Media Preferences on Note-Taking among Pre-Service Language Teachers

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Abstract: Utilizing technology in the context of education is a common practice for effective instruction. Yet, advancements in the aspect of digital note-taking are too slow, despite of its necessity in a digital era where most information resources are lengthy and abundant, but also computerized and wireless. This puts pen-and-paper note-taking in an unfavorable circumstance as compared to note-taking that is digitally assisted. Various studies have surfaced to explore and develop digital tools for taking notes, as well as connecting gaps between pen-and-paper and technology-based note-taking. Unfortunately, it is still vague whether digital note-taking will and should replace the traditional note-taking, as there are flaws and shortcomings present in both medium. This study discussed the prevalent media preference of students when taking notes to determine which of the two note-taking methods are favored. Additionally, it also explores the usability of both note-taking methods, in order to investigate the deficiencies of their use and discuss implications for future note-taking applications. Developing effective note-taking software is problematic due to its complexity issues and suitability for productive learning. The study primarily inspected students’ perceived usability towards both note-taking methods and there is a total of 75 respondents who participated in the evaluation of their preferred media in taking notes. Based on the findings, traditional note-taking is prevalently utilized and favored compared to digital note-taking, but then, digital note-taking surpassed the overall usability score of pen-and-paper note-taking.

Keywords: notetaking tool, digitalized notes, pen-and-paper notes, teachers, media preference, education, technology.

Introduction

Background of the Study

Notes are materials that hold brief and compressed sources of data, facts, figures or records produced by means of writing, while concurrently engaging in other tasks that are in relation to the receptive skills, such as observing and listening (Susanti, 2018). Moreover, excellent note-taking abilities are associated with positive study-related achievements such as course outcomes, preservation of lectures or content of a course, and study practices. In this respect, the act of note-taking is regarded as a skill that grants several advantages for students in their academic life. In a relevant study conducted by DeZure et al. (2001), wherein the study managed to determine the positive impact of reviewing and note-taking to student learning. Based on their study, note-taking is beneficial towards the students’ ability to recall and synthesize the course lectures, which enables them to have progressive outputs or performances.

There are also other studies that are apart from the traditional or so-called old style form of note-taking. One of these is the study of Wyk and Reyneveld (2018), which tackles the prevalence of students to interact with their mobile devices as their means to remain socially connected, therefore, lecturers in the mentioned study made an investigation towards the idea of utilizing
mobile devices as digital tools for educational purposes. Nakayama et al. (2017) conducted a similar study that presented the means of predicting learner’s performance by employing the various features of note-taking such as quantity of terms used and coverage of notes. This study mainly explored note-taking as a factor of learner’s performance, which also served as an indication of how taking notes can assist students in their academic life. Salame and Thompson (2020) showed a relevant research regarding taking notes strategically. In their study, note-taking is viewed as a necessary equipment to progress in the students’ academic career, which would involve certain skills that are needed to collect information about course contents. In addition, their study also pointed the direct relationship that exists between note-taking and students’ overall grades.

However, the previously mentioned studies’ views are challenged by some researches, which seem to gain contradictory insights regarding note-taking. Gurley (2018) conducted a study that was primarily designed to determine whether there was a significant relationship between note-taking method and grade point average of students. Surprisingly, with most of the students who preferred taking notes on paper, there was no significant relationship between grade point average and taking notes. Another study by Hale and Courtney (1994) found out that taking notes hardly had any positive effect on student marks and compelling them only resulted in lesser marks. Hence, additional contextualized studies could be necessary to supplement information to this subject matter and context. Hughes and Suritsky (1993) also presented in their study that there seems to be an insufficient evaluation regarding struggles or difficulties in taking notes. This study is linked to other researches that acknowledge the difficulty of simultaneous interaction of the note-taker to both productive and receptive aspect of note-taking, whether it is in a digital or traditional form. Furthermore, it was also mentioned in the study that taking notes is not a laidback task as it demands concentration and certain receptive skills. Keeping in mind that any distraction or intervention could bring the note-taker out of track. Note-taking involves time pressure, which affects both the quality and quantity of notes as it is necessary to produce concise records or notes (Piolat et al., 2005).

Despite of the abundance in the investigations or studies presented, seldom researches were conducted that took pre-service teachers as respondents in the study, whether it is traditional or digital form of note-taking. As specified by Yusop and Sumari (2015) it is critical for pre-service teachers to understand their own learning style preferences to not deprive themselves from the variety of existing learning styles and in order to fully comprehend an effective and suitable note-taking tool or method. In addition, the purpose of this paper is also to present a contextualized study about media preference (longhand traditional using pen-and-paper or digital) of students in taking their course to help identify whether note-takers are satisfied with their preferred media in taking notes or not and the need to encourage note-takers to utilize specific digital tools for note-taking. Specifically, the study examined usability that comprises the usefulness, ease of learning, and ease of use of the note-takers’ preferred media in taking notes.

Research Questions
The following questions are sought by the study:

1) What is the prevalent media preference of respondents in taking notes?

2) What is the perceived usability of respondents towards their preferred media in taking notes?

3) Does the perceived usability differ across media preference of respondents in taking notes?

Review of Related Literature

Traditional pen-and-paper note-taking
The traditional note-taking is the act of students recording information on paper during a lecturer’s presentation or while reading a source of information (Rivard, 1994). The conventional
way of taking notes is by using a tangible medium, such as paper, to record information that may be utilized later. According to Boch and Piolat (2005), note-taking is a technique of capturing information obtained from a temporary source, such as a reading, an oral conversation, or a lecture. This research depicts a note-taker's struggle with an information source that may be transient or fleeting. According to Carrier et al. (1988), note-taking is a process of summarizing information in short sentences, which allows a large amount of information to be quickly shortened on paper, which is why writing information on paper while listening to lectures is universally considered an important skill for academic success. In this regard, note-taking is about condensing and focusing the information obtained for maximum efficiency. The components of note-taking activities were explored by DiVesta and Gray (1972), who discovered two fundamental functions that promote the learning process: encoding and retrieval. In the encoding perspective, simply taking notes improves learner performance, while the retrieval process promotes the evaluation, organization, and reconstruction of information. To put it another way, note-taking is a useful tool for a student who needs to gather and use knowledge from a source. According to Peper and Mayer (1986), taking notes is a creative activity that allows students to make external links between the contents provided and their past knowledge.

As one of the impacts of taking notes during lectures, students who take notes have a good impact on their exam performance (Crawford, 1925). In this case, note-taking is seen as the most important factor in achieving high exam marks. Kiewra (1985) investigated the quantity of words in students' notes, which is used to assess student learning performance, and found that it is positively connected with free recall of both major themes and details after a lecture. According to their findings, note-taking has the advantage of allowing note-takers to correlate information from a source with previous learnings and experiences. In addition, Hartley (2002) had a similar viewpoint, stating that traditional note-taking is an excellent information-processing technique that is still widely employed in everyday life and numerous professions. It's a helpful instrument, and its application isn't confined to the realm of education. Instead, it is a useful talent that may be used to a variety of circumstances and jobs.

The amount of terms identified in the notes was connected to student learning performance, which showed a positive association that indicated information retention during a lecture. It is linked to a research by Benton et al. (1993), who found that the length of lecture notes was highly related to the length and arrangement of essays written by students concerning the lecture material. Palmatier and Bennett (1974) reinforce prior research' claims by highlighting that taking notes is a widespread and useful habit for students in both lectures and reading materials.

**Digital note-taking**

Although many studies have been presented regarding this task in a digital set-up, note-taking has preserved its traditional aspect (Miura et al., 2005). To put it another way, taking notes hasn't lost its old-fashioned yet common manner of retaining data. According to Grabe and Christopherson (2005), a digital document offers greater benefits than a paper document in terms of storability, transportability, computability, reproducibility, legibility, searchability, printability, and security. In other words, digital notes cannot be retrieved immediately in the physical world. Instead, there has to be a technology that can access digital format. According to Luchini et al. (2002), if an appropriate application for educational tasks and activities is logically built, there is a significant possibility in employing these devices with technology in education and learning. The introduction of technology in the area of note-taking has various advantages, especially when the technology is used in the context of learning and education. Furthermore, according to Cope and Kalantzis (2009), digital note-taking applications are primarily utilized for information annotation, collaboration, indexing, and subsequent retrieval. Digital note-taking tools or applications in this study appear to have comparable capabilities that allow users to successfully highlight and communicate or receive comments in their notes.

However, according to a research conducted by Reimer et al. (2009), students still prefer to take notes using pen and paper rather than relying on modern technology. The study found that digital
note-taking tools lack adaptability in order to meet the demands and preferences of its users. Ward and Tatsukawa (2003) on the other hand say that most existing note-taking systems utilize the keyboard to type notes, which is encouraged because text entry via the keyboard is faster than handwriting. One of the benefits of digital note-taking is that it allows note-takers to save time and effort while gathering information from a source. Education experts reported in a relevant study by Makany et al. (2008) that employing technology to facilitate learning has an impact on learning habits, styles, and results.

While technology has its benefits in the note-taking situation, it also has drawbacks that have been documented in various research in the field of education. According to Bauer and Koedinger (2006), a feature worth highlighting is the copy-paste option, which affects note-takers' retention by allowing individuals to write notes without reading them or focusing on what they have written. As technology makes digital note-taking easier, the note-thinking taker's processes to input information deteriorate more. Instead, they rely on the digital tool's aid. As a result, tools are produced without being tested in the field and design decisions are primarily made by software engineers or developers who aren't familiar with educational ideas (Vega et al., 2007). It does not give enough thought to the digital note-taking tool's influence on learning in the academic environment, because its primary focus is on its general function as a note-taking tool. According to Berque (2006), if a note-taking application is created for educational reasons, it should be developed to preserve the learning gains obtained through conventional note-taking, and each tool should be evaluated to assure its long-term viability for educational purposes. Furthermore, digital note-taking tools for educational purposes should be utilized to complement traditional note-taking rather than to introduce additional obstacles or concerns.

Methodology

Research Design

Descriptive-quantitative design was implemented in this study to acquire necessary familiarity and insights regarding the preferences of students and usability of their preferred note-taking method. Additionally, this study is cross-sectional and made use of survey questionnaires to thoroughly examine the usability features of the students' preferred media in taking notes. The respondents of this study were contacted by the researcher and asked to complete the survey using the google forms link, which was expected to be accomplished in no more than 10 minutes. Before they could proceed with the items involving usability features of their preferred note-taking tool or method, they are also required to impart their demographic profile and media preference that would help the researcher characterize the respondents who participated for this study.

Respondents

This study managed to gather a total of 75 students from the College of Teacher Education in Western Mindanao State University. In terms of gender, the majority are females (59 or 78.7%) and is also dominated by English major students (61 or 81.3%). The respondents’ age ranged from 18-23, with mean age of 20.27, and standard deviation of 1.143. With respect to respondents’ year level, the sample size of the study is composed of: 1st year students (15 or 20%), 2nd year students (17 or 22.7%), 3rd year students (31 or 41.3%), and 4th year students (12 or 16%).

Research Tool

In order to quantify the usability of the respondents’ preferred media in taking notes, a modified questionnaire was adapted and utilized from the study of Fruhling and Lee (2005), which contains the usefulness, satisfaction, and ease of learning approach. The U.S.E. questionnaire approach involves a short questionnaire survey that is used to inspect the main features of usability. It is proven to be a valuable instrument due to it being reliable in examining usability that includes usefulness, satisfaction, and ease of learning of a certain note-taking tool or method.
The research instrument employed consists of 10 items and is allocated into three sections, which are formed according to the U.S.E. approach. This particular research instrument was also modified by eradicating several items from the original instrument to prevent some items from overlapping each other and to make it more comprehensive according to the context of the respondents in this study.

<table>
<thead>
<tr>
<th>Usability</th>
<th>Items</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness</td>
<td>My preferred media helped me to become more effective in taking notes.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Usefulness</td>
<td>My preferred media makes note taking easier to get done.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Usefulness</td>
<td>My preferred media helped me to save time.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Usefulness</td>
<td>My preferred media meets my needs in taking notes.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Ease of learning</td>
<td>I easily learned how to use my preferred media in taking notes.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Ease of learning</td>
<td>I can easily remember how to use my preferred media in taking notes.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Ease of learning</td>
<td>I quickly became skillful with it.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Ease of use</td>
<td>I can effortlessly use my preferred media in taking notes.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Ease of use</td>
<td>My preferred media give me more control over my note-taking activity.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Ease of use</td>
<td>I can make use of my preferred media in taking notes without guidance or assistance from others.</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>

1 [Strongly Disagree], 2 [Disagree], 3 [Agree], and 4 [Strongly Agree].

Pilot Testing and Reliability

This study’s pilot testing surveyed 30 pre-service language teachers from the College of Teacher Education in Western Mindanao State University. Majority of the respondents are female (21 or 70%). Among the 30 students, 19 (63.3%) were taking English as their chosen area of specialization. The respondents’ age ranged from 20 to 22 years old, with a mean age of 20.70 and standard deviation of 0.596. The reliability of the instrument is inspected and analyzed using the IBM SPSS Statistics 20, which is a computer software used to help analyze and interpret the data gathered from the pilot testing. It was reported that the modified instrument utilized in this study attained a reliability score of 0.962, which is higher compared to the reliability score of the original instrument that is 0.93.

Data Gathering Procedure

The research tools after pilot testing were completed via google form. This is a necessary tool for collecting the students’ responses, considering that distributing and acquiring hard copies of the instrument are discouraged because of the pandemic. Respondents were contacted individually via messenger. They were provided with a link that will automatically redirect them to the google form to complete the survey. In total, 91 pre-service language teachers were identified and communicated to receive the google form link. However, only 75 responses were recorded as some of the respondents either failed to submit a response or disagreed with the consent that was provided in the google form.

Coding Procedure and Statistical Treatment

For the analysis of the data gathered from the research instrument, the responses were initially coded. For the demographics, gender (1 for male, 2 for female), area of specialization (1 for English, 2 for Filipino), year level (1 for first year, 2 for second year, 3 for third year, 4 for
fourth year), media preference (1 for pen-and-paper or traditional note-taking, 2 for digital note-taking). Afterwards, the responses in the U.S.E. survey questionnaire (1 for strongly disagree, 2 for disagree, 3 for agree, 4 for strongly agree), and the assigned code for every item in the research instrument (U1 for first item, U2 for second item, U3 for third item, U4 for fourth item, U5 for fifth item, U6 for sixth item, U7 for seventh item, U8 for eighth item, U9 for ninth item, and U10 for tenth item). The instrument used in this study did not contain negative statements. Thus, no reverse coding was done. Furthermore, to determine media preference and perceived usability, descriptive statistics was used, particularly the mean and standard deviation. To determine the significant difference of perceived usability across media preference, the data were treated using the inferential parametric statistical tool known as independent sample t-test.

Results and Discussion

Students’ preferred media in taking notes

To uncover the dominant media preference of students in taking notes, the responses in the utilized research tool were exported and transferred to IBM SPSS Statistics 20, where the data are analyzed using descriptive statistics, particularly valid percentage and frequency. The analysis is presented in the table that follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>57</td>
<td>76.0%</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>24.0%</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

According to the data presented in Table 1.0, with students who heavily prefer the use of traditional note taking (57 or 76%), it could be inferred that despite in an online learning set-up, most of the students favor the use of traditional means in order to construct or form notes. The results can be insightful as it may oppose studies that are convinced to the idea of developing certain digital tools for a specific environment or population to digitally assist students in note-taking, such as the study of Wyk and Reyneveld (2018), which tackles the prevalence of students to interact with their mobile devices as their means to remain socially connected. Additionally, lecturers in the mentioned study also made an investigation towards the idea of utilizing mobile devices as digital tools for educational purposes. On a positive note, this could help support claims that note-taking has preserved its traditional aspect. One of which is the study of Miura et al. (2005), which acknowledges the fact that note-taking hasn't lost its old-fashioned and common manner of retaining data. Also, the data reflects the viewpoint of the study of Hartley (2002), which inferred that traditional note-taking is an excellent information-processing technique that is still widely employed.

Perceived usability of students towards their preferred note-taking tool

To clearly determine the perceived usability of the students’ preferred media in taking notes, the media preference was taken into consideration in order to isolate the responses of students who chose the traditional over digital note-taking and vice versa. The collected data was subjected to analysis by utilizing descriptive statistics, specifically the frequency, valid percentage, mean, and standard deviation.
Table 2.0. Perceived Usability of students towards their traditional or pen-and-paper note-taking

<table>
<thead>
<tr>
<th>#</th>
<th>Statements</th>
<th>Responses</th>
<th></th>
<th></th>
<th></th>
<th>M</th>
<th>Interp.</th>
<th>St. Dev.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SD</td>
<td>D</td>
<td>A</td>
<td>SA</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>My preferred media makes note-taking process easier to get done.</td>
<td>7 12.3%</td>
<td>2 3.5%</td>
<td>31 54.4%</td>
<td>17 29.8%</td>
<td>3.02</td>
<td>HU 0.91</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>My preferred media helped me to save time.</td>
<td>6 10.5%</td>
<td>15 26.3%</td>
<td>28 49.1%</td>
<td>8 14.0%</td>
<td>2.67</td>
<td>HU 0.85</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My preferred media helped me to become more effective in taking notes.</td>
<td>6 10.5%</td>
<td>3 5.3%</td>
<td>24 42.1%</td>
<td>24 42.1%</td>
<td>3.16</td>
<td>HU 0.94</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>My preferred media meets my needs in taking notes.</td>
<td>7 12.3%</td>
<td>6 10.5%</td>
<td>22 38.6%</td>
<td>22 38.6%</td>
<td>3.04</td>
<td>HU 0.99</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I easily learned how to use my preferred media in taking notes.</td>
<td>6 10.5%</td>
<td>2 3.5%</td>
<td>28 49.1%</td>
<td>21 38.6%</td>
<td>3.12</td>
<td>HU 0.91</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I can easily remember how to use my preferred media in taking notes.</td>
<td>6 10.5%</td>
<td>3 5.3%</td>
<td>25 43.9%</td>
<td>23 40.4%</td>
<td>3.14</td>
<td>HU 0.93</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I quickly became skillful with it.</td>
<td>5 8.8%</td>
<td>5 8.8%</td>
<td>34 59.6%</td>
<td>13 22.8%</td>
<td>2.96</td>
<td>HU 0.82</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I can make use of my preferred media in taking notes without guidance or assistance from others.</td>
<td>7 12.3%</td>
<td>2 3.5%</td>
<td>21 36.8%</td>
<td>27 47.4%</td>
<td>3.19</td>
<td>HU 0.99</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I can effortlessly use my preferred media in taking notes.</td>
<td>5 8.8%</td>
<td>4 7.0%</td>
<td>23 40.4%</td>
<td>25 43.9%</td>
<td>3.19</td>
<td>HU 0.92</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>My preferred media gives me more control over my note taking activity.</td>
<td>6 10.5%</td>
<td>5 8.8%</td>
<td>21 36.8%</td>
<td>25 43.9%</td>
<td>3.14</td>
<td>HU 0.97</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Overall Perceived Usability</strong></td>
<td><strong>3.06</strong></td>
<td><strong>HU 0.80</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scale: 1.0 to 1.74 [Very Low Usability], 1.75 to 2.4 [Low Usability], 2.5 to 3.24 [High Usability], and 3.25 to 4.0 [Very High Usability].

Table 3.0. Perceived Usability of students towards their digital note-taking

<table>
<thead>
<tr>
<th>#</th>
<th>Statements</th>
<th>Responses</th>
<th></th>
<th></th>
<th></th>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>My preferred media makes note-taking process easier to get done.</td>
<td>0 0%</td>
<td>1 5.6%</td>
<td>11 61.1%</td>
<td>6 33.3%</td>
<td>3.28</td>
<td>VHU 0.58</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>My preferred media helped me to save time.</td>
<td>1 5.6%</td>
<td>0 0%</td>
<td>6 33.3%</td>
<td>11 61.1%</td>
<td>3.50</td>
<td>VHU 0.79</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My preferred media helped me to become more effective in taking notes.</td>
<td>0 0%</td>
<td>1 5.6%</td>
<td>10 55.6%</td>
<td>7 38.9%</td>
<td>3.33</td>
<td>VHU 0.59</td>
<td></td>
</tr>
</tbody>
</table>
As gathered from the results of Table 2.0 and Table 3.0, findings reveal that pre-service language teachers perceive their preferred media to have at least high usability. One of the implications of this is that traditional method of note-taking, though claimed by certain studies that it retained its old-fashioned way of collecting notes, is still a viable means of being able to record information. Also, it gives further clarity to certain features of traditional note-taking in relation to the reception of notes. Such as the study of Hughes and Suritsky (1993) that suggested the insufficient evaluation regarding struggles or difficulties in taking notes. However, the outcomes of the study do not display such difficulties as most of the respondents have control over their note-taking (x̄=3.14) and can effortlessly utilize pen-and-paper note-taking (x̄=3.19), and do so without much assistance from others (x̄=3.19). Yet, it is worth noting some potential flaws of taking down notes in a traditional manner as manifested in Table 2.0, such as being able to become skillful with it (x̄=2.96), and being able to save time (x̄=2.67). In addition, it can be conjectured that access to digital tools as a pre-requisite to attempt digital note-taking might be inaccessible for certain respondents. Hence, hindering opportunities of utilizing the digital method.

Regarding perceived usability towards digital tools, the data in Table 3.0 mirrors the findings of numerous studies conducted that are aimed in exploring the advantages of digital tool in taking notes (Christopherson and Grabe, 2005; Cope and Kalantzis, 2009; Luchini et al., 2002).

**Differences of students’ perceived usability across preferred media in taking notes**

To determine the existence of a significant difference between the respondents’ media preference and perceived usability, the data set was treated with the inferential and parametric statistics known as Independent-samples T Test, which is presented in Table 4.0.
Table 4.0. Students’ Perceived Usability across preferred media in taking notes

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Categories</th>
<th>M</th>
<th>SD</th>
<th>Description</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Usability</td>
<td>Media Preference</td>
<td>Traditional/ pen-and-paper note-taking</td>
<td>3.06</td>
<td>0.80</td>
<td>High Usability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital note-taking</td>
<td>3.32</td>
<td>0.54</td>
<td>High Usability</td>
</tr>
</tbody>
</table>

Scale: 1.0 to 1.74 [Very Low Usability], 1.75 to 2.4 [Low Usability], 2.5 to 3.24 [High Usability], and 3.25 to 4.0 [Very High Usability].

As garnered from the data set, it was resolved that there is no significant difference on the respondents’ perceived usability towards their preferred media in taking notes when data are grouped according to media preference (p-value ≥ 0.05, instead of p < 0.05), the traditional note-taking [M=3.06, SD=0.80] and digital note-taking [M=3.32, SD=0.54] which shows high usability. It could be settled, though unreliable, the results provided in Table 4.0 could have minor speculations. Specifically, with digital note-taking surpassing the traditional note-taking’s mean score by 0.26. Which supports the claims of numerous researchers (Christopherson, Kalantzis, Ward & Tatsukawa) with regards to digital note-taking having an upper hand to record and store information for later use.

Conclusion

The chief focus of this study is to acknowledge and address the possible factors for the resistance of utilizing both traditional and digital note-taking that affects its usability, recognize the duty for creating note-taking devices, and construct a model for usable and valuable note-taking applications. Furthermore, it also primarily pushes forward the current endeavors of exchanging note taking movement into an advanced shape, and to contribute with other individuals works in managing advanced note-taking method or even application. Hence, the findings of the study are listed below:

- Production of note-taking tools to digitally assist note-takers is risky and ill-advised, since the pen-and-paper note-taking is dominantly favored by most of the respondents in this study.
- Traditional and digital note-taking tools have high usability that enables note-takers to accomplish note-taking activities in an effective and efficient way.
- Pen-and-paper note-taking dominantly perceived as time consuming both in practice and attaining proficiency at it.
- Digital note-taking has its flaws with regards to being a unwieldy and tedious note-taking tool compromises the satisfaction of note-takers.
- There is no significant difference between media preference and overall perceived usability of the respondents’ preferred note-taking tool.

References:


