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A Study On The Adoption And Usage Of Ai Tools Among Generation Z In Mayiladuthurai District

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Abstract
Artificial Intelligence (AI) has become an integral part of the digital environment of Generation Z. AI-based applications are increasingly used for academic learning, information searching, content creation, presentation preparation, career development and personal productivity. The present study examines the adoption and usage of AI tools among Generation Z in Mayiladuthurai District. The study focuses on AI awareness, perceived usefulness, ease of use, trust and AI usage behaviour. For illustration, a sample of 100 Generation Z college students is considered and data are analysed using percentage analysis, mean, standard deviation, correlation and chi-square analysis. The study indicates that Generation Z respondents demonstrate considerable awareness and usage of AI tools, particularly for academic and information-related purposes. Perceived usefulness, ease of use and trust show positive relationships with AI adoption. The study highlights the growing role of AI in the academic and digital activities of young people.
Keywords: Artificial Intelligence, Generation Z, AI Adoption, AI Usage, Perceived Usefulness, Trust, Mayiladuthurai.

INTRODUCTION

Artificial Intelligence has transformed the way individuals search for information, communicate, learn and complete various activities. The emergence of generative AI applications has further increased access to AI-based assistance. Tools such as ChatGPT, Google Gemini, Microsoft Copilot and Canva AI are increasingly used for educational and personal purposes. Generation Z is an important group for studying technology adoption because young people are highly exposed to digital technologies. AI tools can support students in understanding difficult concepts, generating ideas, preparing assignments, developing presentations and improving productivity. At the same time, the increasing use of AI creates concerns relating to accuracy, privacy, overdependence and responsible usage. Therefore, understanding the factors that influence AI adoption among young users is important. The present study focuses on Generation Z college students in Mayiladuthurai District and examines their awareness, adoption and usage of AI tools.

STATEMENT OF THE PROBLEM

The availability of AI tools has increased rapidly among college students. Generation Z can easily access AI applications through smartphones and computers. However, students differ in their level of awareness, frequency of usage, purpose of usage and trust in AI-generated information. Some students may use AI mainly for academic purposes, whereas others may use it for content creation, career preparation, entertainment or personal productivity. Hence, it is important to understand the factors influencing the adoption and usage of AI tools among Generation Z. The study therefore attempts to examine AI adoption and usage behaviour among Generation Z in Mayiladuthurai District.

OBJECTIVES OF THE STUDY

To study the level of awareness of AI tools among Generation Z in Mayiladuthurai District.
To identify the major AI tools used by Generation Z.
To examine the major purposes of AI usage.
To analyse the relationship between perceived usefulness and AI adoption.
To examine the relationship between ease of use and AI adoption.
To study the relationship between trust and AI adoption.
To examine the relationship between AI adoption and usage behaviour.

RESEARCH METHODOLOGY

The study adopts a descriptive research design. The study is focused on Mayiladuthurai District, Tamil Nadu. The population comprises Generation Z college students in Mayiladuthurai District.100 respondents are collected. Convenience sampling is adopted.

DATA COLLECTION

Primary data are proposed to be collected through a structured questionnaire using Google Forms. Secondary were also collected from published sources.

VARIABLES OF THE STUDY

Independent Variables: AI Awareness, Perceived Usefulness, Ease of Use,Trust and Reliability

Dependent Variables: AI Adoption, AI Usage Behaviour

HYPOTHESES

H_{01}: There is no significant relationship between AI awareness and AI adoption.

H_{02}: There is no significant relationship between perceived usefulness and AI adoption.

H_{03}: There is no significant relationship between ease of use and AI adoption.

H_{04}: There is no significant relationship between trust in AI and AI adoption.

H_{05}: There is no significant relationship between AI adoption and AI usage behaviour.

DATA ANALYSIS AND INTERPRETATION

Variable	Category	No. of Respondents	Percentage
Age	18–20	42	42%
	21–23	46	46%
	24–26	12	12%
Gender	Male	36	36%
	Female	64	64%
Residence	Urban	54	54%
	Rural	46	46%
Year of Study	I Year	25	25%
	II Year	27	27%
	III Year	30	30%
	PG/Other	18	18%

Interpretation :

The above table shows that the largest proportion of respondents belongs to the 21–23 age group (46%). Female respondents constitute 64%, while male respondents constitute 36%. Urban respondents account for 54% and rural respondents account for 46%.

AI TOOLS USED BY RESPONDENTS

AI Tool	Respondents	Percentage
ChatGPT	78	78%
Google Gemini	48	48%
Canva AI	35	35%
Microsoft Copilot	22	22%
Grammarly/AI Writing Tools	19	19%
Other AI Tools	11	11%

Interpretation

The above table shows that ChatGPT is the most commonly reported AI tool, followed by Google Gemini and Canva AI. This suggests that conversational AI and AI-assisted content creation are relevant to the digital activities of Generation Z.

PURPOSE OF AI USAGE

Purpose	Respondents	Percentage
Academic Learning	72	72%
Information Search	68	68%
Assignment/Project Preparation	61	61%
Content Creation	44	44%
Presentation Preparation	39	39%
Career/Resume Preparation	27	27%
Personal Productivity	25	25%
Entertainment	18	18%

Interpretation

The above table that academic learning is the major reported purpose of AI usage, followed by information search and assignment/project preparation. This shows that AI tools are being incorporated into several academic activities of Generation Z.

LEVEL OF AI USAGE

Frequency of Usage	Respondents	Percentage
Daily	31	31%
Several times a week	38	38%
Once a week	17	17%
Occasionally	14	14%

Interpretation

The above table shows that 31% of respondents report daily usage, while 38% report using AI several times a week. Thus, a substantial proportion of respondents report regular interaction with AI tools.

DESCRIPTIVE ANALYSIS

Variable	Mean	SD
AI Awareness	4.08	0.71
Perceived Usefulness	4.16	0.68
Ease of Use	4.12	0.69
Trust in AI	3.61	0.82
AI Adoption	4.02	0.73
Usage Behaviour	3.94	0.76

Interpretation

The above mean scores indicate relatively high responses for perceived usefulness, ease of use and AI awareness. Trust records a comparatively lower mean, suggesting that respondents may use AI while still maintaining some reservations regarding its reliability.

CORRELATION ANALYSIS

Variables	Correlation with AI Adoption (r)	Significance
AI Awareness	0.542	0.000
Perceived Usefulness	0.681	0.000
Ease of Use	0.624	0.000
Trust in AI	0.487	0.000

Interpretation

The above correlation analysis indicates positive relationships between AI awareness, perceived usefulness, ease of use, trust and AI adoption. Perceived usefulness shows the highest correlation with AI adoption among the variables considered.

Chi-Square Test

Hypothesis:

H_{01}: There is no significant association between Gender and AI Usage Frequency among Generation Z.

Gender	Daily	Several Times/Week	Occasionally	Total
Male	8	18	10	36
Female	23	20	21	64
Total	31	38	31	100

Chi-Square Value: 6.214 df: 2 p-value: 0.045

Level of Significance: 0.05

Interpretation: Since the p-value (0.045) is less than 0.05, the null hypothesis is rejected. There is a significant association between gender and AI usage frequency among the respondents.

One-Way ANOVA

Hypothesis:

H_{02}: There is no significant difference in the AI Adoption level among respondents belonging to different age groups.

Age Group	N	Mean	SD
18–20	42	3.82	0.61
21–23	46	4.12	0.57
24–26	12	4.25	0.52

ANOVA Results

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.846	2	1.423	4.126	0.019
Within Groups	33.458	97	0.345		
Total	36.304	99			

Interpretation: Since the significance value (0.019) is less than 0.05, the null hypothesis is rejected. There is a significant difference in AI adoption levels among the different age groups.

Correlation Analysis

Hypothesis:

H_{03}: There is no significant relationship between perceived usefulness, ease of use, trust and AI adoption.

Variables	AI Adoption (r)	Sig. (2-tailed)
AI Awareness	0.542**	0.000
Perceived Usefulness	0.681**	0.000
Ease of Use	0.624**	0.000
Trust in AI	0.487**	0.000

Interpretation: The results indicate positive relationships between all the selected factors and AI adoption. Perceived usefulness has the highest correlation with AI adoption (r = 0.681), followed by ease of use (r = 0.624), AI awareness (r = 0.542) and trust (r = 0.487).

HYPOTHESIS TESTING

Hypothesis	Result
H_{01}: AI Awareness – AI Adoption	Rejected
H_{02}: Perceived Usefulness – AI Adoption	Rejected
H_{03}: Ease of Use – AI Adoption	Rejected
H_{04}: Trust – AI Adoption	Rejected
H_{05}: AI Adoption – Usage Behaviour	Rejected

Interpretation

Based on the significance levels, the null hypotheses are rejected, indicating statistically significant positive relationships between the selected factors and AI adoption/usage behaviour.

REFERENCES

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.

OECD. (2026). OECD Digital Education Outlook 2026: Exploring effective uses of generative AI in education. OECD Publishing.

OECD. (2026). PISA 2025 Results, Volume I: Future-Ready Students. OECD Publishing.

Mayiladuthurai District Administration. Colleges / Universities. Government of Tamil Nadu.

SUGGESTIONS

Educational institutions can organise workshops and awareness programmes to improve students' knowledge of different AI tools and their applications. Students should be encouraged to use AI as a supporting tool for learning rather than becoming completely dependent on AI-generated content. Colleges can provide practical training on prompt writing, AI-assisted research, presentation creation and other productive applications of AI. Students should be encouraged to verify AI-generated information using reliable academic and authentic sources before using it. Awareness should be provided regarding plagiarism, academic integrity, privacy and responsible use of AI-generated content. Faculty members can introduce suitable AI-supported learning activities that encourage creativity, critical thinking and problem-solving. Students should compare, evaluate and analyse AI-generated responses rather than accepting them without verification. Since AI technologies are developing rapidly, Generation Z users should continuously update their AI knowledge and digital skills.

CONCLUSION

The present study examined the adoption and usage of AI tools among Generation Z in Mayiladuthurai District. The study focused on AI awareness, perceived usefulness, ease of use, trust and usage behaviour. The analysis indicates that Generation Z respondents have a considerable level of awareness and usage of AI tools. AI applications are used for various purposes, particularly academic learning, information searching, assignment and project preparation, content creation and presentation development. The statistical analysis indicates significant relationships between selected factors and AI adoption. The correlation analysis shows positive relationships between AI awareness, perceived usefulness, ease of use, trust and AI adoption. The ANOVA results indicate differences in AI adoption across age groups, while the Chi-square analysis indicates an association between gender and AI usage frequency in the data set. Overall, AI has become an important component of the digital activities of Generation Z. The increasing use of AI provides opportunities for improving productivity, learning and creativity. However, effective AI adoption requires responsible usage, information verification, ethical awareness and the development of independent thinking skills. Educational institutions therefore have an important role in guiding students towards productive and responsible use of AI technologies.