HIGHER EDUCATION STUDENTS' PERCEPTION TOWARDS THE IMPLEMENTATION OF SYNCHRONOUS AND ASYNCHRONOUS LEARNING MODES

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Abstract

The perception of higher education students towards synchronous and asynchronous learning modes plays a vital role in determining the success of these pedagogical approaches. Students' preferences and attitudes towards these modes can impact their engagement, motivation, and overall learning outcomes. Thus, this research aimed to analyze the students' perception on the modes of English learning activities employed a descriptive quantitative and qualitative approach. Students of all majors became the respondents and filled online questionnaire via Google form. There were 464 respondents filled in the questionnaire. The result showed that students were fully aware of the implementation, characteristics, and consequences of these two learning modes. Furthermore, students can shift and adapt with ease to the modes employed. Then, it can be concluded that students have adapted to the modes of learning and face no difficulty in the employment of synchronous and asynchronous classes.

Keywords: Asynchronous, Learning Modes, Students' Perception, Synchronous

1. Introduction

In recent years, the field of higher education has witnessed a significant shift in instructional delivery methods, driven by advancements in technology and the increasing demand for flexible learning options (Hamid & Sulistyaningrum, 2019). Synchronous and asynchronous learning modes have emerged as two prominent approaches in online education, offering distinct advantages and challenges for both educators and students. Synchronous learning involves real-time interaction between instructors and students, while asynchronous learning allows for self-paced engagement with course materials. Understanding students' perceptions towards these learning modes is crucial for institutions to design effective online learning experiences that cater to diverse student needs.

The perception of higher education students towards synchronous and asynchronous learning modes plays a vital role in determining the success of these pedagogical approaches. Students' preferences and attitudes towards these

modes can impact their engagement, motivation, and overall learning outcomes. Therefore, it becomes imperative to investigate how students perceive the implementation of synchronous and asynchronous learning modes and explore the factors that influence their preferences.

Several studies have examined students' perceptions of synchronous and asynchronous learning in higher education contexts. For instance, Smith and Ferguson (2019) conducted a survey among undergraduate students to explore their satisfaction and perceived effectiveness of synchronous and asynchronous learning activities. Their findings revealed that students appreciated the real-time interaction and immediate feedback provided by synchronous learning, while asynchronous learning was valued for its flexibility and opportunity for self-directed learning.

Moreover, a study by Johnson et al. (2020) investigated students' preferences for synchronous and asynchronous learning during the COVID-19 pandemic, which forced a sudden transition to online education. The researchers found that students' perceptions varied depending on their technological proficiency, learning style preferences, and access to reliable internet connectivity. Additionally, students highlighted the importance of clear communication, well-structured content, and supportive learning environments in both synchronous and asynchronous settings.

Understanding students' preferences for synchronous and asynchronous learning modes is crucial for effective course design and delivery. Several studies have examined student preferences, with varying results. For instance, Smith and Ferguson (2019) found that most students preferred asynchronous learning due to its flexibility and convenience, while only a small percentage preferred synchronous learning. However, in a study by Johnson et al. (2021), it was found that some students preferred synchronous learning as it provided a sense of community and immediate feedback from instructors.

Both synchronous and asynchronous learning modes have their unique advantages and challenges. Research has explored the effectiveness of these modes in terms of student engagement, learning outcomes, and satisfaction. For example, a study by Chen and Jones (2020) compared the two modes and found that synchronous learning had a positive impact on student engagement and interaction, while asynchronous learning was associated with greater flexibility and convenience. Similarly, a meta-analysis conducted by Wang et al. (2022) revealed that both modes were effective in promoting student learning outcomes, although the effect sizes varied across disciplines.

Several factors can influence students' perceptions of synchronous and asynchronous learning modes. One important factor is technological proficiency. Students who are more

comfortable with technology may have a more positive perception of both modes (Li et al., 2021). Additionally, instructor presence and interaction play a significant role in shaping student perceptions. A study by Anderson and Kuskis (2020) found that students' satisfaction with synchronous learning was positively correlated with the instructor's ability to create an engaging and interactive virtual classroom environment.

However, despite these valuable insights, there is a need for further research to explore the specific factors influencing students' perceptions of synchronous and asynchronous learning modes in higher education. This study aims to address this gap by examining the experiences and preferences of a diverse group of higher education students across multiple disciplines, considering various demographic and academic factors.

By gaining a comprehensive understanding of students' perception towards the implementation of synchronous and asynchronous learning modes, this research will contribute to the existing body of knowledge and inform instructional design strategies that promote student engagement and success in online higher education settings.

2. Method

This research which aimed to analyze the students' perception on the modes of English learning activities employed a descriptive quantitative and qualitative approach. Students of all majors became the respondents and filled online questionnaire via Google form. There were 464 respondents filled the questionnaire.

A five-point Likert scale questionnaire became the instrument of this research to collect the data. The questionnaire was consisted of 15 questions which answers' option ranged from Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree.

The data gained was calculated quantitatively, an analyzed qualitatively based on the respondents' answers which show their perceptions and preference. The data then was displayed in the form of percentage in figures and tables as the findings and reference for the discussion.

3. Result

In conducting this research, questionnaire was employed to get the data. There are fifteen questions that are distributed to the respondents by using questionnaire. Likert scale was used in measuring the students' perception by using five scale. The result illustrates that there is positive perception from the students. Both of synchronous and asynchronous learning modes can support students learning activity in different media and situations. Most of students also already known about both of learning modes. In the first question, *"Do you know the difference between synchronous and asynchronous learning modes?"* It shows that 98% students already

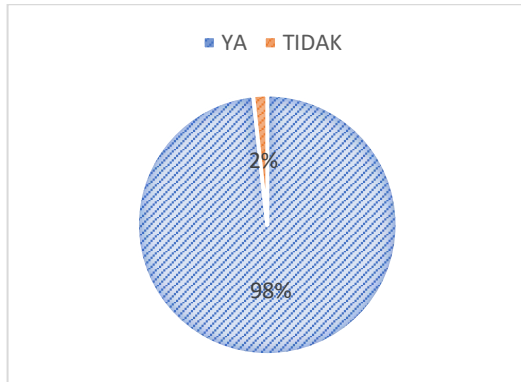known about the differences between synchronous and asynchronous.

Figure 1 Students' knowledge about the differences between synchronous and asynchronous learning modes

Then, the majority of students are also familiar with the media that are frequently utilized in synchronous and asynchronous learning modes. In the second and third questions as follows:

- What types of media are employed in synchronous learning modes (direct learning without time lag)?
- What kind of media are appropriate for the asynchronous learning modes (indirect learning)?

There are 53% students common with the usage of Google Meeting in synchronous learning. 32% and 22% students are common with the usage of Google Form and Learning Management System (LMS) in asynchronous learning modes rather than the usage with Quizzes, Email, WhatsApp, and Telegram. The detailed information is illustrated on the following figure
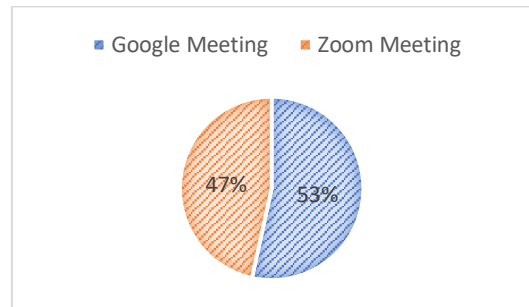
Figure 2 Students' perception about types of media are employed in synchronous learning modes
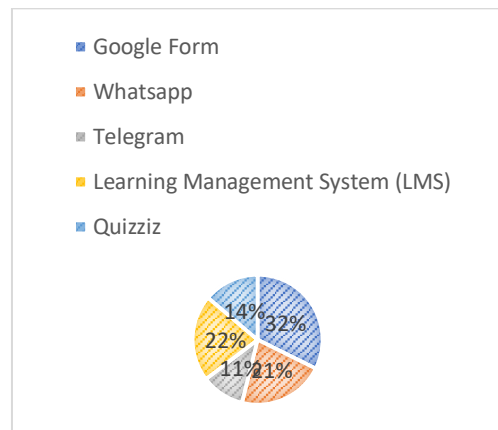

Figure 3 Students' perception about kind of media are appropriate for the asynchronous learning modes

However, other the results show that 84% student synchronous can help them to comprehend the English lesson easier rather than asynchronous by 16%.
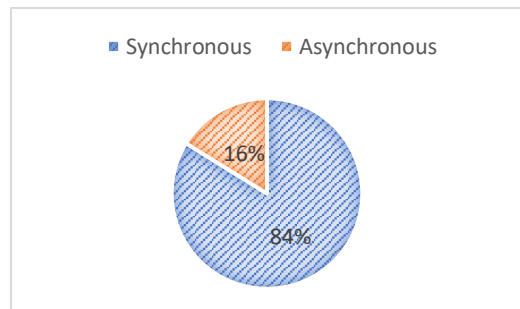

Figure 4 Students' preferences of approaches to comprehend English lessons

Then, 41% most students agree that synchronous learning modes more suited for English online learning than asynchronous by 19%. Besides, most students also actively engage with the learning process by using synchronous modes by 86%, and 57% students can grasp the information presented in the teacher's lectures than asynchronous by 19%. The data are obtained from the questions:

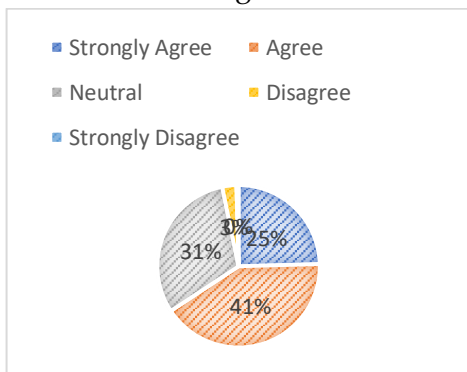- Is the synchronous learning mode more suited for English online learning?

Figure 5 Students' perception in synchronous learning modes

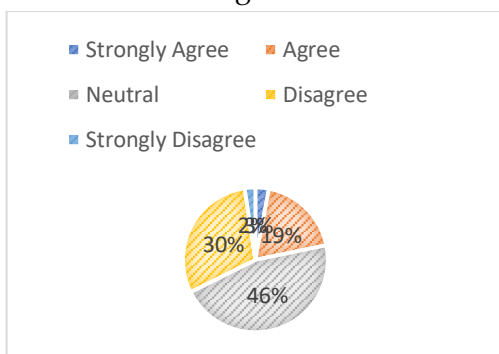- Is the asynchronous learning mode more suited for English online learning?

Figure 6 Students' perception on asynchronous learning

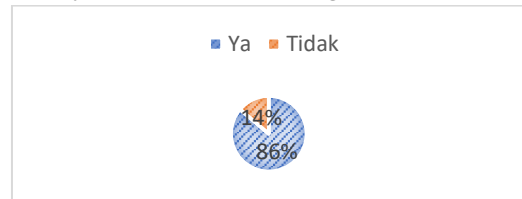- Do you actively engage in synchronous learning?

Figure 7 Students' Participation in synchronous and Asynchronous learning modes

- Do you grasp the information presented in the teacher's lectures using synchronous learning modes?
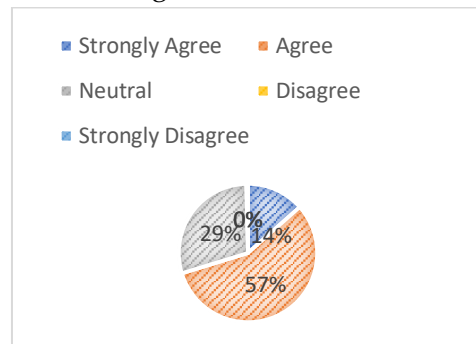

Figure 8 Students' perception about synchronous learning mode in grasping the information

Furthermore, students need 60 minutes to understand English learning content while using the synchronous learning modes meanwhile by using asynchronous, students need >120 minutes to comprehend the materials. The time duration in learning activity by using synchronous and asynchronous learning modes also asked in questionnaire. The detailed information is presented in figure 8 and 9 as follows:
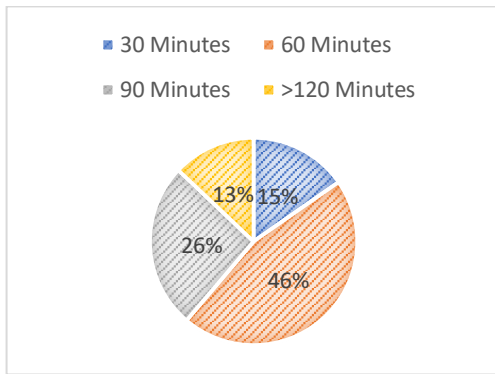
Figure 9 Time durations to understand English learning content while using the synchronous learning modes
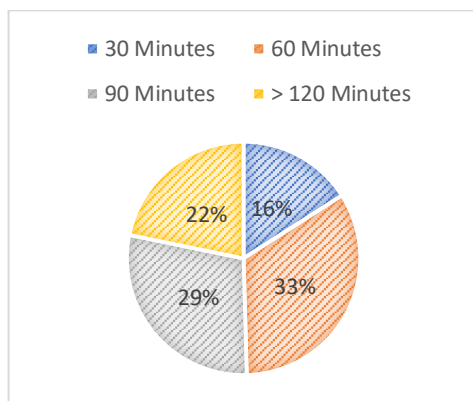

Figure 10 Time duration to understand English learning content while using the asynchronous learning modes

Furthermore, the results also illustrate that most of students can comprehend the English lesson and can help them to improve their English comprehension by using synchronous learning modes by 48%.
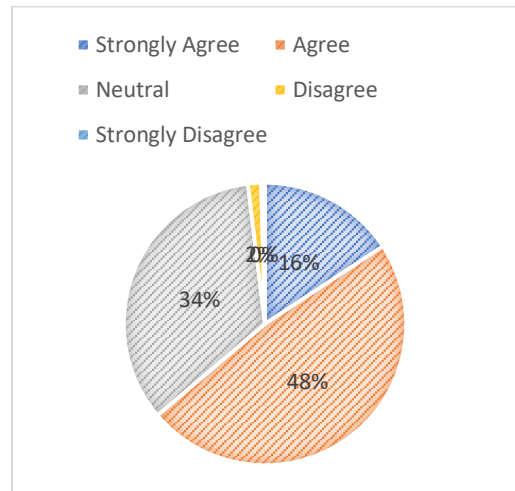

Figure 11 synchronous aid in the development of students' English comprehension

However, there are many alternatives media that can be used by asynchronous learning modes than synchronous learning modes. If in the beginning it is stated that synchronous learning modes have Google Meeting and Zoom Meeting, asynchronous learning modes have Google Form, Quizzes, Email and LMS. From some of asynchronous media before, students are more attractive in doing assignment by using Quizzes by 36%.
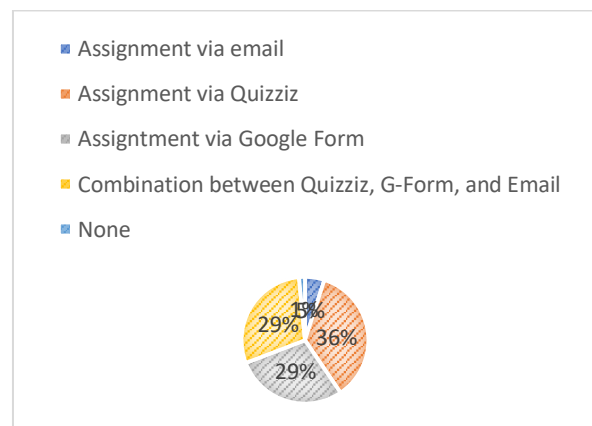

Figure 12 Students' Perception in asynchronous media

Even though asynchronous learning modes cannot facilitate students to learn face-to-face learning directly, 27% students agree that they can comprehend the teachers' lesson materials using asynchronous learning modes.
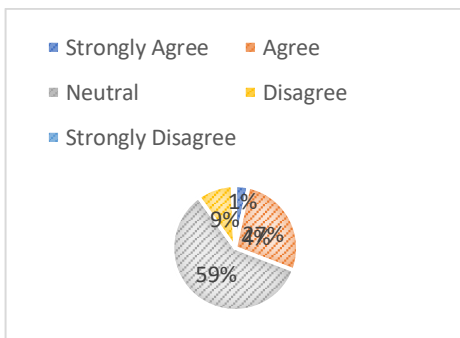

Figure 13 Students perception in comprehending the teachers' lesson materials using asynchronous

In addition, from the results above, it can be inferred that synchronous learning modes more comfort in supporting students learning activity rather than asynchronous, but both have the weakness and strength to support students online learning. The findings of the questionnaire illustrated that students' perception in the weakness and strength of synchronous and asynchronous learning modes in figure14.

Figure 14 Students' Perception of the strength in using asynchronous learning modes to support learning English

Figure 15 Students' Perception of weakness in using asynchronous learning modes to support learning English
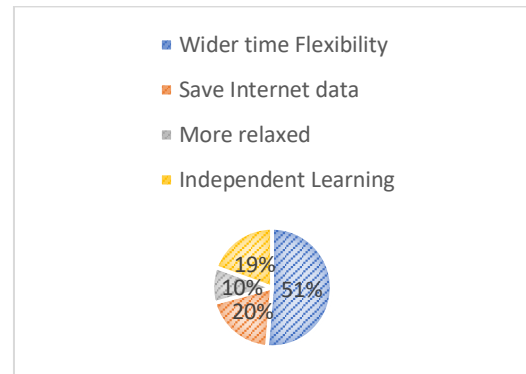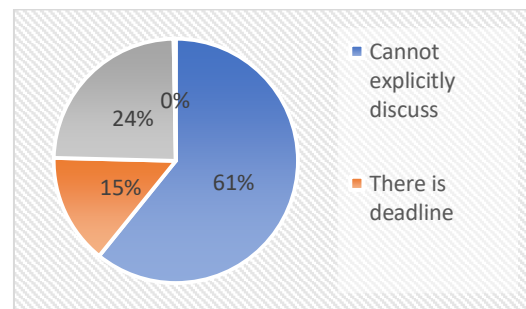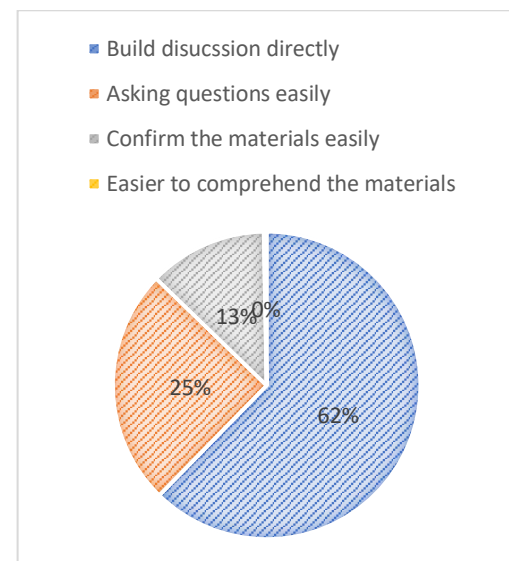

Figure 16 Students' Perception of the strength in using synchronous learning modes to support learning English
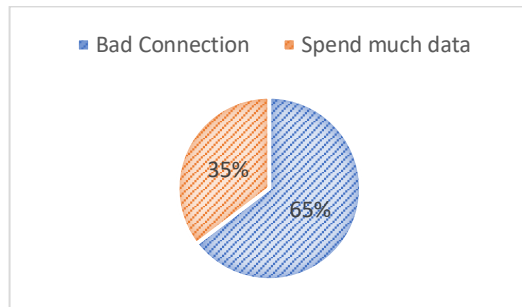
Figure 17 Students' Perception of weakness in using synchronous learning modes to support learning English

From the result of fifteen questions above, the findings can be interpreted that the positive students' perception into the usage of synchronous and asynchronous learning modes. Thus, both of learning modes can be used by teachers and students in teaching and learning process.

4. Discussion

Nowadays, in digital era and the pandemic situation support teachers and students to conduct teaching and learning activity by using online platform. Online learning environment can be divided into synchronous and asynchronous learning modes (Ayesha Perveen, 2016). In investigating the effective usage of synchronous and asynchronous learning modes, students' perception research was conducted to investigate the usage both of learning modes.

Synchronous learning environments offer real-time communication that can be collaborative in nature and incorporate e-activities like an instructor's lecture with the option of question and answer session (Salmon, 2013). According to

Teng, Chen, Kinshuk & Leo (2012) and Asoodar, Atai, Vaezi & Marandi (2014), synchronous learning can help students to comprehend the content materials better rather than asynchronous learning modes. It is caused by synchronous mode build the sense of community through collaborative learning and facilitate virtual classroom as a place for instructors and students to interact and collaborate in real time. In conducting virtual classroom in real time, some medias that can be used in synchronous learning modes such as Google Meeting and Zoom Meeting. It is confirmed in this research that students can actively engage in the learning activity and students can easier understand the materials presented by the teachers by using synchronous learning modes. The results showed 86% students participate in the class actively and 84% student agree that synchronous can help them to comprehend the English lesson easier rather than asynchronous by 16%.

This research finding also confirmed the previous research conducted by Hizriani, et.al (2022) that synchronous learning modes can help students better to grasp content materials or information and practicing English online learning by conducting individual or group presentation at definite time. Teachers also give the feedback and explain the materials by using synchronous learning modes, although the students were not in the same place, they could participate

simultaneously. It is in line with the results that 41% most students agree that synchronous learning modes more suited for English online learning than asynchronous by 19%. Besides, most students also actively engage with the learning process by using synchronous modes by 86%, and 57% students can grasp the information presented in the teacher's lectures than asynchronous by 19%.

Meanwhile, asynchronous learning is not time bound and students can work on electronic activities at their own pace. It means that asynchronous settings made students more individually and less dependent on the instructor. Asynchronous learning has some benefits of course, first, easy to access; it is usually in a digital format and stored on the internet. One of the important things that the students must have an internet connection. Second, the flexibility; The students can access or complete the learning material at any time or at different points of time. The last one is usability; the students can learn likes watch, read or listen the material as many times as necessary. Besides, application of asynchronous learning also had other impacts in the field Psychology namely the motivation of students' learning (Siswanto, et. al, 2021). Motivation is an energy change within the person characterized by effective arousal and anticipatory goal reaction. Motivation will push, move and direct students to learn. Students who have a high learning motivation

will do activities an acquiring knowledge (Amna Emda, 2017).

Based on the theory above, both of them can be employed in online learning environment. In order that implementation asynchronous learning makes a positive impact for students learning outcomes, this is of course, need the role of the teacher. The teacher must design a good media and easy to access by students or the teacher must be smart to choose a platform that can be used by students to learn in asynchronous.

5. Conclusion

The use of learning modes both synchronous and asynchronous in English class is widely used nowadays. Following the implementation, this research is aimed to identify the students' perception on the learning modes implemented. The data is gained from 464 students by filling questionnaire consisting 25 questions. The result showed that students were fully aware on the implementation, characteristics, and consequences of these two learning modes. Furthermore, students can shift and adapt with ease on the modes employed. Then, it can be concluded that students have adapted on the modes of learning and face no difficulty in the employment of synchronous and asynchronous class. The implication of this study is that students are adaptive, and ready for further educational innovation such as technological embedded learning activities.

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