Students’ attitudes toward the internet usage for learning

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ABSTRACT

This paper examined students’ attitudes toward the use of internet for their learning and measured the differences between male and female students on the usage of internet-assisted in their learning. The participants of this study were 27 senior high school students in East Java, Indonesia, consisted of 6 male and 21 female. The data was gathered through questionnaire. The findings proved that majorities of students felt positive attitudes toward the use of internet for their learning. There were no differences between male and female students on their attitude of internet usage. Suggestions are for pedagogical as well as future researches.

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1. Introduction

During Covid 19 pandemic, the educational activities hugely move to the virtual world. Students’ attitudes toward the internet determine their process and goals in the online learning. Some study have ever been conducted to examine attitudes for the internet for online educational activities (Asiksoy & Islek, 2017; Hoque et al., 2020; Masry Herzallah & Stavissky, 2021; Nuankaew et al., 2021; Reddy & Karthik, 2013). Asiksoy and Islek (2017) investigated impacts of virtual laboratory on students’ attitudes. They involved 42 students who divided into treatments and control groups. They confirmed that virtual laboratory affected positively to students’ attitudes. Hoque et al (2020) observed students’ attitudes toward educational technology. Their study engaged 99 students as
participants with delivering questionnaires. They proved that majorities of students gained positive attitudes in technology utilizations. Other findings were computer and laptops usage relied on positive effects on students. Masry Herzallah and Stavisky (2021) explored on students and teachers of elementary and middle school attitudes for the online learning. They engaged 476 students and 250 teachers to participate in their study. They underlined findings that the age was the pivotal role for teachers and students, those were proved by younger children and older teachers gather difficulties during an online learning. They also found some dissidence from gender and sectorial sides.

In online learning setting, Nuankaew et al. (2021) investigated students’ attitudes toward online learning during Covid-19 pandemic. Their research collected 492 participants. The finding was that majorities of participants strongly agreed and accepted online teaching and learning. Reddy and Karthik (2013) investigated students’ attitudes toward the internet. They gathered 200 students as respondents. They found that students though the internet as essential knowledge. It provided information for accomplishing assignments which was reliable with educational needs. Most of respondents felt comfortable and enjoyed also were easier to use internet than library. All of those findings correlate with students attitudes toward the internet usage, it is concluded that attitudes interrelate on what students do toward the internet for learning.

Another research was by Abedalaziz et al. (2013) investigated and measured postgraduate students’ attitudes toward the internet use and computer. They employed 289 participants in their research. The data measured through scale. The study revealed that most of participants gained high level attitudes toward the usefulness and control of computer and internet. They also highlighted that no differences among participants attitudes toward the use of computer and internet, due to the gender. Other study that revealed the interconnected between students attitudes on the computer and internet usage was Alkahtani (2016) who studied on the students’ attitudes toward electronic learning resources. The results asserted that students have positive attitude toward electronic learning resources for their study. He also revealed that there were correlations between the use of electronic learning resources and students’ attitudes.

A study by Carruth and Ginsburg (2014) who explored on social networking and privacy attitudes of college students, were took 289 samples of students. They realized that self-efficacy and personal privacy of participants who played facebook were significantly determinants of social media privacy concerns. Draskovic et al. (2017) studied toward students’ attitudes of social media in the learning process. They used survey to receive the data from respondents. Their respondents were 81 students in Croatia and of 84 students in German. They concluded that most respondents have positive attitudes toward the use of social media as tools within course. Guillén-Gáméz et al. (2020) led the study to investigate students’ attitudes toward ICT and gender differences. They employed 180 early childhood and elementary educational students. The findings concluded that the existences of significant differences attitudes of students toward ICT based on gender were highlighted. They also underlined some results such as men and distance learning were more favorable with the affective, while conventional learning (face-to face) was more in the cognitive and behavior. Maican and Cocorada (2017) observed on the Romanian students’ attitudes toward computers, internet, and smartphones. The respondents were 685 students. They used descriptive and correlational study. They found that the differences of male and female students occurred on their attitudes towards the com-
puters, internet and smartphones. Self-efficacy has no differences between male and female students; they also underlined that positive and negative attitude as well as tasks switching of male and female students and their academic performance correlated with their performance activities in Facebook.

To add more, Sabti and Chaichan (2014) measured students attitudes and barriers toward technology use for their learning English. They employed 30 students. Equal 15 male and female students were involved. They realized that gender disparities on the technology attitudes existed. Female students were higher and more positive attitudes to use technology than male. However, both gender performed high and positive attitude toward the usefulness and perceived ease of computer in learning English. The barriers of their learning English with the technology were detected on some points such as skill, equipment, and motivations. Those three barriers impacted, higher impacts were skill, whereas weak impacts were motivation. Samsujjaman and Halder (2019) studied on students’ attitudes toward the use of social media associated with their learning achievements. They employed 210 students to participate in their study. The results asserted some points. The first was that female students tended to have higher attitudes than male students. The second was the significance difference between Urban and rural students toward their attitudes on the use of social media. The third was existences of differences between social science and literature streamed students. The fourth was that there was the correlation between academic achievements and students attitudes on social media.

Due to the previous researches, there were very rare researches exploring more in senior high school students’ attitudes toward the use of internet for their learning in the context of Indonesia. Therefore, this study aimed at explaining senior high school students’ attitudes toward the use of internet and at defining differences between male and female students toward the use of internet for their learning. The research questions are developed as follows:

a. What are students’ attitudes on the internet usage for their learning?
b. Are there any differences among male and female students’ attitudes toward the internet usage for their learning?

2. Method

The study employed 27 senior high school students in East Java. It consisted of 6 male and 21 female. The descriptive quantitative was applied to define students’ attitudes toward the internet use for their learning. Mann Whitney analysis was utilized to explore male and female differences toward their attitudes for the use of internet. All of the data was gained via questionnaire. It used Likert scale from 6 to 1 points from strongly agree, agree, slightly agree, slightly disagree, disagree, and strongly disagree. Avoiding bias answers was through eluding neutral. The researcher adapted questionnaire from Shin (2007). It actually explored three aspects namely perception, belief, and attitudes on the use of internet. This study only used one aspect, attitudes aspect. The indicators of students’ perspectives toward internet is presented on Table 1.

The data was counted via Ms Excel to convert those data from Likert-Scale (interval) to score (ordinal data). Meanwhile, SPSS 25 was maximized to gauge Mann Whitney for male and female students’ differences on their attitudes of using internet.
Table 1 - Indicators of students' perspectives toward internet

| Variable | Indicators | Items | Code |
|----------|------------|-------|------|
| Students perspectives of internet | Attitude | I would like to use internet for my future learning | A1 |
| | | I am competent to use internet for my future learning | A2 |
| | | I need more internet training for my learning | A3 |
| | | I have to learn on how integrate internet with my learning | A4 |
| | | I used internet-based materials as much as possible for my learning | A5 |

3. Results and discussion

3.1. Result

Students' perceptions, beliefs and attitudes toward the internet usage for their learning

Table 2 presents the results of students' attitudes toward the use of internet for their learning. A1 showed that 11% of students slightly disagreed to use internet in their future learning, and 37% of students slightly agreed in confirming the use of internet for their future learning. Meanwhile, 33% of students agreed that they preferred the internet for their future learning. However, only 9% of students strongly agreed to use the internet to assist their learning in the future.

In answering the second question, 10 students or 37% among all the participants felt that they were competent to use the internet (37%). Meanwhile, only 1 student (4%) felt that he/she were incompetent to use internet for learning. In addition, the A3 question referred to students' perceptions toward training of internet needs. It bold findings that 2 students felt that did need some internet trainings compared to 41% of students agreed to join some internet coaching.

Further, A4 question depicted results that only 4% of students disagreed and slightly disagreed to learn in the integrating internet with the learning compared to 37% of students agreed to learn in integrating the internet for learning. Finally, A5 conform that 3% of students felt that he did not need the internet-material based for their learning. Meanwhile, 44% of students agreed to use the internet—materials based. 22% of students strongly agreed on it.

Table 2 - Students' Attitudes toward Internet for Learning

| Code | Scale | Mean | SD |
|------|-------|------|----|
| A1   | -     | 3(11%) | 10(37%) | 9(33%) | 5(9%) | 4.5926 | .93064 |
| A2   | -     | 1(4%)  | 8(30%)  | 5(9%)  | 10(37%) | 3(11%) | 4.2222 | 1.12090 |
| A3   | -     | 2(7%)  | 3(11%)  | 10(37%) | 11(41%) | 1(4%)  | 4.2222 | .97402 |
| A4   | -     | 1(4%)  | 1(4%)   | 9(33%)  | 10(37%) | 6(22%) | 4.7037 | .99285 |
| A5   | 1(3%) | -     | 4(15%)  | 4(15%)  | 12(44%) | 6(22%) | 4.6296 | 1.21365 |

Male and female students’ differences on attitude toward the use of internet for their learning

The implementation of internet for learning affected students’ progress and achievements in the learning. Male and female students could gain differences attitudes or not in the use of internet
for their learning. Therefore, it needs to be gauged to comprehend further. Table 3 shows the results of male and female differences on the attitudes for their internet usage in learning.

| Variables | Gender | N   | Mean Rank | Sum of Ranks | Mann-Whitney U | Wilcoxon W | Z     | Asymp. Sig. (2-tailed) |
|-----------|--------|-----|-----------|--------------|----------------|------------|-------|-----------------------|
| Attitude  | Female | 21  | 14.74     | 309.50       | 47.500         | 68.500     | -.907 | .364                  |
|           | Male   | 6   | 11.42     | 68.50        |                |            |       |                       |

The table 3 proved that female gathered mean rank at 14.74 and male at 11.42. The results of Mann Whitney and Wilcoxon were 47.50 and 68.50, assisted with Z value was -.907. The significance two tailed was .364. Therefore, it can be concluded that there were no significance differences between male and female students toward the use of internet for their learning.

3.2 Discussion

The first research question is about students’ attitudes toward the use of internet for their learning. Most of students preferred to use internet for their learning future. They felt competent in using internet. They also asserted and enthusiast if they join internet training. They also wanted to integrated internet with their learning and wielded internet materials learning resources as many as possible. This implied that most of them have well attitude toward the use of internet for their learning. Majorities of students chose the internet for their future learning. They asserted that they felt competent to utilize the internet. They also were enthusiast to join if there were the internet training. They also needed to learn how integrated the internet for their learning as well used materials internet – based. In short, they have positive attitudes toward the use of internet for their learning. Those findings were supported with some studies, for example Al-Otaibi, 2012; Balaramulu & Maheshwari, 2015; Rehman et al., 2010).

Al-Otaibi (2012) conducted the research to investigate correlations among the internet, cognitive, emotional, and behaviour components. There were 216 respondents participated in his study. They found that majorities of students laid on positive attitudes toward the use of internet. Balaramulu and maheshwari (2015) diagnosed students’ attitudes on the internet usage in learning. The respondents were 100 students. The data was analysed through Likert-scale and was received through questionnaire. The findings proved that non existences between male and female students for their internet usage occurred. Rehman et al. (2010) argued the same points that most students have positive attitudes on the internet and asserted the internet as a pivotal learning tool. The results also underlined that the students felts comfortable to use the internet to search information and to gather as many as possible learning resources.

The second research questions analysed male and female students’ differences on their attitudes toward the use of internet for their learning. The results highlighted that there were no differences between male and female students on their attitudes toward their use of internet for their learning. In other words, all students tended to have similar positive attitude toward the use of internet for their learning. Those were in lines with some research findings (such as Asiksoy & Islek. 2017; Nuankaew
et al., 2021; Reddy & Karthik, 2013; Wong & Fong, 2014). Wong and Fong (2014) studied on students’ attitudes toward online and traditional method. The results posted that there were no significant differences between traditional method and online learning. Both methods were responded positively by students. Another study was by Rhema and Miliszewska (2014). They pointed out that there were no differences between male and female on their attitudes toward e-learning and ICT usage. Sultana and Imtiaz (2018) also figured out similar point that there were no differences between male and female on the utilization of internet as well as no differences of self-efficacy between male and female students. Golub et al. (2007) also figured out that no differences occurred between male and female students in their online learning

4. Conclusion

The implementation of internet for the learning was persuaded by current conditions where the world education huge changed into the virtual scheme. Of course, it less or more impacted to the students’ attitudes on the utilization of the internet for their learning. The results of first research questions asserted that most of students collected positive attitudes toward the use of internet for their learning. The second research question answered that there were no differences between male and female students on their attitudes of internet for their learning. It implied that most of students have similar and positive attitudes on their attitudes of using the internet. The suggestions proved both at the pedagogic and future research. For the pedagogic, the results expected to be integrated in the curriculum and lesson plan. For the future research, the findings can be used as the basic and can support further research and other study fields related with the online learning.

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