their suggestions and recommendations were taken into consideration and they agreed that the scale's items are valid and reliable for investigating the research aim and objectives. Therefore, it can be said that the utilization and attitude scale used in this study possesses content validity. As the Scale contains items that seem related to the measured variables, the utilization and attitude scale also possesses face validity. The intrinsic validity coefficient was established by taking the square root of the reliability coefficient which is 0.97.

Data collection procedure

The present study was conducted using the survey method among students of higher educational institutions of Ramakrishna Mission, West Bengal. Data were collected through questionnaires distributed to students in printed form. Respondents were given sufficient time to answer, and necessary clarification was provided whenever required. Confidentiality of responses was ensured, and participants were informed that the data would be used only for research purposes. They were encouraged to provide honest opinions without fear of right or wrong answers. Finally, the collected data were analyzed using appropriate statistical techniques and interpreted descriptively.

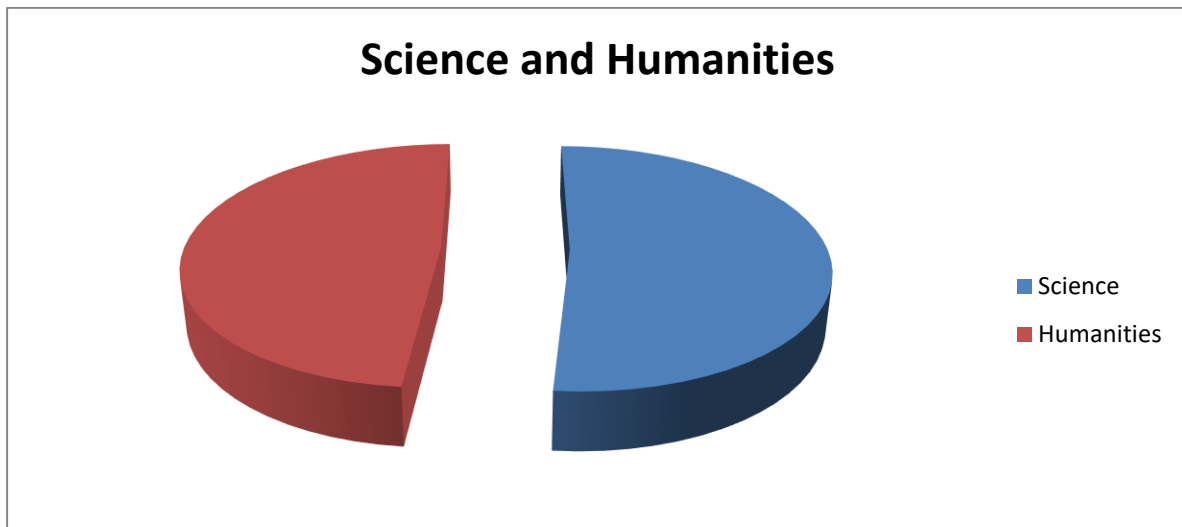
- i. Purchased questionnaire
- ii. Questionnaire duplication
- iii. Distribution of questionnaire
- iv. Evaluation of the questionnaire
- v. Scoring
- vi. Data presentation in table, graph or chart
- vii. Descriptive and inferential analysis are used
- viii. Findings are presented
- ix. Summary is drawn and conclusion is given
- x. Recommendation and suggestion for further study
- xi. Compilation of references and appendices are done for the study.

Presentation of the data

The data collected for this study is presented in both tabular and graphical formula to provide a comprehensive understanding of higher education students' attitude towards the use of ChatGPT and AI.

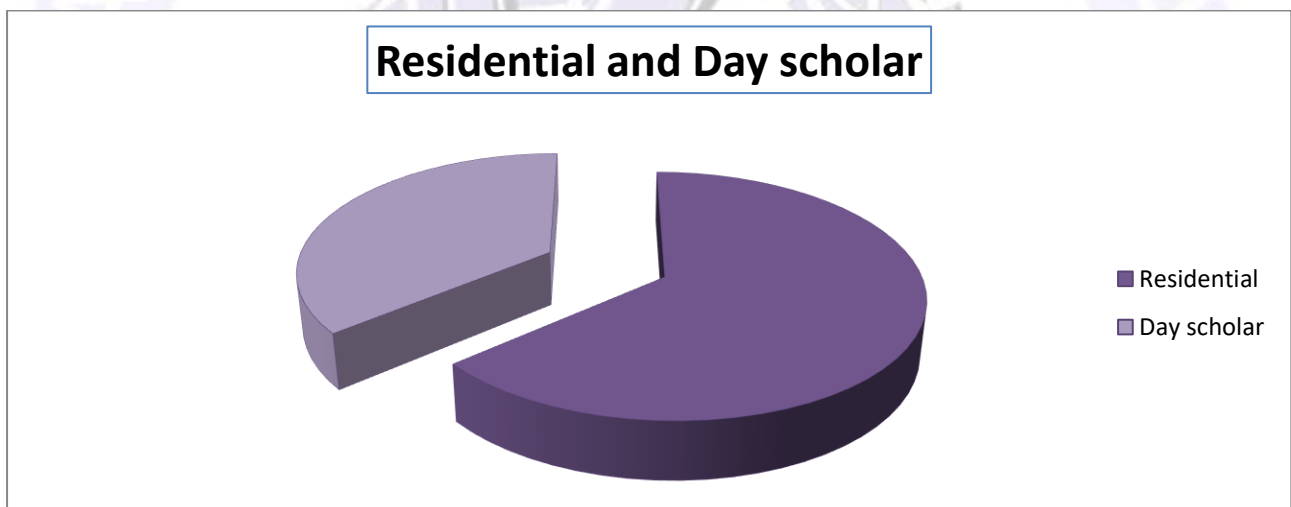
Demographic profile of respondents between Science and Humanitis stream-

Category	Frequency	Percentage
Science	121	51.49
Humanities	114	48.51



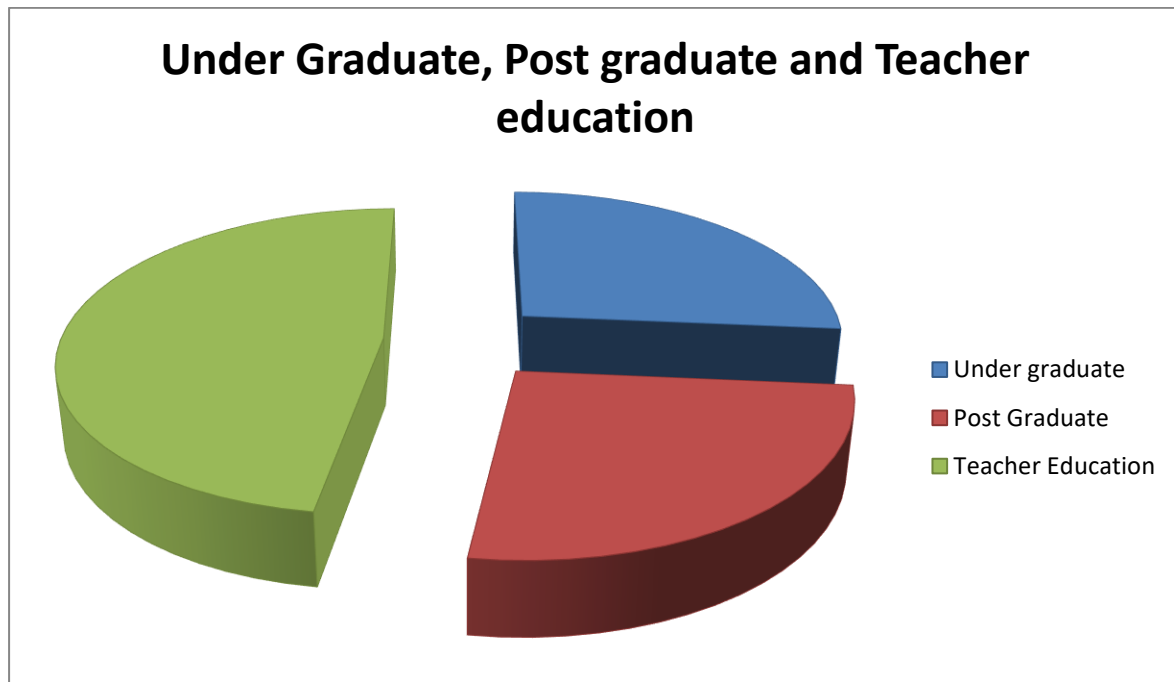
Demographic profile of respondents between Residential and Day scholar students -

Category	Frequency	Percentage
Residential	150	63.83
Day Scholar	85	36.17



Demographic profile of respondents between Under graduate, Post Graduate, and Teacher education students -

Category	Frequency	Percentage
Undergraduate	62	26.38
Post graduate	61	25.96
Teacher education	112	47.66



4.

This chapter presents the analysis and interpretation of quantitative data collected to examine the attitudes of higher education students towards the use of ChatGPT and AI tools in academics. The primary objective is to test the research hypotheses and identify any statistically significant differences in students' attitudes based on demographic and academic variables.

The data were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) to summarize general trends, followed by inferential statistical techniques such as:

Independent Samples t-test – to compare the mean differences between two independent groups (e.g., science vs. humanities students, residential vs. day scholars users of ChatGPT),

One-way ANOVA (Analysis of Variance) – to assess differences in attitudes across more than two groups (e.g., UG, PG AND Teacher education).

These tests were applied to determine whether any observed differences were statistically significant at the 0.05 level of significance. The assumptions of normality and homogeneity of variances were also tested before applying these parametric tests.

The findings presented in this section are organized based on the research objectives and hypotheses, with interpretation provided in the context of existing literature and the broader implications for educational practices involving AI.

Data Analysis and Interpretation

Objective 1: To discover the differences among the students towards the usage of ChatGPT and AI with reference to their academic streams (Science or Humanities)

H₀₁: There is no significant difference in attitude towards ChatGPT and AI between Science and Humanities students.

Table 4.1

t-Test for Equality of Means Between Science and Humanities Students

Group	Mean	Variance	N
Science	114.48	160.88	121
Humanities	112.32	211.05	114

An independent samples t-test assuming equal variances was conducted to compare the attitudes of Science and Humanities students. As shown in Table 4.1, the mean attitude score for Science students ($M = 114.48$, $SD^2 = 160.88$) was slightly higher than that for Humanities students ($M = 112.32$, $SD^2 = 211.05$). However, the t-statistic was not significant, $t(233) = 1.21$, $p = .23$, which is greater than the conventional alpha level of .05.

$t(233) = 1.21$, $p = .23$

Conclusion: Since $p > .05$, the null hypothesis was not rejected. There is no statistically significant difference in the attitude towards ChatGPT and AI between students from Science and Humanities backgrounds.

Objective 2: To discover the differences among the students towards the usage of ChatGPT and AI with reference to their residential status (Residential students or Day Scholars)

H₀₂: There is no significant difference in attitude towards ChatGPT and AI between Residential students and Day Scholars.

Table 4.2

t-Test for Equality of Means Between Residential and Day Scholar Students

Group	Mean	Variance	N
Residential	113.22	178.40	150
Day Scholar	113.81	200.32	85

An independent samples t-test assuming equal variances was conducted to compare the mean scores of Residential ($M = 113.22$, $SD^2 = 178.40$) and Day Scholar students ($M = 113.81$, $SD^2 = 200.32$). The results, shown in Table 4.2, indicate that the difference is not statistically significant, $t(233) = -0.32$, $p = .75$.

$t(233) = -0.32$, $p = .75$

Conclusion: The null hypothesis was not rejected. There is no statistically significant difference in attitude towards ChatGPT and AI between Residential and Day Scholar students. The small difference observed in means is likely due to random variation.

Objective 3: To compare the differences among students towards the usage of ChatGPT and AI with reference to their academic levels (Undergraduate, Postgraduate, and Teacher Education)

H₀₃: There is no significant difference in attitude towards ChatGPT and AI among Undergraduate, Postgraduate, and Teacher Education students.

Table 4.3

One-Way ANOVA for Academic Level

Group	N	Mean	Variance
Undergraduate (UG)	62	117.02	178.70
Postgraduate (PG)	61	115.39	159.48
Teacher Education (TE)	112	110.38	188.17

A one-way analysis of variance (ANOVA) was conducted to examine differences among the three academic groups. The results (Table 4.3) indicate a statistically significant difference in mean scores among the groups, $F(2, 232) = 5.81, p = .003$.

$$F(2, 232) = 5.81, p = .003$$

Since the ANOVA result was significant, post hoc t-tests were conducted:

UG vs PG: $t(121) = 0.69, p = .49$. No significant difference.

UG vs TE: $t(172) = 3.08, p = .002$. Significant difference.

PG vs TE: $t(171) = 2.36, p = .019$. Significant difference.

Conclusion: The null hypothesis was rejected. There is a statistically significant difference in attitudes towards ChatGPT and AI among the three academic levels. Specifically, Undergraduate and Postgraduate students showed significantly more positive attitudes than Teacher Education students.

Research Implication:

These findings suggest that students enrolled in Teacher Education programs may face challenges or have different perceptions regarding the integration of AI tools like ChatGPT. This may reflect disparities in training, resource availability, or curriculum relevance. Further qualitative research is recommended to explore the underlying causes and inform potential interventions or reforms in teacher education.

Major Findings

This chapter outlines the key findings that emerged from the analysis of data related to students' academic performance across different variables such as academic stream, residential status, and educational level.

Findings Based on Academic Stream

The study explored whether students from different academic streams—Science and Arts—showed any significant variation in academic performance. The findings revealed that although students from the Science stream appeared to perform slightly better, the difference was not statistically significant. This indicates that academic stream, in itself, does not have a major impact on student achievement.

Findings Based on Residential Status

An analysis was conducted to compare the academic performance of Day Scholar and Residential students. The results showed that both groups performed similarly in terms of academic scores. No meaningful difference was found between the two, suggesting that the type of residence or living arrangement has little to no influence on students' academic outcomes.

Findings Based on Educational Level

The study further examined academic performance among students at different educational levels—Undergraduate, Postgraduate, and Teacher Education. It was found that Undergraduate and Postgraduate students performed at comparable levels. However, students in Teacher Education programs consistently lagged behind the other two groups. This significant difference points toward potential challenges specific to the Teacher Education stream that may be affecting their academic performance.

Conclusions

The study has led to several important conclusions:

Students' academic stream, whether Science or Arts, does not play a decisive role in determining academic success.

Residential status—whether a student is a Day Scholar or resides on campus—also does not significantly influence academic performance.

Educational level, however, emerges as a critical factor. While Undergraduate and Postgraduate students perform similarly, students in Teacher Education programs show notably lower levels of academic achievement.

Educational Implications

The findings of this study suggest that while stream and residence may not require focused intervention, there is an urgent need to address the gaps within Teacher Education programs. This may include reviewing the curriculum, teaching practices, and student support services to ensure that these students receive adequate academic and institutional guidance.

Recommendations for Future Research

Future studies could benefit from incorporating qualitative methods to explore the underlying reasons for the lower performance of Teacher Education students. Expanding the scope to include multiple institutions or geographic regions could also provide more generalizable results. Furthermore, long-term studies tracking academic progress over time may offer deeper insights into the factors that contribute to or hinder academic success.

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