

EFL COLLEGE STUDENTS' PERCEPTIONS ON SYNCHRONOUS AND ASYNCHRONOUS COMMUNICATION TOOL USAGE IN E-LANGUAGE LEARNING

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Abstract

Synchronous and asynchronous communication tools are used to assist teachers and students in supporting an e-language learning environment accessible from anywhere and at any time. Thus, the current study aims to discover EFL college students' majority perception of using synchronous and asynchronous communication tools. This study used a quantitative research design, that is, a survey. The research involved 237 Indonesian EFL learners pursuing their Bachelor's degrees in the English Education Department. The data was collected using a close-ended questionnaire adapted and modified from Perveen (2016) with three indicators: students' awareness and activeness, students' perceptions of the advantages and disadvantages, and students' preferences on synchronous and asynchronous communication tool usage. This questionnaire was made in a Google Form and was distributed through WhatsApp. Furthermore, the data was assessed using Sudijono's (2018) assessment criteria. The research findings highlight two main points. First, 54.01% of students positively perceived using synchronous communication tools. Second, 52.74% of students have positive perceptions of using asynchronous communication tools. Therefore, the research suggests lecturers can combine synchronous and asynchronous communication tools since students positively perceived both communication tools.

Keywords: Students' Perceptions, Synchronous Communication Tools, Asynchronous Communication Tools, E-Language Learning

INTRODUCTION

E-language learning allows teachers and students to create a language learning environment available anywhere and anytime with support from digital technology or communication tools. It is critical since language learning is time-consuming; its procedure necessitates a lot of input and interaction (Xodabande, 2017). However, selecting synchronous and asynchronous communication tools in an e-language learning environment has yet to pay much attention to their importance in supporting learning. In e-learning, little attention is given to how people use synchronous and asynchronous media (Xie, et al, 2018). Furthermore, the choice of these technologies impacts the efficacy of the learning process and academic achievement. The study by Alameri, Masedah, Hamadallah, Ismail, and Fakhouri (2020) discovered that the selection and use of e-platforms significantly impacted self-studying and academic performance. It is in line with the preliminary observation result that the selection of communication tools for e-language learning needed more consideration by the English Education Department. Therefore,

the students still need help due to the limits and inappropriate selection of communication tools in e-learning courses.

Synchronous communication tools are media used for face-to-face or real-time interaction or message transmission that enable real-time collaboration, just as in a traditional classroom where students and teachers interact instantly; it includes video, web and audio conferencing, live chat, whiteboarding, and application sharing (Lim, 2017a). On the other hand, asynchronous communication tools are media used to communicate or deliver communications that are non-concurrent and do not occur in real-time; they involve discussion forums, weblogs, email, and social media messaging (Lim, 2017b). Moreover, such difficulties will certainly lead to various perceptions from students on synchronous and asynchronous communication tool usage in e-language learning.

Perception is a constructive process based on top-down processing; it starts with sensory data that require higher cognitive information, whether from previous experiences or stored information, to create judgments about what people observe (Gregory, 1980). Furthermore, students' perceptions play an essential role in evaluating the effectiveness of using synchronous and asynchronous communication tools in e-language learning. Investigating students' perceptions may assist in identifying subgroups of students who have the most need for enhancing the learning environment that contributes to better learning achievements (Könings, Seidel, Brand-Gruwel, and van Merriënboer, 2014). Students' perceptions might have a direct effect on their learning. Therefore, it has the potential to be a credible assessment that results in improving learning (Turner & Meyer, 2000).

The perception is divided into positive and negative categories (Irwanto, 2002; Robbins & Judge, 2012). Positive perception is a way of seeing the world that presents all information and knowledge (known and unknown) in a favorable light (Irwanto, 2002). On the other hand, negative perception connects information (known or unknown) with the encountered object in a negative or unsuitable way (Irwanto, 2002b). Individual dissatisfaction with a particular object leads to negative perception, as do individual ignorance and a lack of experience with the observed object (Robbins & Judge, 2012). Furthermore, positive perception improves self-esteem and confidence, helping people keep up with reality, face challenges, and move forward and vice versa (Burns, Richardson, and Brady, 2010).

There are several previous studies in non-Indonesian and Indonesian contexts related to this study. First, Perveen (2016) evaluated the effectiveness of synchronous and asynchronous E-Language Learning activities in an E-Language Learning Environment (ELLE) at the University of Pakistan. Second, Özdal, Yükselir, & Akarsu (2021) investigated students' perspectives, preferences, strengths, and weaknesses of synchronous and asynchronous approaches and the comparison of face-to-face language instruction with online learning at Turkey University. Third, Riwayatningsih & Sulistyani (2020) assessed the effectiveness of university students' synchronous and asynchronous e-language learning environments in Indonesia. Fourth, Yulitriana (2021) analyzed EFL students' attitudes toward synchronous and asynchronous learning at Palangka Raya University. However, this study has certain gaps with those researches. This study is focused on analyzing EFL college students' majority perception of synchronous and asynchronous communication tool usage in e-language learning.

METHOD

This study uses a quantitative research design, that is, a survey. The quantitative research approach concentrates on objective measurements and statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and changing pre-existing statistical data using computational tools (Creswell, 2014). Based on these beliefs, the current study is compatible, which intends to examine numerical data obtained through a survey study. The

survey research designs are procedures in quantitative research that utilize questionnaires or interviews to collect quantitative, numerical data, which they then statistically analyze to detect trends in responses and evaluate study questions or hypotheses; it aims to discover people's attitudes, perceptions, behaviors, or qualities (Creswell, 2012).

This study's population is 581 English Education Department UIN Sunan Gunung Djati Bandung who have learned English utilizing synchronous and asynchronous communication tools. Furthermore, the research sample consists of 237 students from the English Education Department. This sample is determined using proportionate stratified random sampling with the calculation of the Slovin Formula and proportional allocation formula (Gay, Mills, and Airasian, 2009; Ferdinand, 2014). It is chosen for this study since the participants are not homogeneous and proportionately stratified, which analyzes students' perceptions of different student batches. Table 1 displays the calculation of the research sample of this study.

Table 1: Research Sample

No.	Batch	Total Students	Sample
1.	2018	131	$\frac{131}{581} \times 237 = 53,43 \approx 53$
2.	2019	129	$\frac{129}{581} \times 237 = 52,62 \approx 53$
3.	2020	134	$\frac{134}{581} \times 237 = 54,66 \approx 55$
4.	2021	187	$\frac{187}{581} \times 237 = 76,28 \approx 76$
Total		581	237

The data collection technique of this study uses a close-ended questionnaire in a Google Form that was distributed through WhatsApp with the modification of the Likert Scale by Creswell (2012): strongly agree, agree, disagree, and strongly disagree. Furthermore, this questionnaire involved three indicators: students' awareness and activeness, students' perceptions of the advantages and disadvantages, and students' preferences that were adapted and modified from Perveen (2016). Furthermore, this questionnaire is reliable since the reliability test result is 0.923, which is > 0.70 (Nunnally, 1995). The following table shows the research instrument grid of this study.

Table 2: Research Instrument Grid (Perveen, 2016)

Construct	Indicator		Question Item
EFL students' perceptions on the use of synchronous and asynchronous communication tools in e-language learning at English Education Department UIN Sunan Gunung Djati Bandung	Awareness & Activeness	6	Synchronous= 1, 3, 5 Asynchronous= 2, 4, 6
	Advantages & Disadvantages	4	Synchronous= 7, 9* Asynchronous= 8, 10*
	Preferences	2	Synchronous= 13 Asynchronous= 14
Total		12	12

Remarks:

*= Negative statement

The whole process of calculating data is using Microsoft Excel and SPSS. In addition, all of the data collection is calculated to answer the research question based on Sudijono’s (2018) assessment norms. The table below shows the assessment norm.

Table 3: Assessment Norms (Sudijono, 2018).

No.	Perception Category	Score (X) = Interval Formula
1.	Very Positive	$X > Mi + SDi$
2.	Positive	$Mi < X \leq Mi + SDi$
3.	Negative	$Mi - SDi < X \leq Mi$
4.	Very Negative	$X < Mi - SDi$

Furthermore, the interval formula is calculated by calculating the ideal score of the mean (Mi) and the standard deviation (SDi) based on Sudijono’s (2018) formula, as seen below. The calculation data can be used to categorize the perceptions of EFL students. Furthermore, the interval formula is used in SPSS to determine the frequency of students’ perceptions. As a result, the research findings were accurately examined to provide valuable descriptions and referrals to other sources.

$$Mi = \frac{1}{2}(Max + Min) \tag{1}$$

$$SDi = \frac{1}{6}(Max - Min) \tag{2}$$

Remarks:

Mi= Ideal mean

SDi= Ideal standard deviation

Max= The maximum score

Min= The minimum score

FINDING AND DISCUSSIONS

This section presents the research question’s relevant data: the majority of students’ perceptions of synchronous and asynchronous communication tool usage in e-language learning. It contains the participants’ responses to 12 questionnaire items adapted and modified from Perveen (2016). This study’s total number of participants is 237 students. This amount corresponds to the research participants’ target. Table 3 shows the interval formula for the assessment norm of students’ perceptions of synchronous and asynchronous communication tool usage in e-language learning.

Table 4: Interval Formula of the Assessment Norm.

Indicator	Score Max	Score Min	Ideal Mean	Ideal Std. Deviation
Synchron-ous & Asynchron-ous	24	6	$Mi = \frac{1}{2}(24 + 6) = 15$	$SDi = \frac{1}{6}(24 - 6) = 3$

Table 4 displays the data output calculations of the interval formula for synchronous and asynchronous communication tool assessment norms. This calculation is based on three indicators that generated the following results: maximum (Max) = 24, minimum (Min) = 6, ideal mean (Mi) = 15, and ideal standard deviation (SDi) = 3. The interval formula for the assessment norms of students’ perceptions was established by the ideal mean and standard

deviation. The assessment norms of students' perceptions of using synchronous communication tools in e-language learning are shown in the table 5 below.

Table 5: Assessment Norms Result of Students' Perceptions on Synchronous Communication Tool Usage.

Interval Formula	Perception Category	Frequency				Total	Percentage
		2018	2019	2020	2021		
$X > 18$	Very Positive	15	16	16	5	52	21.94%
$15 < X \leq 18$	Positive	31	23	27	47	128	54.01%
$12 < X \leq 15$	Negative	6	10	8	18	42	17.72%
$X < 12$	Very Negative	1	4	4	6	15	6.33%
Amount		53	53	55	76	237	100%

The study results show that most students in the 2018 to 2021 batches are positively considered synchronous communication tool usage in e-language learning. Table 5 revealed that 128 students, or 54.01%, are included in the positive perception category. It confirms that most students have positive perceptions on synchronous communication tool usage in e-language learning. Positive perception is a way of looking at the world that draws all information and knowledge in a positive way (Irwanto, 2002). Furthermore, it is consistent with previous research, which found that the majority of students favor the use of various forms of synchronous communication technologies, such as Zoom, LiveChat, and Blackboard, in their online language study (Almekhlafy, 2020; Broadbent & Lodge, 2021; and Alia, Antasya, Aireen, Amy, and Malthane., 2022). Table 6 displays the students' responses to questions about their awareness and activeness on synchronous communication tool usage in English online learning.

Table 6: Students' Responses on Synchronous Communication Tool Usage Questionnaire Items.

Indicator	No.	Item	Frequency			
			SA	A	DA	SDA
Awareness & Activeness	1.	I know what synchronous communication tools in e-language learning are.	52	113	67	5
	3.	I know the kind of synchronous communication tools in e-language learning.	40	104	90	3
	5.	I actively use synchronous communication tools in e-language learning.	32	96	103	6
Advantages	7.	Synchronous communication tools are economical, flexible, and intense for e-language learning.	31	125	76	5
	9.	Synchronous communication tools are time-bound, connectivity-bound, and have high bandwidth for e-language learning.	10	107	86	34

Indicator	No.	Item	Frequency			
			SA	A	DA	SDA
Preferences	11.	I prefer to use synchronous communication tools in e-language learning.	51	91	78	17

Remarks: SA = Strongly Agree; A= Agree; DA = Disagree
 SDA = Strongly Disagree

Table 7: Assessment Norms of Students’ Perceptions on Asynchronous Communication Tool Usage

Interval Formula	Perception Category	Frequency				Total	Percentage
		2018	2019	2020	2021		
$X > 18$	Very Positive	13	12	10	10	45	18,99%
$15 < X \leq 18$	Positive	30	32	27	36	125	52,74%
$12 < X \leq 15$	Negative	10	9	15	27	61	25,74%
$X < 12$	Very Negative	0	0	3	3	6	2,53%
Amount		53	53	55	76	237	100%

Table 6 shows students’ responses to questionnaire items related to students’ perceptions on synchronous communication tool usage. This study believed that students’ awareness and activeness with synchronous communication tool usage in e-language studies influence their perceptions. Based on the findings above, 113 and 104 students are aware of and actively use synchronous communication tool in English online learning. It is in line with Xie et al. (2018) discovered that 79% are aware of synchronous mode. Furthermore, the highest frequency of agreement from this indicator (statements 1, 3, and 5) is statement number one, “I know what synchronous communication tools in e-language learning are.” These findings confirm that the majority of students are aware of and actively using synchronous communication technologies in e-language learning. Students’ perceptions of using synchronous communication tools are influenced by their prior experience and knowledge, which is related to their awareness and participation (Gregory, 1980). Real-life experiences shape people’s perceptions, which in turn shape their behavior and attitudes (Akande, 2009).

Furthermore, students’ perceptions of the benefits and drawbacks of using synchronous communication tools in e-language learning influence their perception of using them. The findings revealed that 125 students are agreed that synchronous communication tool usage in English online learning had more advantages than disadvantages. This finding is consistent with Perveen (2016), who found that students agreed that synchronous sessions in e-language learning provided them with more benefits. Students’ responses to this indicator (statements 7 and 9), statement number seven, “Synchronous communication tools are economical, flexible, and intense for e-language learning,” had the highest frequency agreement. Based on this finding, most students believed synchronous communication tools provided more benefits in e-language learning. Real-time communication, communicative and collaborative discussions, and improved language abilities are all advantages of synchronous communication technologies (Lim, 2017).

Based on the student preferences indicator, 91 students prefer to use synchronous communication tools in e-language learning. In accordance with a previous study, students’

enjoyment of their experiences is an essential aspect of their perceptions (Pérez-Pérez, Serrano-Bedia, and Garca-Piqueres, 2020). It reveals that most students choose to utilize synchronous communication tools in e-language learning because they find them more beneficial. In addition, positive perception increases learners' self-esteem and confidence in dealing with difficulties (Burns et al., 2010). As a result of their personal experience and prior knowledge, students have positive perceptions of using synchronous communication platforms, which increases their motivation for e-language learning. The following table displays the assessment norms of students' perceptions of using synchronous communication tools in e-language learning.

Table 7 displays that the majority of students in the 2018 to 2021 batches have a positive perception on asynchronous communication tool usage in e-language learning. It shows that 125 students, or 52.74%, are in the positive perception category. It confirms that students have positive perceptions on asynchronous communication tool usage in online language learning. Positive perception results from an individual's satisfaction with an object as a result of their interaction with it; this study uses synchronous communication tools as the object (Robbins & Judge, 2012). Individuals with favorable perceptions may tolerate and encourage any perceived activity (Irwanto, 2002). Furthermore, it is consistent with a previous study that discovered that when students used asynchronous communication technologies in e-learning, they felt more at ease (Xie et al., 2018). Table 8 shows the students' responses to their awareness and active participation in asynchronous communication tool usage.

Table 8: Students' Responses on Synchronous Communication Tool Usage Questionnaire Items.

Indicator	No.	Item	Frequency			
			SA	A	DA	SDA
Awareness & Activeness	2.	I know what asynchronous communication tools in e-language learning are.	57	108	67	5
	4.	I know the kind of asynchronous communication tools in e-language learning.	44	109	81	3
	6.	I actively use asynchronous communication tools in e-language learning.	35	107	90	5
Advantages & Disadvant-ages	8.	Asynchronous communication tools are economical, flexible, and intense for e-language learning.	47	104	82	4
	10.	Asynchronous communication tools are time-bound, connectivity-bound, and have high bandwidth for e-language learning.	6	133	80	18
Preferences	12.	I prefer to use asynchronous communication tools in e-language learning.	18	66	129	24

Remarks:

SA = Strongly Agree

A = Agree

DA = Disagree

SDA = Strongly Disagree

Table 8 shows students' awareness and activeness in using asynchronous communication tools from statements 2, 4, and 6 revealed that 109 students agreed with statement number four, "I know the kind of asynchronous communication tools in e-language learning." This statement gained the most agreement among students. It is consistent with the Xie et al. (2018) study, which found that 84% of students were aware of asynchronous technologies in e-learning. It indicates that most e-language learning students are aware of asynchronous communication tools in e-language learning because of their knowledge and activity experience with them. It supports the claim that determining individual positive or negative perceptions requires conceptual knowledge and experience (Gregory, 1980; Jones, 2013). The process of developing consciousness or comprehension of sensory information mediated by sight, hearing, smell, sensation, and touch is called perception (Slameto, 2010; Qiong, 2017). It is comparable to a previous study, which discovered that most students who saw LMS as asynchronous communication tools improved their grammatical proficiency (Truong, 2021).

Furthermore, students' perceptions on the advantages and disadvantages of asynchronous communication tool usage in online English learning show that 133 students agree with statement 10, "Asynchronous communication tools are time-bound, connectivity-bound, and have high bandwidth for e-language learning." In addition, asynchronous communication tools reduce the possibility of misinterpretation of other people's opinions, no face-to-face interaction (not in real-time), and the longer time it takes to receive feedback and need technological skill (Perveen, 2016; Lim, 2017). Nevertheless, students' responses to statement number eight, "Asynchronous communication tools are economical, flexible, and intense for e-language learning," had the highest amount of agreement and strong agreement from the students. It is in line with the prior study that discovered that students' positively perceived the most significant benefit of asynchronous modes are flexibility (Perveen, 2016). This finding confirms that most students considered that asynchronous communication tools in e-language learning provided benefits and limitations in their online language learning.

Table 8 displays students' preferences for using asynchronous communication tools in e-language learning. It shows that 129 students did not prefer to use asynchronous communication tools in e-language learning. Individual preferences may be influenced by perception processes such as selection, organization, and interpretation, which exist physically and psychologically based on their experience (Qiong, 2017).

Based on previous discussions, EFL students in the English Education Department prefer synchronous communication tools rather than asynchronous communication tools in their English online learning. Furthermore, positive or negative perceptions are determined by a person's experience, knowledge, and perception process about the benefits and limitations of communication tools and their preferences. Thus, English lecturers can use these findings as a reference in order to help decide on the communication tools to be utilized for effective e-language learning. Inform a number of important data (original) fields which are obtained from the questionnaires, surveys, documents, interviews, observations and other data collection techniques. It can be completed with a table or graphic to clarify the result.

CONCLUSION

The majority of Indonesian EFL college students have positive perceptions of synchronous and asynchronous communication tool usage in e-language learning. However, they preferred using

synchronous communication tools in e-language learning. The positive or negative perceptions are impacted by a person's sensory information, prior knowledge, experience, and perception process (human senses). Additionally, positive perception can enhance students' self-esteem, confidence, and willingness to learn English in e-language learning and vice versa. Hence, students' perceptions are crucial for e-language learning because they may evaluate and enhance the learning process, resulting in higher learning achievements. Furthermore, as the research recommends, lecturers can expand the usage of synchronous communication tools in English online learning since students positively perceive and prefer using them; or they can blend synchronous and asynchronous communication tools since students like both communication tools. Lecturers also can conduct a need analysis survey to determine which communication tools students prefer in the specific course. Moreover, as a topic specification, the research can relate synchronous and asynchronous communication tools to a specific course or skill since this study focuses on general e-language learning. Then, as a methodological choice, the research can use a qualitative design and a small sample size to investigate the elements influencing EFL students' perceptions deeply.

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