Attitudes and Behaviors regarding the use of Artificial Intelligence among students of the Faculty of Science, Chiang Mai University, Academic year 2025.

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Abstract

This study examined attitudes, usage behaviors, and factors associated with AI adoption among undergraduate students in the Faculty of Science, Chiang Mai University. The minimum required sample size was 335 students, and 348 students were included in the analysis. Data were collected using an online questionnaire and analyzed using descriptive statistics and the Likelihood-Ratio Test. The results showed that students generally had positive attitudes toward AI, especially regarding perceived usefulness and perceived ease of use. AI was mainly used for information searching, content summarization, and problem solving. ChatGPT was the most frequently used AI tool. Year of study, major, perceived usefulness, perceived ease of use, and social influence were significantly associated with AI usage behaviors. These findings suggest that universities should support effective and responsible AI use in higher education.

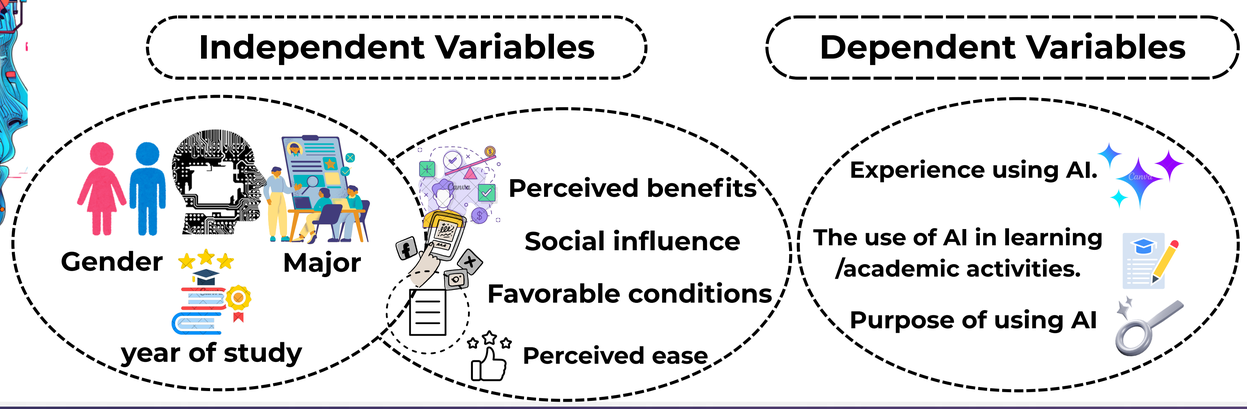
Introduction

Artificial Intelligence (AI) is increasingly used in higher education to support learning, information searching, writing assistance, and problem solving. Understanding students' attitudes and AI usage behaviors is important for curriculum development and digital skill enhancement. This study investigated attitudes, usage behaviors, and factors associated with AI use among undergraduate students in the Faculty of Science, Chiang Mai University.

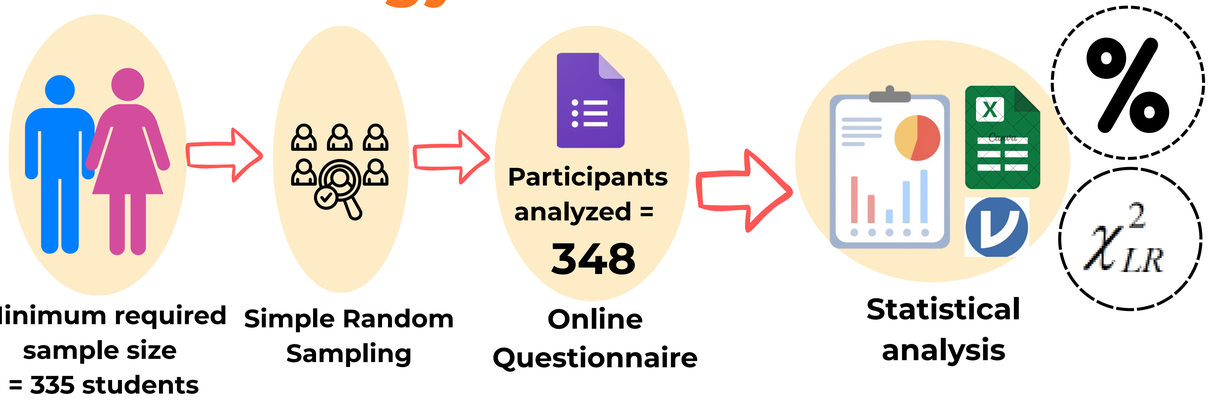
Objectives

1. To examine students' attitudes toward AI.
2. To investigate AI usage behaviors in academic contexts
3. To identify factors associated with AI usage behaviors

Conceptual framework



Methodology and Tools



Results

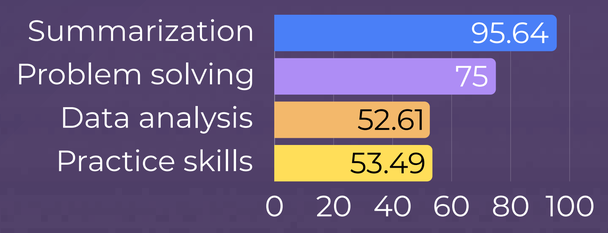
- Participant Characteristics
- Behavioral patterns in using Artificial Intelligence
- Factors affecting the behavioral patterns in using Artificial Intelligence

The analysis showed that students generally had positive attitudes toward AI and actively used AI in academic activities. AI was mainly used for information searching, content summarization, problem solving, and data analysis.

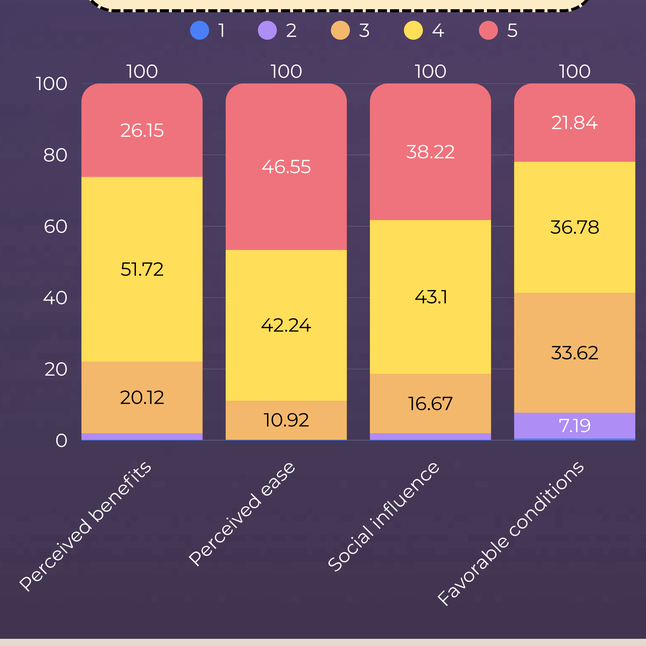
Year of Study



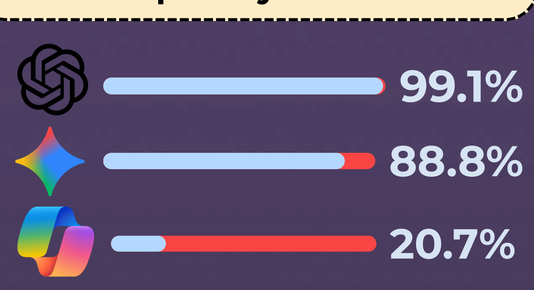
AI Usage Behaviors



Attitudes toward AI



Most Frequently Used AI Tools



Factors Associated with AI Usage

Significant factors (P-Value < 0.05)

Gender
- Use AI to analyze data (0.0021)

Major
- The use of AI in learning/academic activities. (0.0157)
- Use AI to generate ideas (<0.0001)
- Use AI to translate (<0.0001)
- Use AI to train skills (<0.0001)

Perceived benefits
- Fuse of AI in learning/academic activities (0.0029)
- Frequency of AI use in learning activities (0.0092)
- Use AI to summarize content (0.0005)

Year of Study
- Frequency of AI use in learning/Academic activities (0.0203)
- Use AI to generate ideas (0.0218)
- Use AI to analyze data (0.0041)

Perceived ease of use
- Use AI to translate (0.0390)

social influence
- use of AI in learning/academic activities (0.0034)
- Frequency of AI use in learning activities (0.0460)
- Use AI to summarize content (0.0028)

Conclusion and Discussion

Students in the Faculty of Science, Chiang Mai University showed positive attitudes toward AI and actively used AI in academic activities, especially for information searching, summarizing content, and problem solving. ChatGPT was the most frequently used AI tool. In addition, year of study, major, perceived usefulness, perceived ease of use, and social influence were significantly associated with AI usage behaviors. These findings suggest that universities should provide structured support to promote effective and responsible AI use in higher education.

Implications

- AI Literacy Curriculum
- Responsible AI Training
- AI-Enhanced Learning
- Digital Competency

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