

Date Published: July 2021

## Key Factors Influencing Students' Post-Triability Intention to Adopt E-Textbooks in a Medium-Size University

Halbana Tarmizi

*Bemidji State University*, halbana.tarmizi@bemidjistate.edu

Hamdan Alabsi

*Bemidji State University*, hamdan.alabsi@bemidjistate.edu

Mahmoud Al-Odeh

*Bemidji State University*, mahmoud.al-odeh@bemidjistate.edu

Follow this and additional works at: <https://openspaces.unk.edu/mpjbt>



Part of the [Technology and Innovation Commons](#)

---

### Recommended Citation

Tarmizi, H., Alabsi, H., & Al-Odeh, M. (2021). Key Factors Influencing Students' Post-Triability Intention to Adopt E-Textbooks in a Medium-Size University. *Mountain Plains Journal of Business and Technology*, 22(1). Retrieved from <https://openspaces.unk.edu/mpjbt/vol22/iss1/8>

This Empirical Research is brought to you for free and open access by OpenSPACES@UNK: Scholarship, Preservation, and Creative Endeavors. It has been accepted for inclusion in Mountain Plains Journal of Business and Technology by an authorized editor of OpenSPACES@UNK: Scholarship, Preservation, and Creative Endeavors. For more information, please contact [weissell@unk.edu](mailto:weissell@unk.edu).

---

## Key Factors Influencing Students' Post-Triability Intention to Adopt E-Textbooks in a Medium-Size University

### Cover Page Footnote

We would like to thank Ihsan Rizky (University of Minnesota - Twin Cities) for his time and effort in proofreading our paper.

# KEY FACTORS INFLUENCING STUDENTS' POST-TRIABILITY INTENTION TO ADOPT E-TEXTBOOKS IN A MEDIUM-SIZE UNIVERSITY<sup>1</sup>

HALBANA TARMIZI  
BEMIDJI STATE UNIVERSITY

MAHMOUD AL-ODEH  
BEMIDJI STATE UNIVERSITY

HAMDAN ALABSI  
BEMIDJI STATE UNIVERSITY

## ABSTRACT

In recent years, E-textbooks have become a real alternative to the traditional textbooks in higher education. Many institutions have been encouraging their usage with mixed success. This study investigates students' perceptions of E-textbooks in a medium-sized university in the Midwestern United States and measures students' intention to adopt E-textbooks where they had an option to choose between traditional textbooks and E-textbooks for their classes. Literature reviews indicated some inconsistencies related to E-textbook adoptions. We used the Technology Acceptance model to investigate these inconsistencies. We considered three factors in this study: Perceived Ease of Use, Perceived Values, and Technology-Savvy. An E-textbook adoption model is proposed, and we used an online survey to collect data among students on campus. In this study we focus on those students who have tried E-textbooks in at least one of their classes and assess their intention to adopt. This study confirms that the Perceived Ease of Use is a critical factor to consider for the successful adoption of E-textbooks.

**Keywords:** Adoption; E-textbooks; Perceived Ease of Use, Technology Savvy; Perceived Value

## INTRODUCTION

E-textbook usage has been exponentially growing for the last decade. This growth can be explained by the practical improvements provided to readers, including accessibility, availability, survivability, and, most importantly, ecological responsibility. Additionally, data-oriented applications and devices (e.g., Amazon Kindle) have become ubiquitous, and users have become accustomed to massive increases in data storage capabilities and computational power. Furthermore, one of the leading textbook publishers, Pearson, announced its digital-first strategy to encourage students to adopt digital courseware materials (McKenzie 2019). The demand for digitized books has increased accordingly, making E-textbooks the preferred option in most academic societies. The global E-books market was valued at \$18.13 billion in 2020 and is expected to reach \$23.12 billion by 2026. The largest E-textbook market is in North America, and the fastest-growing market is in the Asia Pacific. These numbers are expected to grow during the COVID-19 pandemic since many institutions have moved their courses online (MordorIntelligence 2021).

---

<sup>1</sup> Submitted: 30 Mar 2021; Revised: 26 Jun 2021; Accepted: 26 Jun 2021

This paper discusses the influencing factors contributing to college students' adoption of E-textbooks, including Perceived Ease of Use, Perceived Value, and Technology-Savvy. In a previous study, Tarmizi and Al-Odeh (2015) hypothesized that those factors would positively influence the adoption of E-textbooks. We conducted a survey among students at a medium-sized university in the United States Midwest to investigate those hypothesized relationships. This research paper is organized into six parts: Research Gap, Literature Review, Methodology, Empirical Results, Discussion, followed by Implications, and the Conclusion.

### RESEARCH GAP

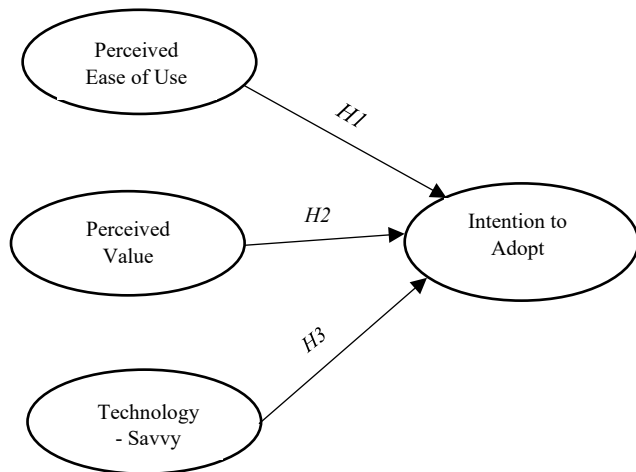
The researchers found a lack of research studies regarding the factors that influence E-textbook adoptions in small-to-medium-sized institutions in some parts of the United States. This research might help in closing that gap by investigating the factors influencing E-textbook adoptions by college students of small-to-medium-sized universities located in the United States Midwest. In addition, this research can be used as baseline information for future studies. The focus of this research is to answer the following questions:

1. Is there a relationship between Intention to Adopt and Perceived Value of E-textbooks?
  2. Is there a relationship between Intention to Adopt and Perceived Ease of Use for E-textbooks?
  3. Is there a relationship between Intention to Adopt and Technology-Savvy of students?
- We tested the following three hypotheses, as illustrated in Figure 1, in this study:

H1: Perceived Ease of Use is positively related to Intention to Adopt.

H2: Perceived Value of E-textbooks is positively related to Intention to Adopt.

H3: Technology-Savvy is positively related to Intention to Adopt.



**Figure 1: Relationships Among Factors**

One of the important factors in E-textbook adoption is its trialability. As Rogers (2003) argued, trying out an innovation would allow one to remove uncertainty about it. Therefore, in this study, we only considered respondents who had tried E-textbook in at least one of their classes.

## LITERATURE REVIEWS

Research on electronic textbooks or E-textbooks has been done by several researchers looking at different aspects of E-textbooks. Scholars from various countries have conducted and continue to research the adoption of E-textbooks. Bansal (2010) listed several studies related to E-textbook usage and usability. In his paper, each study was listed to include information on how data was collected and the method of analysis. Many of the studies had a wide range of respondents, with some studies having up to 1,372 and others as low as twenty-seven. In the research itself, Bansal (2010) focused on the role of environmental consciousness and personality on E-textbook usage. We used the Technology Acceptance Model by Davis (1989) in this study to assess the intention to continue the usage of E-textbooks, based on two constructs: Perceived Ease of Use and Perceived Usefulness.

A recent study from Indonesia by Sisko et al. (2020) examined the determinant factors in the intention to use E-books, including the Perceived Ease of Use factor. Their findings suggested that the Perceived Ease of Use positively affected the usage of E-books. They confirmed that their finding on this factor is consistent with previous studies, including a study from South Africa by Osih and Singh (2020).

However, a number of inconsistencies can be found in the results of some of the studies. Zhao et al. (2019) gave examples of inconsistencies in the relationship between E-textbooks and student performance. Kassis, Boldt, and Lopez (2008) studied online textbooks with an integrated web-based homework management product. They found that using the online textbook (E-textbooks) in combination with a homework management system called Aplia did have a negative, although insignificant, impact on student performance. Other studies, including Mizrachi (2015) and Wu & Peng (2017), also found that students using printed textbooks showed significantly better performance than those using E-textbooks. However, several studies found that the use of E-textbooks resulted in better performance, e.g., Dennis et al. (2016) and Biranvand and Khasseh (2014). A study by Daniel and Woody (2013) comparing students' performance based on using E-textbooks vs. traditional textbooks found that reading time for E-textbooks was higher because students were doing multitasking while using E-textbooks.

Another factor that exhibits inconsistencies across several studies is the role of pricing of E-textbooks. McGowan, Stephens, and West (2009) looked at students' perceptions of E-textbooks. They found that students, in general, preferred traditional textbooks. In addition, they looked at gender, age groups, education level, and prior use. Some of the features that make E-textbooks attractive to students were their cheaper cost and light weight. Baker-Eveleth and Stone (2016) conducted a study to find factors influencing adopters and non-adopters of E-textbooks. In this study, they received 1,434 responses from students consisting of 758 adopters and 464 non-adopters. Using content analysis, they looked into comments regarding E-textbooks. They identified six themes from those comments: Price/Cost, Usability, Type of Class, Ownership, Accessibility, and Learning Impacts. In the Price/Cost, students who were non-adopters indicated that they didn't see the significant price differences of E-textbook compared to printed textbooks. On the other hand, adopters viewed a significant price differences between E-textbooks and printed textbooks. Another study conducted in Taiwan revealed that the data from experienced students showed that Perceived Cost (PC) had no significant impact on their Behavioral Intention (BI) (Hung, Hsieh and Huang 2018). A study by Wiese and Plessis (2014) looked into the role of

libraries for E-textbook acceptance. They found that students did not perceive E-textbooks as more valuable than the traditional textbook. Furthermore, they pointed out the role of price (value) in E-textbooks' possible acceptance. Therefore, it is interesting for the researchers to see whether the price is one of the important factors for adopting E-textbooks.

Research conducted by Sun and Flores (2013) on the Technology-Savvy factor in relation to E-textbooks found that Technology-Savvy positively influenced someone's E-textbook experiences, including learning outcomes. Furthermore, technology savviness has been a significant factor in adopting and using many information technologies, including smartphones, social media, and websites (Moore, et al. 2020).

As Wiese and Plessis' study (2014) argued that E-textbook's usefulness was not perceived as significant compared to the traditional textbook, the researchers did not include the perceived usefulness construct in this study. Using Bansal's findings (2010), the researchers argue that Perceived Ease of Use will be positively associated with the intention to adopt. Furthermore, we claim that E-textbook's Perceived Value will also be positively associated with the Intention to Adopt factor. Then, using the finding of Sun and Flores' research (2013), the researchers argue that Technology-Savvy factor will be positively associated with the Intention to Adopt factor.

For technology savviness, Parasuraman (2000), in his paper with the title "Technology Readiness Index," developed a scale and subscales to measure technological readiness. He used one of the subscales to measure innovativeness using seven items. Based on that subscale, Shanahan and Hyman (2010) developed a measurement to measure technology-savviness. Their measurement was based on six of the seven Parasuraman's items, plus two additional items. Therefore, there were eight items in this technology savviness (tech-savviness) scale.

The Perceived Ease of Use measurement used in this research is based on Davis' Technology Acceptance Model (1989). The wording of the three items was adjusted with the purpose of the E-textbook technology, i.e., navigating, reading, and learning.

In this research, the perceived value was measured using the items in Sweeney and Soutar (2001). Their study argued that perceived value was different from satisfaction, as satisfaction would require the use of a product. Those items to measure Perceived Value factor included: reasonable pricing, offer value for money (help to save money), and a cheaper alternative but provides the same value (good product for the price). Each of the items was measured using a 5-Likert scale.

We measured the Intention to Adopt factor using three items similar to the methodology explained by Davis (1989). However, we adjusted the method to represent the intention of using E-textbook in student's other classes (*I intend to use E-textbooks for my other classes*), as well as in one class (*I intend to use E-textbooks more frequently*), and intention to maximize the use of E-textbook (*I intend to use E-textbooks as often as possible*).

## METHODOLOGY

We conducted the study at a Midwestern university in the United States, with an enrollment of around 5,000 students. The proportion of male and female students on campus was almost identical (50.5% vs.49.5%). The demographic of the student body consisted of 88% White, 3% Native Americans, 3% International Students, and a small percentage of other minority groups. For nearly five decades the faculty, staff, administration, and students at the university have

decided that the environment is a defining feature of the university. Therefore, the university bookstore provides students an option to choose between traditional textbooks and E-textbooks for most of the courses.

The research methodology used in this research was quantitative, in which online surveys were used to collect students' responses. We also conducted a literature review to gain insight into the possible factors that may influence the adoption of E-textbooks. Previous studies also helped in validating the questions for the online survey powered by Google forms. We sent an invitation to participate in this study to all students at the university through the official students' mailing list. In the invitation email, the researchers explained the purpose of the study and reassured the participants about the anonymity of their responses. The Institutional Review Board (IRB) considered the study as an exempt study and approved distributing the survey to the students. An introduction about the researchers, their backgrounds, and the overall study's objectives, along with their contact information, were included in the informed consent. Participation in this study was voluntary, and no financial incentive was offered to participate. We sent two email reminders to the students to improve the response rate. The questionnaire for this study has been developed to address the following:

- Demographic information of respondents (including gender, race, and current status on campus)
- Perceived Values of E-textbook (5-point Likert scale) – from Sweeney and Soutar (2001)
- Technology-Savvy (5-point Likert scale) – from Parasuraman (2000)
- Perceived Ease of Use (5-point Likert scale) – from Davis (1989)
- Intention to Adopt (5-point Likert scale) – from Davis (1989)

The survey was organized and divided into five sections: demographics information of participants, three questions on Perceived Ease of Use of E-textbooks, three questions on values received from using E-textbooks, three questions on Intention to Adopt E-textbooks, and eight questions on Technology-Savvy. To ensure the survey's quality, the researchers used measurements developed and tested by other researchers. For example, to measure Perceived value, we adopted the measurement from Sweeney and Soutar (2001).

A pilot study was conducted for the questionnaire to validate the clarity of each item in the survey and measure the technological ease of use of the survey. Three students were randomly chosen for this refinement process. The questionnaire was revised based on the feedback of the pilot study participants. The pilot study was also used to determine the duration needed to answer the survey. About fifteen minutes was the average time needed to answer all of the questions in the survey. The survey was open for one month. Most of the responses were received within a week of the initial survey invitation. The collected data were analyzed using multiple linear regression analysis.

This study has some limitations. First, we conducted this study based on convenience sampling. It means the respondents are those who responded to our survey invitation email. Therefore, it is impossible to use this study's results to make general assertions about the population. Furthermore, we only considered three factors that we believed were important for E-textbook adoption in this study. Other factors could be included in similar studies. Therefore, future studies might expand the number of factors that should be considered. Finally, this study

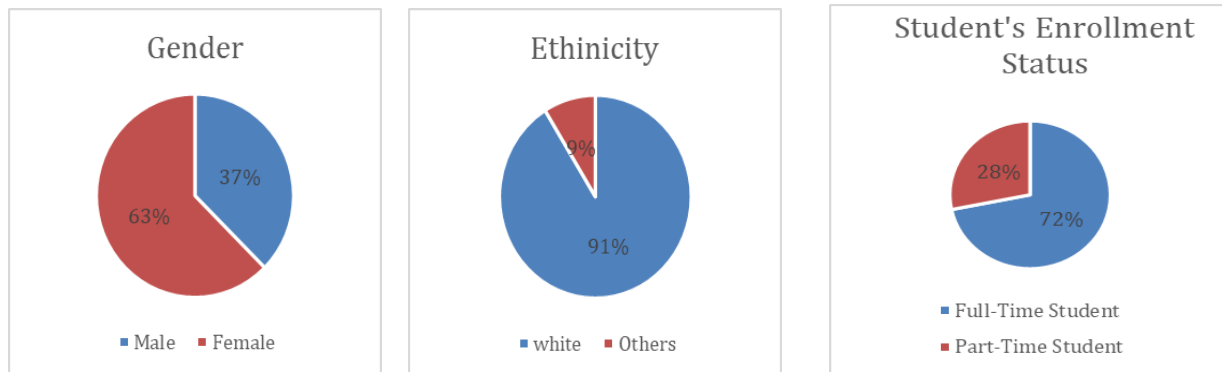
was based on self-reported data, which had some limitations, including response bias, honesty, interpretation of questions, and introspective ability (Salters-Pedneault 2020).

### EMPIRICAL RESULTS

The survey was distributed to all students at the university. There was a total of 231 students who responded to the survey. We excluded eighty students who answered that they did not have experience in using E-textbooks. Ultimately, 150 responses from those who had experience using E-textbooks were included, and their responses were used to test our three hypotheses. As each factor in our model (see Figure 1) was measured with multiple items, we took the mean of user responses to all items of each factor.

#### Sociodemographic

Figure 2 illustrates the sociodemographic of the participants. The collected data shows that 37.5% of the respondents are male, and 62.5% are female. Furthermore, the descriptive statistics indicate that the predominant ethnicity is White, making up 91.2% of the sample population, with the remaining 8.8% distributed among other ethnicities, such as Asian/Pacific Islander (2.01%), Black or African American (1.3%), Hispanic or Latino (0.6%), Native American (2.6%), and other (2.01%). The data also indicates that 71.8% of the respondents are full-time students, consisting of Freshmen (11%), Sophomores (20%), Juniors (34%), Seniors (34%), and Graduates (2%). In contrast, 28.2% of the respondents are part-time students, consisting of Freshmen (2%), Sophomores (5%), Juniors (33%), Seniors (52%), and Graduates (7%).



**Figure 2: Sociodemographic Profile**

#### Hypotheses Testing

This study was conducted to determine if Perceived Ease of Use, Perceived Value, and Technology-Savvy factors influence students' Intentions to Adopt E-textbooks. The hypotheses of the study are:

- H1: Perceived Ease of Use is positively related to Intention to Adopt.
- H2: Perceived Value of E-textbooks is positively related to Intention to Adopt.
- H3: Technology-Savvy is positively related to Intention to Adopt.



The researchers hypothesized that Perceived Ease of Use, Perceived Value, and Technology-Savvy factors might positively predict the Intention to Adopt factor. Therefore, a multiple linear regression analysis was conducted to confirm or reject relationships among the independent variables (Perceived Ease of Use, Perceived Value, and Technology-Savvy) and the dependent variable (Intention to Adopt).

The result of the multiple linear regression analysis has shown that three predictors collectively explained 50.7% of the variance in Intention to Adopt ( $R^2 = 50.7$ ,  $F(3, 146) = 52.052$ ),  $p < .05$ ), which shows the model was collectively significant. Table 1 shows the summary of the regression analysis result.

**Table 1: Regression Summary Output for Three Predictors**

<i>Regression Statistics</i>	
Multiple R	0.718893835
R Square	0.516808346
Adjusted R Square	0.506879751
Standard Error	1.007433922
Observations	150

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	158.4878929	52.82929763	52.05251236	6.11559E-23
Residual	146	148.1787738	1.014923108		
Total	149	306.6666667			

	<i>Coefficients</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.918535309	3.845106289	0.000179395
Technology-Savvy Mean	0.007233167	0.082003173	0.934756503
Perceived Value for Mean	0.008794012	0.081250959	0.93535365
Ease of Use Mean	0.818571584	10.77502766	2.76528E-20

By examining each predictors' contributions, we can determine that Perceived Ease of Use factor positively influences the Intention to Adopt factor ( $\beta = 0.82$ ,  $t = 10.77$ ,  $p < 0.05$ ). However, it can also be concluded that Perceived Value factor ( $\beta = 0.008$ ,  $t = 0.08$ ,  $p = 0.93 > 0.05$ ) and Technology-Savvy factor ( $\beta = 0.007$ ,  $t = 0.082$ ,  $p = 0.93 > 0.05$ ) do not significantly contribute in predicting the Intention to Adopt factor.

This result suggests that students who perceived that E-textbooks are relatively easy to use, are more likely to have intentions to adopt E-textbooks. Table 2 shows the coefficient path of each hypothesis.

**Table 2: Hypothesis Coefficient Path**

<i>Hypothesis</i>	<i>Path</i>	<i>Path Coefficient</i>	<i>Remarks</i>
H1	Perceived Ease of Use → Intention to Adopt	0.8	Accepted
H2	Perceived Value → Intention to Adopt	1.0	Rejected
H3	Technology-Savvy → Intention to Adopt	0.4	Rejected

Further examinations were conducted on the stated factors to determine whether any other relationships exist among contributors. Therefore, another multiple regression analysis was conducted to determine whether any of the factors could positively influence Perceived Ease of

Use factor. The results demonstrate that two predictors collectively explained 24.7% of the variance in Perceived Ease of Use ( $R^2 = 24.7\%$ ,  $F(2, 147) = 24.199$ ),  $p < .05$ ). Table 3 shows the summary of regression.

The results in Table 3 revealed that Technology-Savvy scarcely influences Perceived Ease of Use ( $\beta = 0.30$ ,  $t = 3.32$ ,  $p < 0.05$ ). According to the results, it can also be determined that Perceived Value factor ( $\beta = 0.52$ ,  $t = 4.74$ ,  $p < 0.05$ ) did indicate a slight contribution ( $R^2 = 24.7\%$ ) in predicting the Perceived Ease of Use factor. The findings suggest that students who are “more technologically savvy” and “perceive E-textbooks as more valuable” are more likely to perceive that using E-textbooks as relatively easy and more likely to adopt E-textbooks.

**Table 3: Regression Summary Output for two Predictors**

<i>Regression Statistics</i>					
Multiple R					0.497686031
R Square					0.247691386
Adjusted R Square					0.237455894
Standard Error					1.093753945
Observations					150

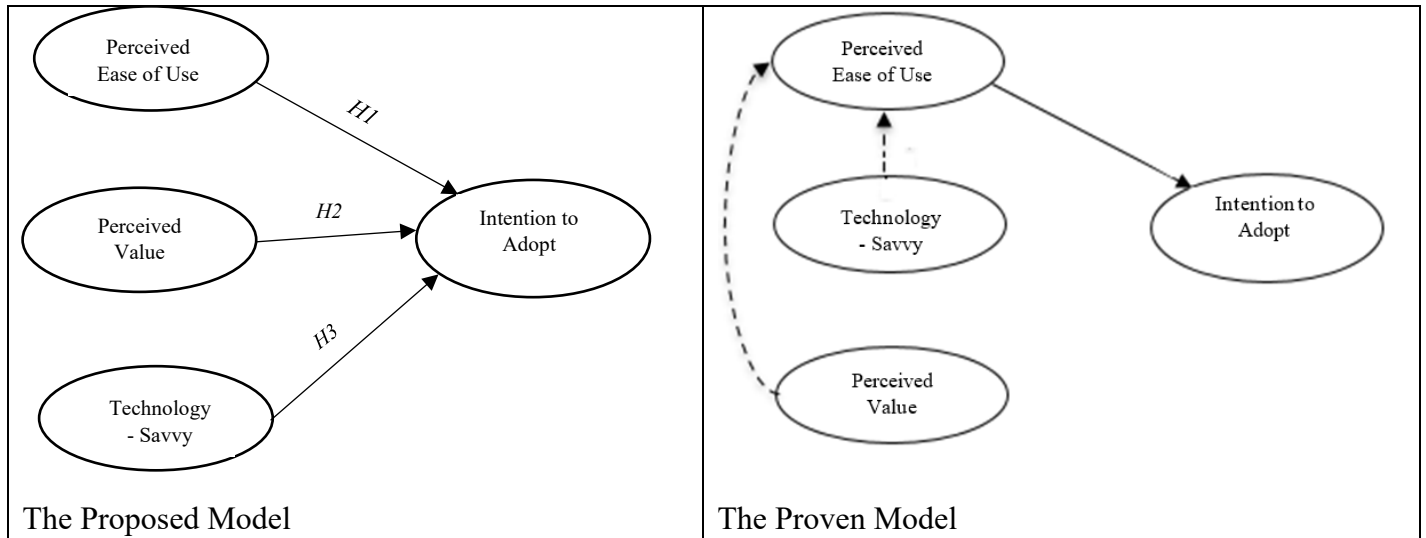
  

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	57.89905	28.94953	24.19927	8.22448E-10
Residual	147	175.8558	1.196298		
Total	149	233.7548			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.935027313	0.247621	3.776038	0.000231
Technology- Savvy Mean	0.307498957	0.092344	3.329922	0.001098
Perceived Value for Mean	0.519012274	0.109432	4.742799	4.94E-06

Figure 3 illustrates the relationships among different factors that could influence students' intention to adopt E-textbooks. The graph on the left is the proposed model that shows Perceived Ease of Use, Perceived Value, and Technology-Savvy factors influence the Intention to Adopt factor. However, the result of the study is demonstrated by the graph on the right. We found that Intention to Adopt factor was only directly influenced by Perceived Ease of Use factor but not the other two factors. On the other hand, those two factors, i.e., Technology-Savvy and Perceived Value, influenced Perceived Ease of Use factor.



**Figure 3: Relationships Among Different Factors Before and After Hypotheses Testing**

## DISCUSSION

Our findings suggested that the Perceived Ease of Use is the only factor that influences Intention to Adopt of E-textbook by students. This result supported the Technology Acceptance Model (Davis 1989) that Perceived Ease of Use factor was considered as one of the factors that influenced users' decision to adopt new technology. Our study indicated that the Technology-Savvy is not a significant factor for Intention to Adopt E-textbook. The finding in our study contradicts earlier findings that found this to be a significant factor (Moore, et al. 2020); however, one of the possible explanations for this finding could be that the E-textbook is a relatively simple type of Information Technology (IT) product that does not require extensive effort or technical background to use. Nowadays, students grow up surrounded by various IT products, including game consoles, smartphones, tablets, smart devices, computers, and others, making them relatively comfortable with technology.

Our study also found that the Perceived Value is not a significant factor for Intention to Adopt E-textbooks. This finding does not support the argument from Wiese and Plessis (2014) that pointed out the role of price (value) in the possible acceptance of E-textbook. We could argue that students' preference for the traditional textbook, as McGowan et al. (2009) found, still outweighs their perception of E-textbooks' value. Unless the students could get their E-textbooks for a very low price (or almost for free), they still prefer to have the traditional textbooks over the E-textbooks. Another possible explanation could be that students need to spend more time reading E-textbooks than traditional textbooks (Woody, Daniel and Baker 2010), so that they could perceive that using the traditional textbooks is still the most effective way to learn as they would spend less time than on E-textbooks regardless of the attractiveness of the E-textbook prices.

As we tested the relationship between the Technology-Savvy and Perceived Ease of Use factors, we found that the Technology-Savvy factor is indeed related to Perceived Ease of Use factor. As Sun and Flores (2013) noted, the Technology-Savvy factor did influence E-textbook experience of students. In that study, the so-called technology veterans showed a high score on perceived helpfulness of E-textbooks compared to technology novices.

This study also found that the Perceived Value factor influences the Perceived Ease of Use factor. While it is quite surprising, we could argue that one of the possible explanations of this relationship is that the more features an E-textbook has, the more valuable it is. For example, having embedded multimedia features in an E-textbook would allow students to watch and better understand the content of the book. Therefore, this feature could impact their perceptions of the Ease of Use of the E-textbook. However, further research is still needed to investigate the particular reasons behind this relationship.

### IMPLICATIONS AND CONCLUSION

This study investigated the factors that influence Intention to Adopt E-textbooks. Our results confirm that the Perceived Ease of Use is the most important factor to consider for successful adoption of E-textbooks. Therefore, it is important to make E-textbooks user-friendly and easy to use regardless of users' technology savviness. Furthermore, more embedded features in E-textbooks would make them more attractive. However, we should make sure that those extra features would not increase the E-textbooks' complexity, resulting in lowering its Perceived Ease of Use.

While the Technology-Savvy factor does not directly relate to the Intention to Adopt factor, it is still a factor that we should consider as it influences the Perceived Ease of Use factor. Therefore, it is important to make sure that our students have a certain level of technology savviness through introduction courses at the high school or freshmen college years. This would positively influence E-textbook adoption as students perceive E-textbooks as easy to be used. Furthermore, as students use more E-textbooks in their college classes, they feel more comfortable using them and would feel easier navigating the E-textbooks. This skill, in turn, would make them more likely to continue using E-textbooks throughout their college years.

At the same time, our study would suggest that the pricing of E-textbooks compared to traditional textbook will not significantly impact its adoption. This could change if students could get their E-textbooks for free or at very low prices compared to traditional textbooks. Therefore, publishers of E-textbooks should not focus on pricing strategy to attract more users, as long as the pricing discount is relatively modest or the price differences to traditional textbooks are only minimal. The new open textbook initiative that makes E-textbooks available for free for students could make the Perceived Value factor significant toward the Intention to Adopt factor. However, further studies are still needed in this area to study each of the three factors more closely to determine what Technology-Savvy, Perceived Value, and Perceived Ease of Use mean to college students today. For example, further investigation is needed for the Perceived Ease of Use factor in relation to task/technology fit issues (Goodhue 1998). This factor might be influenced by which devices students are using to read an E-textbook. Another suggestion for future studies would be investigating the impact of instructors' requirements on student decisions to adopt an E-textbook, as some instructors require students to buy E-textbook packages.

As mentioned in the limitation paragraph earlier, we only considered three factors that we believed were important for adoption in this study. There are other factors that could be included. Therefore, our future studies should expand the number of factors to be considered.

In conclusion, E-textbook is a learning medium for now and the future. At some point in the near future, E-textbooks will replace the traditional textbooks, like digital music download

replaced the traditional CD or vinyl records. However, to gain more acceptance, there are several factors to consider, including its Perceived Ease of Use.

#### ACKNOWLEDGMENTS

We would like to thank Ihsan Rizky (University of Minnesota - Twin Cities) for his time and effort in proofreading our paper.

## REFERENCES

- Baker-Eveleth, Lori, and Robert W. Stone. 2016. "Factors Influencing Adopters and Non-Adopters of E-Textbooks." Proceedings of the 2016 AIS SIGED International Conference on Information Systems Education and Research. 14. <https://aisel.aisnet.org/siged2016/14>
- Bansal, Gaurav. "Continuing E-book Use: Role of Environmental Consciousness, Personality and Past Usage." In *AMCIS*, p. 456. 2010.
- Biranvand, Ali, and Ali Akbar Khasseh. "E-book Reading and Its Impact on Academic Status of Students at Payame Noor University, Iran." *Library Philosophy and Practice* (2014): 0\_1.
- Daniel, David B., and William Douglas Woody. "E-Textbooks at What Cost? Performance and Use of Electronic v. Print Texts." *Computers & Education* 62 (2013): 18-23.
- Davis, Fred D. "Perceived Usefulness, Perceived Ease of use, and User Acceptance of Information Technology." *MIS Quarterly* (1989): 319-340.
- Dennis, Alan R., Serdar Abaci, Anastasia S. Morrone, Joshua Plaskoff, and Kelly O. McNamara. "Effects of E-Textbook Instructor Annotations on Learner Performance." *Journal of Computing in Higher Education* 28, no. 2 (2016): 221-235.
- Goodhue, Dale L. "Development and Measurement Validity of a Task-technology Fit Instrument for User Evaluations of Information System." *Decision Sciences* 29, no. 1 (1998): 105-138.
- Hung, Wei-Hsi, Pei-Hsuan Hsieh, and Yao-De Huang. "Critical Factors of the Adoption of E-Textbooks: A Comparison between Experienced and Inexperienced Users." *International Review of Research in Open and Distributed Learning* 19, no. 4 (2018).
- Kassis, Mary, David Boldt, and Salvador Lopez. "Student Perceptions and Performance: The Use of an Online Textbook with an Integrated Web-based Homework Management Product." *Mountain Plains Journal of Business and Technology* 9, no. 1 (2008): 3.
- McGowan, Matthew K., Paul R. Stephens, and Charles West. "Student Perceptions of Electronic Textbooks." *Issues in Information Systems* 10, no. 2 (2009): 459-465.
- McKenzie, Lindsay. "Pearson's Next Chapter." *Inside Higher Ed*.  
<https://www.insidehighered.com/digital-learning/article/2019/07/16/pearson-goes-all-digital-first-strategy-textbooks>.
- Mizrachi, Diane. "Undergraduates' Academic Reading Format Preferences and Behaviors." *The Journal of Academic Librarianship* 41, no. 3 (2015): 301-311.
- Moore, Michael A., Patrícia S. Lavieri, Felipe F. Dias, and Chandra R. Bhat. "On Investigating the Potential Effects of Private Autonomous Vehicle Use on Home/Work Relocations and Commute Times." *Transportation Research Part C: Emerging Technologies* 110 (2020): 166-185.
- Mordor Intelligence. "E-book Market - Growth, Trends, COVID-19 Impact, and Forecasts (2021 - 2026)." <https://www.mordorintelligence.com/industry-reports/e-book-market>.
- Osih, S. C., and U. G. Singh. "Students' Perception on the Adoption of an E-Textbook (Digital) as an Alternative to the Printed Textbook." *South African Journal of Higher Education* 34, no. 6 (2020): 201-215.

- Parasuraman, Ananthanarayanan. "Technology Readiness Index (TRI): A Multiple-item Scale to Measure Readiness to Embrace New Technologies." *Journal of Service Research* 2, no. 4 (2000): 307-320.
- Rogers, Everett M. 2003. *Diffusion of Innovations*. New York: Free Press.
- Salters-Pedneault, Kristalyn. "The Use of Self-Report Data in Psychology. " *VerywellMind*. <https://www.verywellmind.com/definition-of-self-report-425267>.
- Shanahan, Kevin J., and Michael R. Hyman. "Motivators and Enablers of SCOURing: A Study of Online Piracy in the US and UK." *Journal of Business Research* 63, no. 9-10 (2010): 1095-1102.
- Sisko, Alexander. "Determinant Factors Intention to Use E-Books in Jabodetabek." *Psychology and Education Journal* 57, no. 9 (2020): 306-320.
- Sun, Jun, and Javier Flores. "Student Characteristics and E-Textbook Experiences: The Direct and Moderating Effects of Technology Savvy and Gender." *Information Systems Education Journal* 11, no. 3 (2013): 4.
- Sweeney, Jillian C., and Geoffrey N. Soutar. "Consumer Perceived Value: The Development of a Multiple Item Scale." *Journal of Retailing* 77, no. 2 (2001): 203-220.
- Tarmizi, Halbana, and Mahmoud Al-Odeh. 2015. "Assessing Student Perceptions and Current Adoption of E-Textbooks." MWAIS 2015 Proceedings. <https://aisel.aisnet.org/mwais2015/4>
- Wiese, Melanie, and Giselle Du Plessis. "The Battle of the E-Textbook: Libraries' Role in Facilitating Student Acceptance and Use of E-Textbooks." *South African Journal of Libraries and Information Science* 80, no. 2 (2014): 17-26.
- Woody, William Douglas, David B. Daniel, and Crystal A. Baker. "E-books or Textbooks: Students Prefer Textbooks." *Computers & Education* 55, no. 3 (2010): 945-948.
- Wu, Jiun Yu, and Ya-Chun Peng. "The Modality Effect on Reading Literacy: Perspectives from Students' Online Reading Habits, Cognitive and Metacognitive Strategies, and Web Navigation Skills Across Regions." *Interactive Learning Environments* 25, no. 7 (2017): 859-876.
- Zhao, Fan, Xiaowen Fang, and Feng Wang. "Impact of Previous Reading Experiences on Effectiveness of e-Textbook." In *Proceedings of the 5th International Conference on Frontiers of Educational Technologies*, pp. 58-62. 2019.