# Assessing Undergraduate Science Students' Understanding of Type 2 Diabetes at Chiang Mai University, Academic Year 2025.

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## Abstract

This study assessed diabetes mellitus knowledge among 182 Faculty of Science students at Chiang Mai University for the 2025 academic year. Data collected via questionnaires using stratified and simple random sampling were analyzed using descriptive statistics, Mann-Whitney U, and Kruskal-Wallis tests. Most participants were female (59.9%), and 62.1% had a direct relative with diabetes. Knowledge scores differed significantly based on academic year, field of study, and having a direct relative with diabetes, but no significant difference was found regarding gender.

## Introduction

The prevalence of Type 2 Diabetes is rapidly increasing both globally and in Thailand. University students are particularly vulnerable due to lifestyle transitions that can negatively impact their diet and physical activity. Therefore, assessing their current knowledge and preventive behaviors is crucial to raise awareness and develop effective prevention strategies for the future.

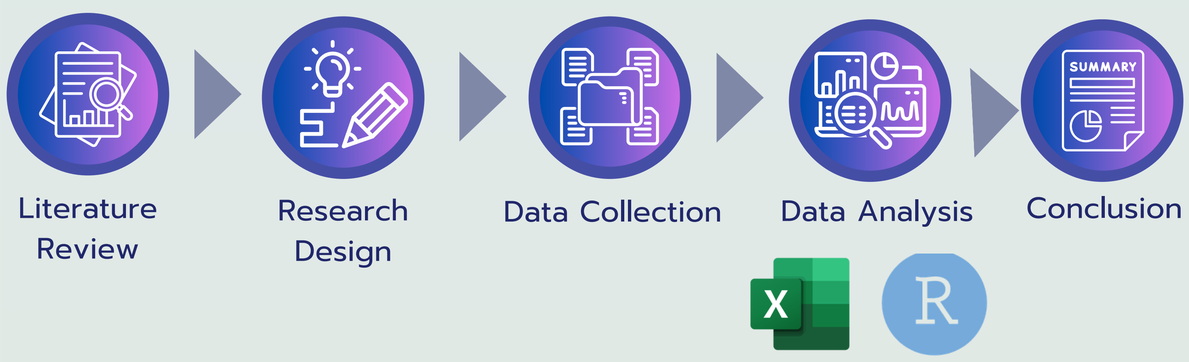




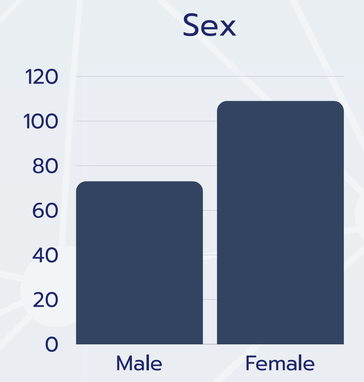

## Objectives

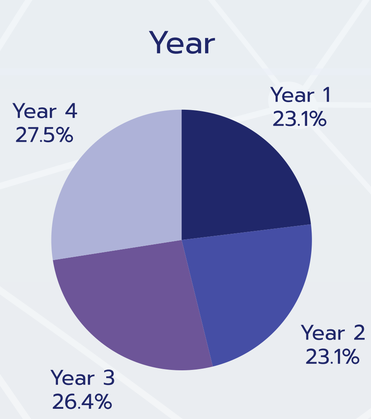
The objective of this study is to assess the level of knowledge and understanding regarding diabetes mellitus among undergraduate students in the Faculty of Science at Chiang Mai University for the 2025 academic year.

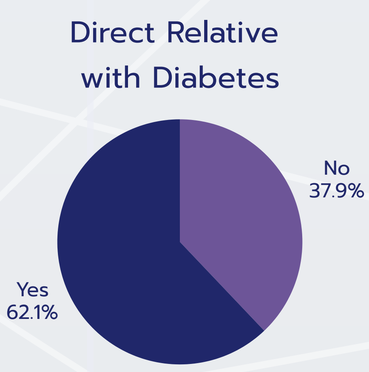
## Methods




## Results



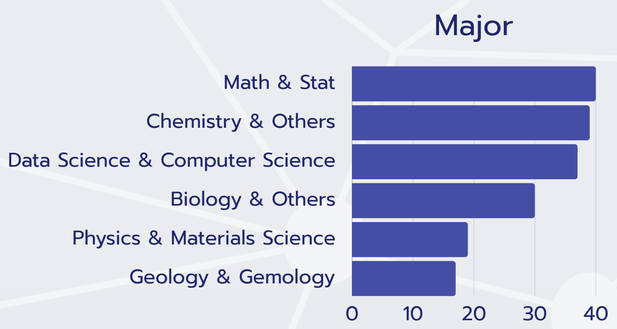
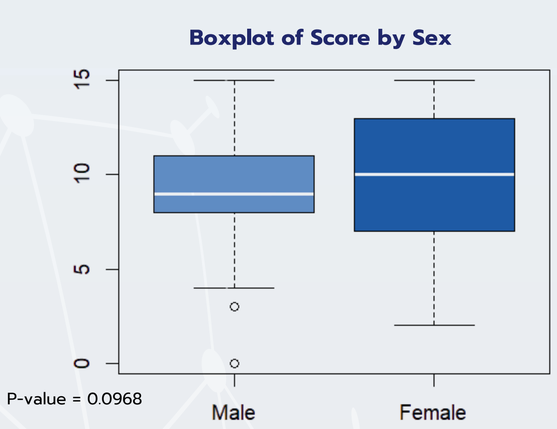
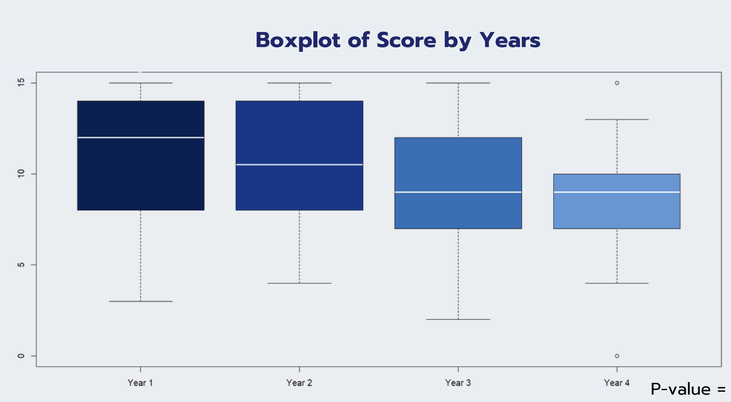
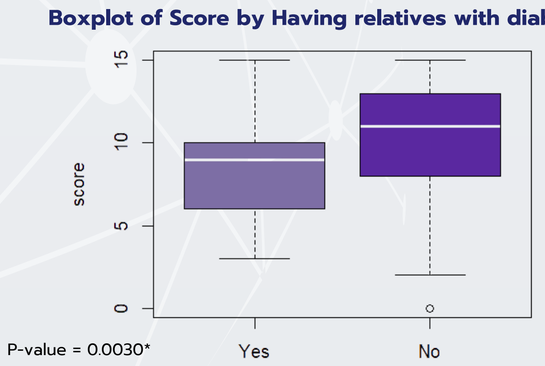




Figure 1. Descriptive statistics of participants including sex, academic year, family history of diabetes, and field of study.



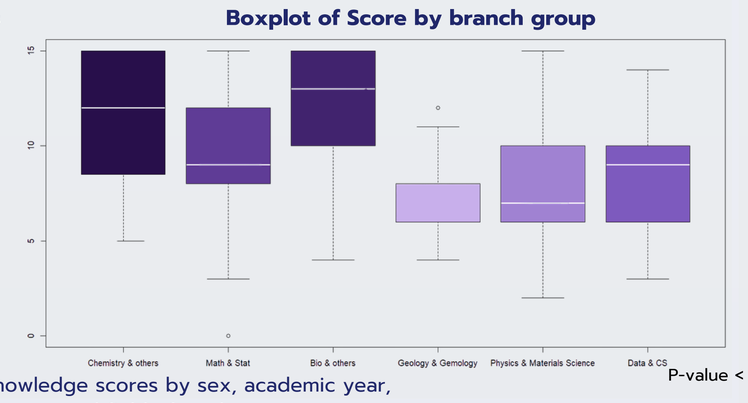




Figure 2. Comparison of diabetes knowledge scores by sex, academic year, family history of diabetes, and field of study.

## Conclusions

The study concludes that academic year, field of study, and a family history of diabetes significantly affect students' knowledge scores, with those having a family history tending to score higher. In contrast, gender shows no significant effect on the overall knowledge scores. However, when categorized into knowledge levels (low-moderate versus high), all factors-gender, academic year, field of study, and family history-are significantly associated with the students' level of understanding. These findings highlight the necessity for targeted health education and proactive diabetes prevention strategies, particularly focusing on students without a family history of the disease, to foster long-term health awareness.

## References

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