

The Relationship Between E-Textbook Use and Computer Self-Efficacy Among Higher Education Students at CDI College, Mississauga Campus

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Introduction

- Technology is changing education rapidly.
- E-textbooks are replacing traditional textbooks in many colleges.
- Students today are expected to be confident with digital tools.
- Understanding how e-textbook use affects students' confidence in using computers is essential.

Purpose of the Study

- To examine whether using e-textbooks influences students' confidence in using computers (computer self-efficacy).
- To see if this relationship differs depending on:
 - Field of study
 - Age group
 - GPA

Research Questions

- Is there a significant difference in students' behavior toward e-textbooks based on their field of study?
- Does computer self-efficacy vary by age group?
- Is there a relationship between computer self-efficacy and students' academic performance (GPA)?

Literature Review

- Teachers like e-textbooks because they can be updated quickly. Students like them because they cost less than paper books. Some e-textbooks are free to read online or have different prices, like a small donation or payment for one term (Stone, R. et al., 2013).
- Self-efficacy shows how much a person believes in self to do the task and make a change in behavior. It has a big effect on motivation, how much effort a person gives, and how long they keep trying, special in learning (Stone, R. et al., 2013).

Methodology

- Participants: 30 higher education students from CDI College Mississauga campus.
- Method: Quantitative survey.
- Data Analysis: One-Way ANOVA.
- Variables:
 - Dependent: E-textbook use, computer self-efficacy.
 - Independent: Field of study, age, GPA.

Demographic Background

Figure 1. Gender Distribution of Survey Participants

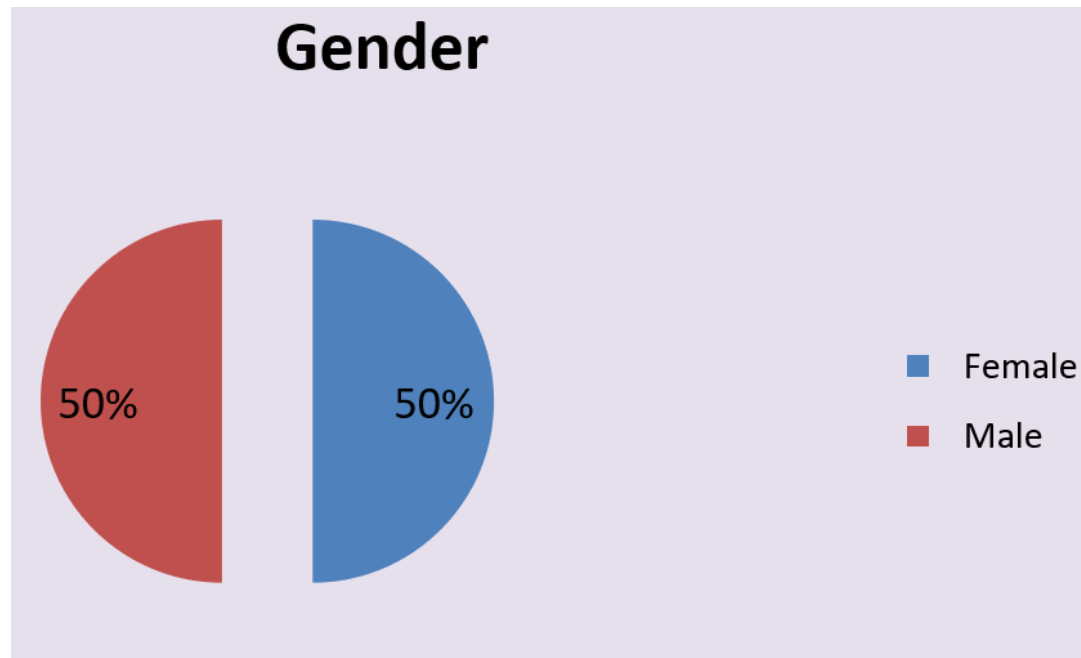
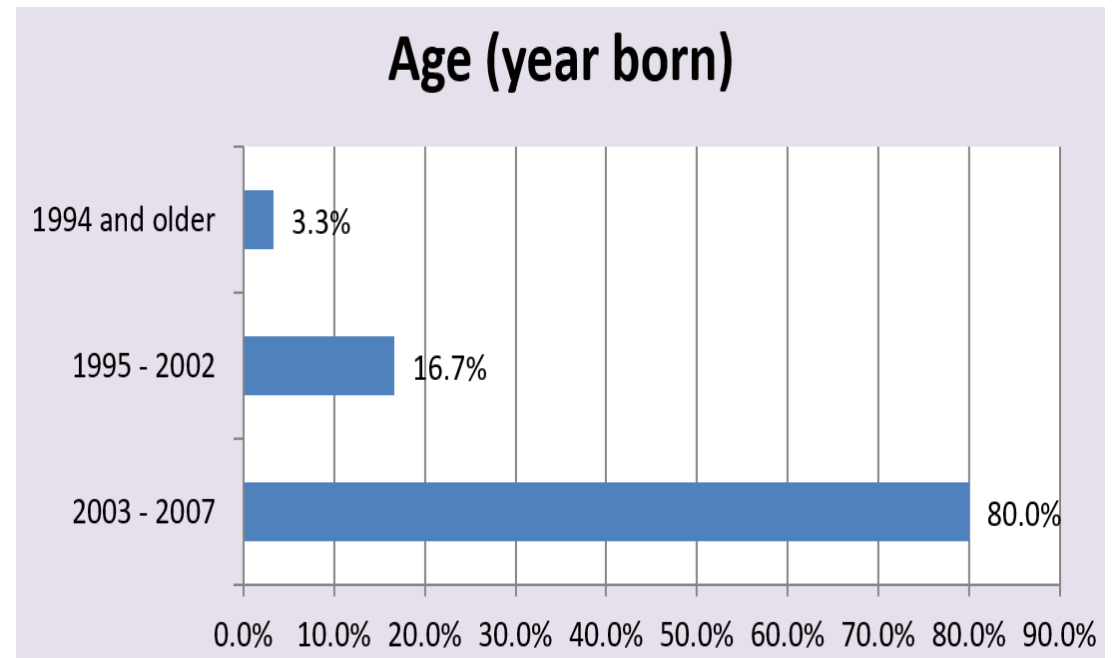


Figure 2. Age (year born) Distribution of Survey Participants



Demographic Background

Figure 3. GPA Distribution of Survey Participants

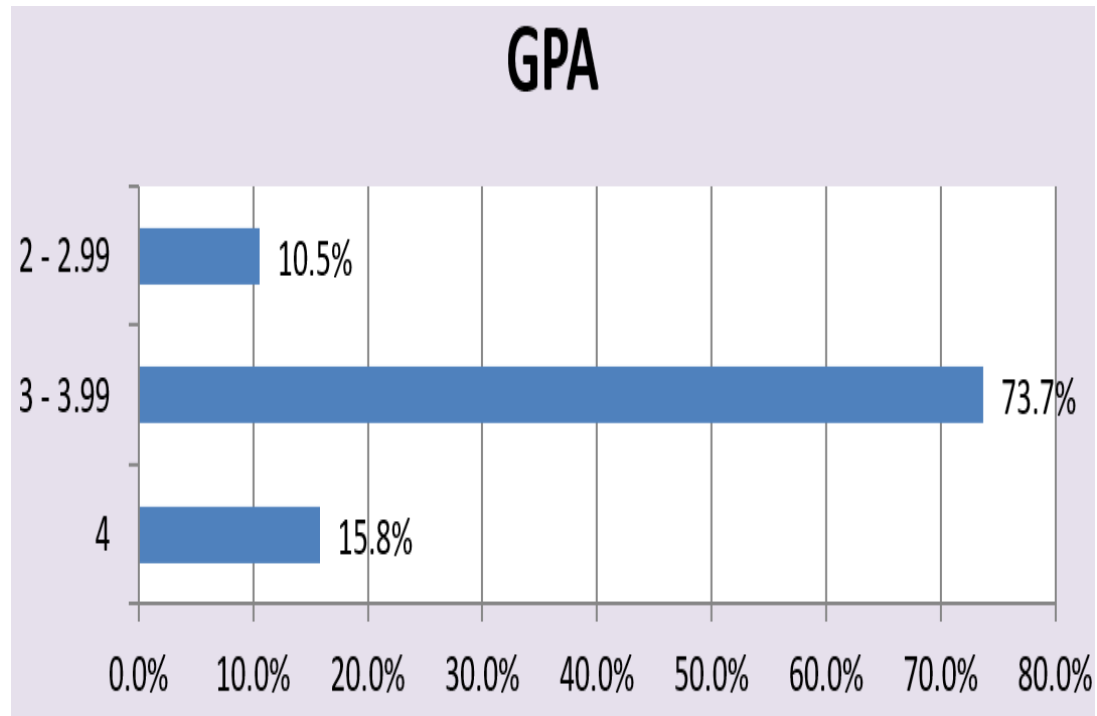


Figure 4. Ethnicity Distribution of Survey Participants

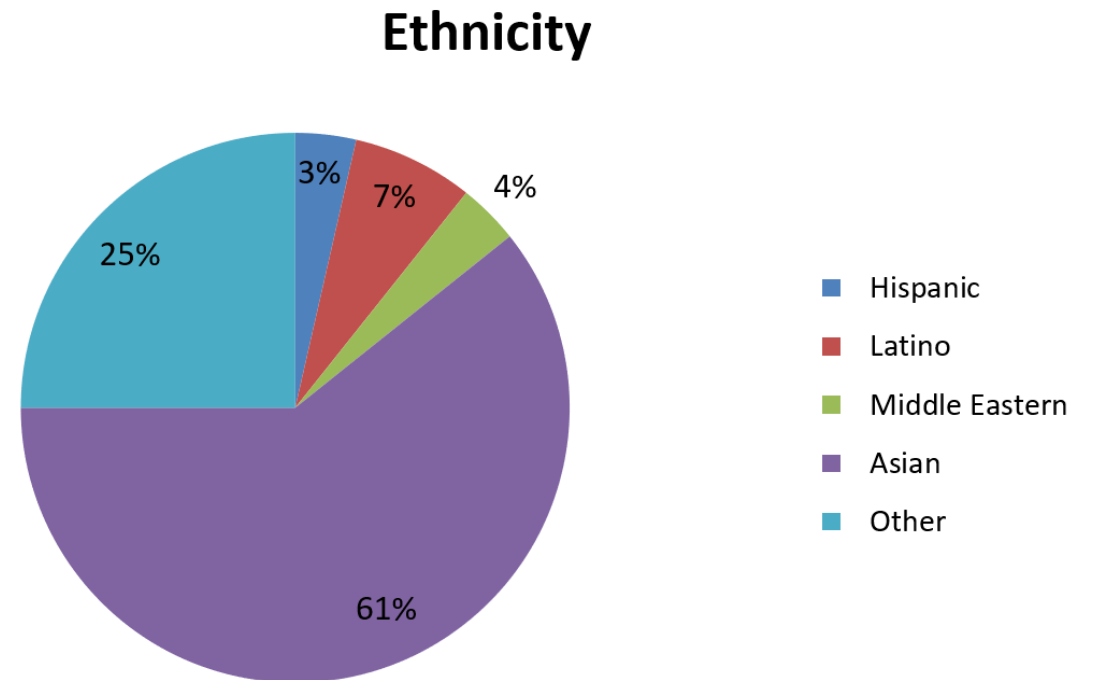
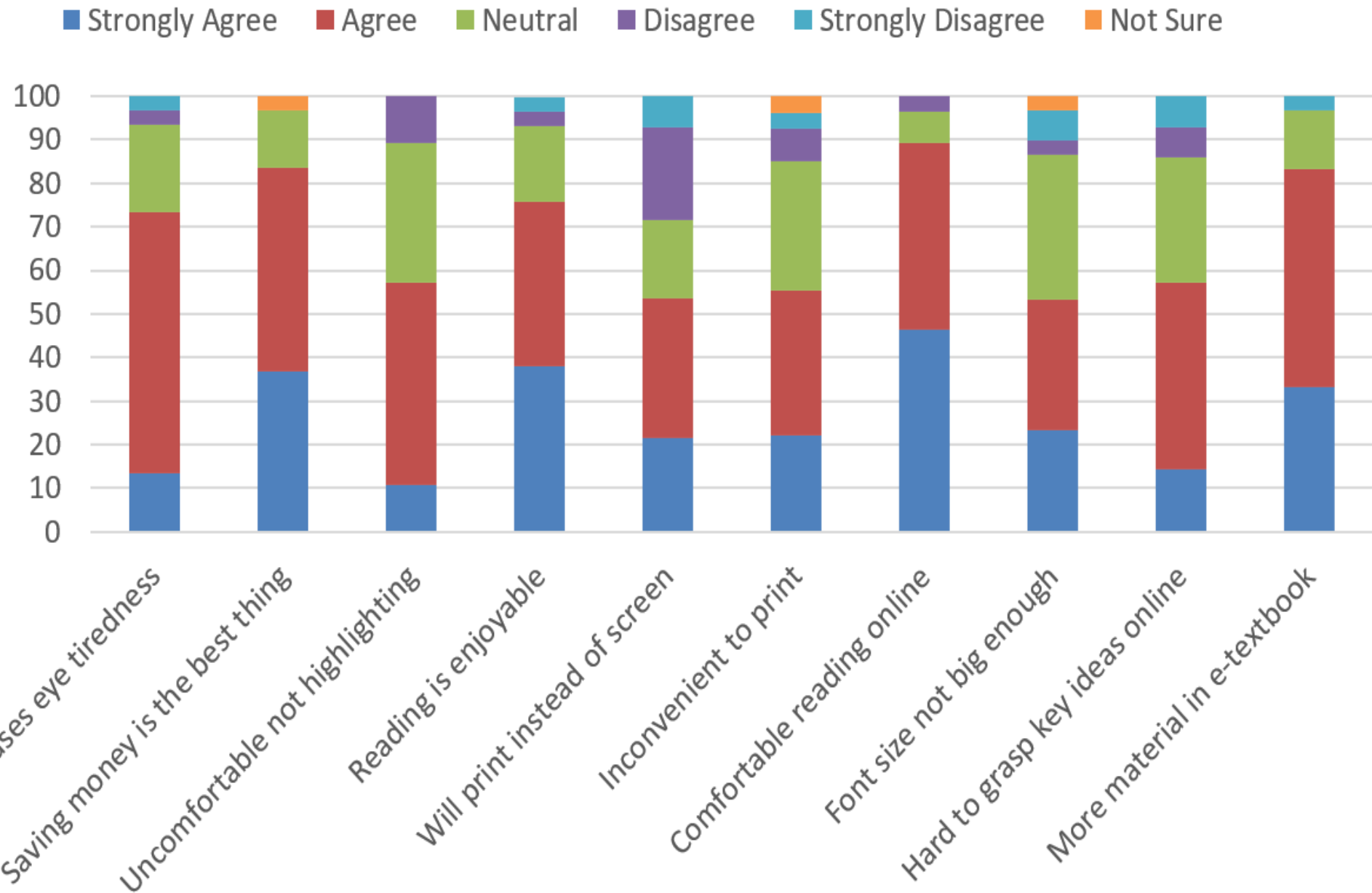


Figure 5. Clustered Bar Chart Presenting Electronic Textbook Usage Data

Student's Openion on E-Textbook Usage

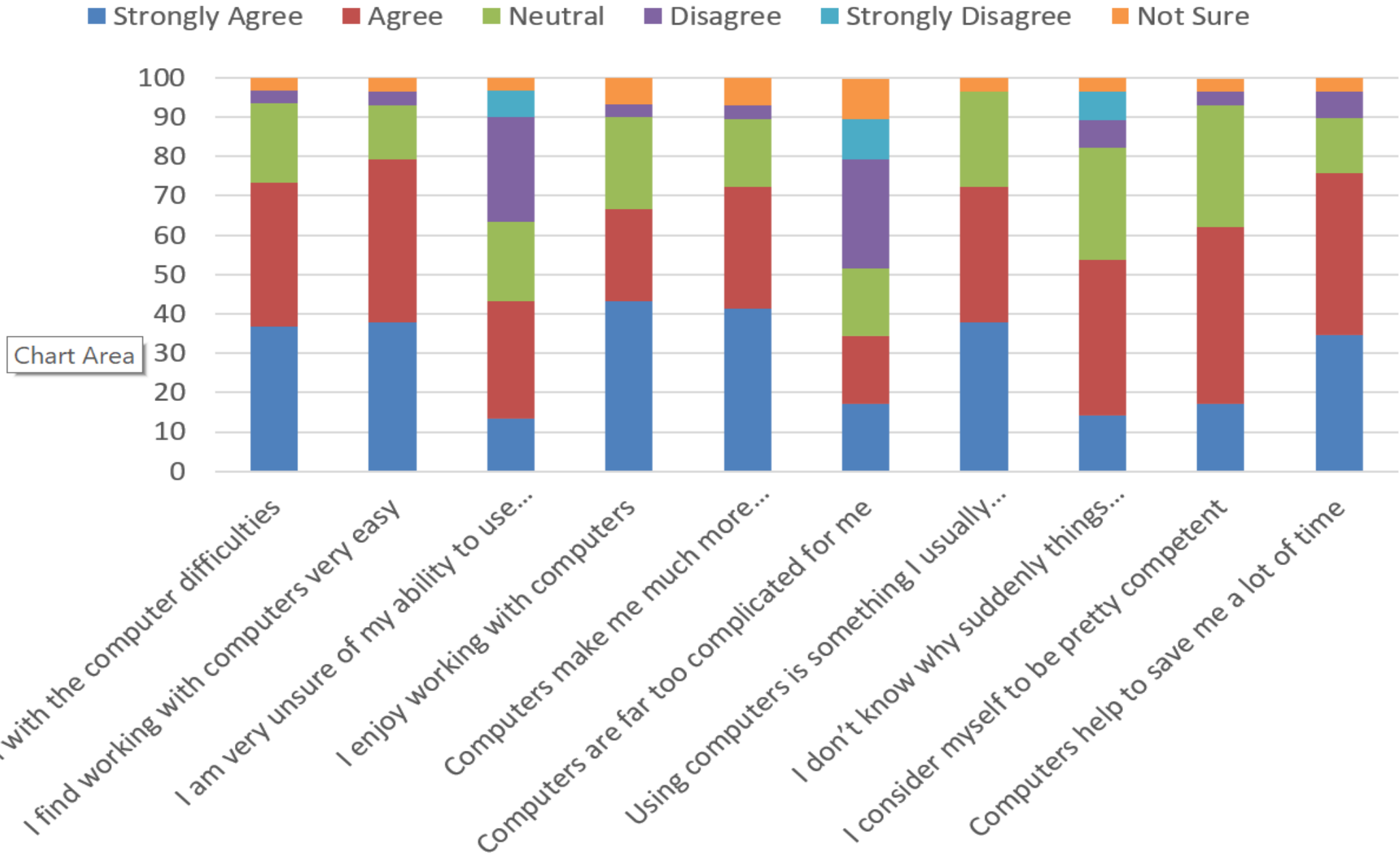


Mean of 2-2.5 for most of the independent variables

Median of 2 for all of the independent variables

Figure 6.
Clustered
Bar Chart
for
Computer
Self-
Efficacy

Student's Opinion on Computer Self-Efficacy



Hypotheses

- H1: There is a significant difference in students' behavior toward e-textbooks based on their field of study.
- H2: There is a significant difference in computer self-efficacy between students from different age groups.
- H3: There is a significant relationship between students' computer self-efficacy and their academic performance (GPA).

Results

- Most students reported positive experiences with e-textbooks and high computer self-efficacy.
- No statistically significant differences found across:
 - Field of study
 - Age groups
 - GPA levels
- All p-values $> .005$. No research hypothesis confirmed.
- ANOVA Analysis Comparing Students':
 - Attitudes Toward E-Textbooks by Fields of Study: P-Values range .243 - .940
 - Self-Efficiency Toward Computers by Age Groups: P-Values range .161 - .997
 - Competence Toward Computers by GPA: P-Values .064 - .987

Conclusion and Implications

- No big difference found in digital confidence based on background.
- It suggests that students today might already have technological skills, no matter their background.
- It gives new information about international students in Canada.
- It shows that while e-textbooks may not make a big change in digital confidence, they help in learning in a digital environment.

Limitations

- Small sample size (30 students from one campus).
- Data was self-reported, which may have response bias.

Recommendations for Future Research

- Involve a larger and more diverse sample from various colleges.
- Conduct longitudinal studies to observe changes over time.
- Use qualitative methods (e.g., interviews) to explore deeper insights into student experiences and motivations.

References

- Ditmyer, M. M., Dye, J., Guirguis, N., Jamison, K., Moody, M., Mobley, C. C., & Davenport, W. D. (2012). Electronic vs. traditional textbook use: Dental students' perceptions and study habits. *Journal of Dental Education*, 76(6), 728–738.
- Stone, R. W., & Baker-Eveleth, L. J. (2013). Students' intentions to purchase electronic textbooks. *Journal of Computing in Higher Education*, 25(1), 27–47. <https://doi.org/10.1007/s12528-013-9065-7>

Questions

Thank you

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