



Indonesian High School Students' Readiness and Attitude toward Online Learning : A Mixed Method Study

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Abstrak

Penelitian ini bertujuan untuk mengetahui kesiapan dan sikap siswa terhadap pembelajaran online serta bagaimana kesiapan dan sikap belajar mereka tersebut mempengaruhi partisipasi dan prestasi belajar mereka dalam pembelajaran online. Penelitian ini menggunakan Mixed Method Research (MMR) dengan menyebarkan kuesioner dan melakukan wawancara mendalam. Kuesioner dibagikan kepada 50 siswa di 5 SMA di salah satu kabupaten di provinsi Sulawesi Selatan Indonesia, dan 5 siswa yang merespon kuesioner dipilih untuk dilakukan wawancara. Data kuantitatif dari kuesioner dianalisis menggunakan Statistical Package for Social Sciences (SPSS), sedangkan data kualitatif dari wawancara dianalisis menggunakan analisis tematik. Hasil penelitian menunjukkan bahwa kesiapan dan sikap siswa telah terbukti mempengaruhi tingkat keterlibatan mereka dalam pembelajaran online bahasa Inggris. Beberapa faktor yang mempengaruhi kesiapan siswa, yaitu: kurangnya pemahaman teknologi terkait platform pembelajaran digital, perangkat teknologi untuk pembelajaran virtual, kuota, dan akses internet. Studi ini juga menemukan bahwa, meskipun siswa memiliki sikap negatif terhadap pembelajaran online pada awal pelaksanaannya, namun mereka telah belajar sesuatu yang baru terkait dengan teknologi pendidikan yang mempengaruhi sikap positif mereka terhadap pembelajaran online, termasuk pembelajaran online bahasa Inggris. Studi ini menyarankan perlunya guru menerapkan pendekatan dan strategi pembelajaran yang efektif untuk meningkatkan keterlibatan siswa (secara aktif) dalam pembelajaran online.

Kata Kunci: Pembelajaran online, Kesiapan belajar, Sikap siswa, Mixed method research.

Abstract

This study aims to find out students' readiness and attitude toward online learning and how their learning readiness and attitude affect their participation and academic achievement in online learning. This research used A Mixed Method Research (MMR) by distributing questionnaires and conducting depth interviews. The questionnaire was distributed to 50 students in 5 senior high schools in one district in South Sulawesi province of Indonesia, and 5 of the students who responded to the questionnaire were selected to be interviewed. The quantitative data from the questionnaire were analyzed using the Statistical Package for Social Sciences (SPSS), while the qualitative data from the interview was analyzed using thematic analysis. The results showed that students' readiness and attitude have been found to impact students' level of involvement in English online learning. Some factors influenced the students' readiness, namely: a lack of technological understanding of digital learning platforms, technological devices for virtual learning, quotas, and internet access. The study also found that, despite the students' negative attitude toward online learning at the beginning of the implementation of online learning, they have learned new something about education technology which influenced their positive attitude towards online learning, including English online learning. The study suggests the need for teachers to implement an effective learning approach and strategy to enhance students' involvement in online learning.

Keywords: Online learning, Readiness, Attitude, Mixed method research.

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INTRODUCTION

The COVID-19 outbreak has deeply affected almost all aspects of life, included education sector. The Indonesian government has suspended face-to-face learning activities for several months. The learning process, which was previously carried out in schools, universities, and courses, has been temporarily halted in order to combat the spread of this virus, which has killed millions of people worldwide. As a result, Indonesian educators have been told to switch from face-to-face to entirely online educational activities is the safest and most effective strategy to prevent the virus from spreading. To allow the educators and students to conduct virtual teaching and learning activities, they were introduced with some new applications, such as Zoom, Google Suite for Education, Google Classroom, Google teams, and other social media.

Virtual learning allows educators with the chance to organize their teaching and learning independently using internet. Baran et al. (2013) state that educators are no longer the main actor of information or the focus of engagement in online teaching, but rather the guide of the side. As a result, teachers' speaking time in the online classroom is steadily decreasing. Basilaia and Kvavadze (2020) define online learning as the medium of transferring and/or sharing knowledge via the internet. Educators and learners' ability to involve and participate virtually is a crucial aspects in online learning (Zhu & Liu, 2020). One of the aims of online learning is to encourage distant learners to engage in self-study or autonomous study as the part of the handicap in implementing regular face-to-face teaching (Tuntirojanawong, 2013). Online learning, in general, is a new educational idea that uses internet technology to deliver digital content and create a learner-centered environment for educators and students. To do this, every institution provides support to its educators and students. All of these actions, in addition to the production and delivery of learning materials, help students progress in terms of learning, interacting, and effective communication (Bachtiar, 2021). As previously stated, online learning institutions provide student support services that still dependent on variables of the learning process such as attention, motivation, emotional aspects, and students' preparedness to use various e-learning methodologies.

The functions or models of online learning that are used are numerous. There are three types of online learning functions: (1) supplement, where e-learning acts as a conventional teaching assistant and students have the option of using it or not; (2) complement, where e-learning has a function to support the traditional learning process, usually the learning content on e-learning is used as enrichment or remedial material; and (3) substitution, where e-learning replaces the overall learning process (Arkorful & Abaidoo, 2015).

A study by Aji et al. (2020) found that due to teamwork between instructors, school staffs, pupils, and parents, online learning activities during the Covid-19 epidemic in primary schools could be implemented successfully. Another study by Purwanto et al. (2020) showed some teachers, students, and parents faced some challenges in online learning. These challenges were lack of mastery of technology, expensive internet or quota fees, lack of interaction and communication among students, teachers and parents, and teachers' workloads were booming because they must communicate with other teachers, school principals, and parents, as well as coordinate their efforts. Parents, on the other hand, believed that the issues were more linked to the low level of students' learning discipline when study from home, but a lot of time spent helping their children learn at home, a lack of technical abilities, and higher internet fees. Zhang et al.'s (2020) study pointed out the ambiguity and debate over the way and the subject content to teach, the workload on teacher and student, teaching environment, and its consequences for fair education.

Despite its advantages and expanding popularity, online learning has a number of drawbacks. When compared to traditional learning, several researchers have discovered that the quality of learning outcomes in online learning is inferior (Xu & Jaggars, 2013). Figlio et al. (2013) found that there was little difference in performance between virtual learning and traditional face to face classrooms for high and low performing students, with students who performed poorly in face to face classrooms even perform considerably worse in

online setting. Therefore, the implementation of the online teaching platforms creates some debates among education stakeholders, especially students. Most of students prefer face-to-face teaching and consider that online teaching is less effective (Xu & Jaggars, 2013). Another problem is that not every region in Indonesia can conduct online teaching effectively. There are still some regions that have unstable internet connections even some areas are not yet covered with internet connection at all. In addition, online teaching in general is costly compared to face-to-face classroom since it requires teachers and students to purchase an internet package which is still quite expensive.

There is evidence that students in traditional classrooms are more motivated than those who learn online. In a study looking at the association between gender and course style, Yang et al. (2015) found that either males or females had a larger mastery goal orientation in face to face classroom courses compared with online courses (traditional vs online). Yang et al. discovered that, in goal orientation, males outperformed females in online courses, whereas girls in traditional classes performed better in goal orientation. Research also points out that students prefer traditional classes for specific topics. Students at college, according to Jaggars (2014), felt favor the traditional classroom for topics they regard to be more challenging, while they prefer online programs for ones they consider to be easier. The availability of instructors in traditional classrooms became a reason behind this decision. When asked why they choose traditional instruction in tough classes, most stated that they prefer traditional instruction. Students in Jaggars' study said that online learning were good for topics where students might teach themselves the learning content, but that they valued the amount of instructor help generally provided in face-to-face settings for tough lectures.

Students must learn online because the world is currently facing a global pandemic (COVID-19 pandemic). Readiness is one of the criteria that determines a lesson's success. The cognitive precursor to either resistance to or support for a change effort has been termed as readiness (Armenakis et al., 2016). In learning, readiness is an important aspect that enables the students to reach the target of the learning process. Palloff and Pratt (1999) divided the definition of online learning readiness into three different points. The three different points are: (1) learning instructions in online learning preference contrary to face-to-face; (2) the ability and confidence in working with technological devices; and (3) the skill for independent learning. According to Watrionthos (2019), there are five dimensions that might be implemented to assess students' online learning readiness. These dimensions are: (1) self-efficacy for internet use (the belief of computer/technology users in their ability to use it on a basic level); (2) self-efficacy for virtual communication (students' perception of their skills to understand language and culture in an e-learning environment, as well as how well they can express themselves in that environment; (3) motivation (the desire and effort to improve behavior and encourage other students to learn with e-learning; (4) independent learning (students' ability to identify the needs of their learning, to decide learning objectives, select and implement effective learning techniques, and assess learning objectives, with and/or without assistance from others; and (5) learner control (the student's skills to manage learning as delegated authority).

Despite a myriad of previous research investigating the value of virtual learning during Covid 19, there is limited published research to investigate the level of students' readiness and attitude in online learning. Most of the researches on students' learning readiness and attitude were carried out in typical learning environments and out of teaching English as a Foreign language. How readiness and attitude work within online learning settings and teaching English as a Foreign Language are not as well understood. This research could add to the corpus of knowledge about the factors that determine students' readiness and attitude in English online learning, especially in Indonesian context. The research question that guides this study is "What and how is students' readiness and attitude in English online learning during Covid 19 pandemic?"

RESEARCH METHOD

This study adopted Mixed Method Research (MMR). MMR is defined as an approach that uses quantitative and qualitative methodologies to complement each other's strengths due to these "both approaches may provide stronger evidence for a conclusion" (Johnson & Onwuegbuzie, 2016, p. 21). As a result, mixed methods researchers recognize that both quantitative and qualitative approaches may contribute to research, and they are actively pursuing the usage of and integration of both (Van Griensven et al., 2014). Because the goal of this study was to not only identify, but also to comprehend the students' learning readiness and attitude, and their involvement in English online learning, both quantitative and qualitative data were equally weighted in this study (Bachtiar, 2020). The quantitative data assisted in determining the level of students' readiness and attitude in learning virtually. The qualitative data helped to identify the students' experiences in English virtual learning and the effect of readiness and attitude on students' participation in English online learning.

Research Setting and Participants

The present study was carried out in one district in the province of South Sulawesi, Indonesia. This research setting was purposefully selected and considered appropriate because research regarding online learning implementation during Pandemic Covid -19, and some schools have limited access of internet in the district. Five cohorts of learners consisting of 50 students from five Senior High Schools participated in the questionnaire. To obtain more detailed information and to combine the data collected through the questionnaires, 5 (five) students from different schools were invited to take part in the interviewed. The five participants were choosen from different schools was to get a variety of perspectives (Bachtiar, 2021) from the participating students about their readiness and attitude in English online learning. The coding reference was utilized for the interview data to enable in differenciating the source of information with IT standing for the interview transcript at the start of the reference quotes, followed by the participants' and school pseudonym names. For example, IT.Ahmad.SC1 would refer to the interview with Ahmad from school 1.

Data Gathering Tools and Analysis

In the current study, the researcher employed questionnaires and semi-structured interviews as investigative tools. There were two kinds of questionnaires that were employed: the Student Learning Readiness (SLR), and the Student Learning Attitude (SLA). The SLR consisted of 18 items in which the participants were asked to indicate their choice on the 18 items, using a five-point scale varying from "Strongly Disagree" to "Strongly Agree". While the SLA consisted of 20 statements in which the students were asked to indicate each of the 20 items on a five-point scale that ranges from "Negative" to "Positive". For the semi-structured interview, it focused on four aspects: learning readiness, learning attitude, online learning, and the effect of learning readiness and attitude in English online learning. Using these two investigative tools, the researcher was able to collect a wealth of information regarding the participants' perceptions of learning readiness and attitude in English online learning. These two data sources are particularly crucial since they provide triangulation, which increased the study's credibility, validity and reliability (Maxwell, 2012).

The quantitative data from the questionnaire was transferred and analyzed using the computer software Statistical Package for Social Sciences (SPSS). The data collected from the participants was described using descriptive statistics such as means and standard deviations. In order to obtain qualitative information from the interview, thematic analysis was used. Thematic analysis is the process of looking for themes that emerge as essential to the explanation of a phenomenon (Bachtiar, 2021; Daly et al., 1997). Boyatzis (1998) defines a theme as "a pattern in the information that at minimum describes and organizes the possible observations and at maximum interprets aspects of the phenomenon" (p. 161).

RESULT AND DISCUSSION

Table 1 provides the participants who involved in the questionnaire based on their school, gender, and grade.

Table 1
The Participants' School, Gender, and Grade

School Name	Gender	Grade/Class Level			Total (%)
		X	XI	XII	
School A	Male	-	2	2	8
	Female	2	2	2	12
School B	Male	1	2	1	8
	Female	1	3	2	12
School C	Male	1	2	2	10
	Female	1	2	2	10
School D	Male	-	2	2	8
	Female	2	1	3	12
School E	Male	1	2	1	10
	Female	2	2	2	10
Total		11	20	19	100

Of the 50 students who involved in the questionnaire, 11 (22%) students were in grade X, 20 (40%) were in grade XI, and 19 (38%) of them were in grade XII. The students included 21 (42%) males and 29 (58%) females and they were from different five schools. Table 1 points that the participating students in the questionnaire were mostly females and in grade XI.

Students' Readiness in Online Learning

To find out the students' readiness in following online learning, the Learning Readiness Questionnaire (LRQ) that consist of 18 items was distributed to the participants. The mean score and its interpretation is presented in Table 2.

Table 2
The Level of Student's Readiness

Aspect	N	Mean Score	Interpretation
Level of students' readiness	50	37.67	Moderate level of readiness

Table 2 revealed the student's mean score in learning readiness is 37.67, which is categorized as a moderate level of readiness. It can be interpreted that most of the participating students had the moderate degree of readiness in following English online learning. Table 2 also implied that some of the students were ready and some of them were not ready to join the online learning.

There were five aspects of students readiness in online learning that involved in the LRQ (see Table 3). The mean scores and its interpretation for each of the five aspects of LRQ are presented in Table 3.

Table 3
The Level of Students' Readiness in Five Aspects

Readiness Aspects	Mean Score	Classification
Computer/Internet Self-Efficacy	37.08	Moderate
Self-Directed Learning	34.84	Low
Learner Control	33.72	Low
Motivation in Learning	47.28	Moderate
Online Communication	38.15	Moderate

Table 3 shows that the lowest mean score was learner control (33.72), followed by students' self-directed learning (34.84). The research findings indicate that the participants have issues in term of managing

themselves when having online learning. On the other hand, the highest mean score was on motivation in learning (47.28). This indicates that although the learning process was conducted in virtual environment, the students still have high motivation in learning.

In order to know the students' perception of their readiness in online learning, they were asked to indicate their views for each items of LRQ. Table 4 presents the result of the LRQ items along with the five statements. The percentage of responses for each items would be used as the foundation for further interpretation.

Table 4
Students' Readiness in Online Learning

Items	Strongly Agree		Agree		Uncertain		Disagree		Strongly Disagree	
	N	%	N	%	N	%	N	%	N	%
1. I have capability in using the basic functions of Microsoft Office (MS Word, Excel, and Power Point).	2	4	23	46	13	30	12	24	0	0
2. I have sufficient knowledge and skills in managing and using software for online learning.	0	0	5	10	7	14	29	58	4	8
3. I can use internet (e.g. google, youtube) to search or find information in online learning.	0	0	15	30	12	24	21	42	2	4
4. I follow my personal study plan.	1	2	6	12	12	24	26	52	5	10
5. I look for assistance when I face learning problems.	9	18	28	56	5	10	6	12	2	4
6. I can manage my time well.	1	2	9	18	14	28	12	24	14	28
7. I made a list of my learning objectives.	0	0	2	4	6	12	33	66	9	18
8. I hold myself to higher standards for learning performance.	13	26	14	28	8	16	12	24	3	6
9. I have control over my own learning.	0	0	2	4	11	22	26	52	11	22
10. When I'm learning online, I'm not sidetracked by other internet activity.	2	4	14	28	12	24	15	30	7	14
11. On the basis of my requirements, I repeated the online teaching materials.	11	22	21	42	8	16	7	14	3	6
12. I am receptive to new ideas.	6	12	29	58	11	22	9	18	3	6
13. I am motivated in learning.	8	16	23	46	9	18	8	16	2	4
14. I learned on my mistakes.	2	4	16	32	10	20	12	24	10	20
15. I am fond of sharing ideas with others.	10	20	14	28	7	14	14	28	5	10
16. I am confident in my ability to connect well with people utilizing internet technologies (email, discussion).	0	0	11	22	16	32	21	42	12	24
17. I'm comfortable using text to express my feelings and humor.	1	2	9	18	14	28	21	42	5	10
18. I feel comfortable asking inquiries in online forums.	3	6	19	38	14	28	9	18	5	10

Table 4 shows that the participating students have different readiness in online learning based on the item of LQR. Based on the LQR items, most of the students felt "agree" for the item 5 (I look for assistance when I face learning problems = 56%) and item 12 (I am receptive to new ideas = 58%). On the contrary, most of the students felt "disagree" to the item 2 (I have sufficient knowledge and skills in managing and using software for online learning = 58%) and item 7 (I made a list of my learning objectives = 66%).

Table 4 also shows that, although almost half of the participants felt they have capability in using the basic functions of Microsoft Office (item 1 = 46%), but only 15 (30%) of them felt confident to use internet (e.g. google, youtube) to search or find information in online learning (item 3). This is interesting because the result of item 3 is consistent with the result of item 16 (the students felt confident in their ability to connect well with other people utilizing internet technologies), in which 21 (42%) of them chose “disagree”. Another interesting finding is that many of the students (30%) felt to be distracted by other virtual activities when studying online.

Most of the participants in the interview informed that at the beginning of the implementation of online learning, almost all students were not ready to shift from face to face learning classroom to fully virtual learning environment. Some factors influenced their readiness, such as: lack of technological understanding in relation to digital learning platform, technological devices (smartphone, laptop, etc.) for virtual learning, quotas, and internet access. The findings from the current study support the study findings from Lalima and Dangwal (2017) that pointed out that a sudden change in learning delivery model did not provide students with opportunity to adjust themselves. The sudden change from classical face-to-face learning to fully online learning made students were not ready for online learning. Online learning differs from face-to-face learning in that face-to-face learning provides for human psychological interactions during the classroom activities as well as direct social engagement in the classroom (Shand & Farrelly, 2017).

Despite the low level of students' readiness at the beginning of the online learning implementation, most of the students perceived that they need to participate actively in the online learning to meet the standard of attendance set by their school and to learn and gain new knowledge. The participating students informed that they were interested to attend the online class due to the new experience they found in term of learning approach and method, as well as learning environment. The participants' perceptions are represented in following two quotes.

At the beginning of the implementation of online learning, most of us (students) felt frustration and demotivated because we had not ready yet with the sudden change of learning approach. Many of us also faced handicap in term of online learning devices (i.e. laptop, mobile phone), and internet access. However, we also found an interesting learning experience, in which the learning process was conducted using internet. The new learning approach enable us to learn new knowledge and skills, as well as keep updating with the new approach in education. So, despite we also get invaluable knowledge, skills, and experience (IT.St2.SC3).

One of the notable finding from this study is that the sudden change in the learning model had not only impacted students' readiness but also their motivation in learning. Four of the participants in the interview clarified that many students were initially demotivated in attending online learning classroom. However, as time went by and students' understanding of online learning models and media increased, students' motivation increased. Four of the five participants in the interview informed that due to technological skills the students learn, they found online learning to be fun and worth. The participating students informed that the innovative technique of leveraging digital platforms in online learning has enhanced their motivation to learn. Through digital platforms like Zoom, Microsoft Teams, and Google Classroom, they learnt and experienced new approaches and strategies in learning. According to them, these new digital platforms are critical information and skills for their careers and lives, especially in this technological age. The current study's findings support the ideas from Sobron et al. (2019) who indicate that the notion of online learning, which is more rigorous than traditional learning methods, can provide students with more meaningful learning experiences. The current study's findings also confirmed the study results from Firman and Rahayu (2020) and Simamora (2020), that due to online learning, students got a lot of opportunities to experience digital learning packages. As a result, it can be stated that the students' participation in online learning was motivated by their motivation, which includes self-determination, personal interest, and belief (Knowles & Kerkman, 2007).

Students Attitude towards Online Learning

Another aspect that has been investigated in this research is students' attitude toward online learning. In order to investigate the level of students' attitude in online learning, the researcher distributed the Learning Attitude Questionnaire (LAQ) which consist of 22 items. The questionnaire consisted of 7 negative statements and 15 positive statements. Table 5 below showed the mean score of each item of the questionnaire.

Table 5
Students' Attitude towards Online Learning

No	Items	Mean Score	Interpretation
1	Other types of teaching and learning will never be replaced by online learning.	3.94	Moderately Positive
2	I'm uneasy with online learning since I don't comprehend it.	3.52	Moderately Positive
3	Online learning is an inhuman learning process	3.48	Moderately Positive
4	Many of our educational issues can be solved through online learning.	2.10	Moderately Negative
5	I'm apprehensive about online learning.	3.43	Moderately Positive
6	New chance in managing learning process emerge as a result of online learning	2.21	Moderately Negative
7	It's tough to manage online learning, which makes it frustrating to utilize.	4.09	Moderately Positive
8	There are endless possibilities for online learning that have yet to be considered.	3.25	Moderately Positive
9	Teachers and students benefit from online learning since it saves time and effort.	2.25	Moderately Negative
10	Online learning makes education and training more accessible.	2.40	Moderately Negative
11	Collaborative learning is possible with online learning.	2.25	Moderately Negative
12	Learners can be more engaged with online learning than with other types of learning.	2.04	Moderately Negative
13	Because it incorporates all forms of media, online learning improves the quality of teaching and learning.	2.43	Moderately Negative
14	Teaching and learning become more flexible with online learning.	2.26	Moderately Negative
15	Online learning enhances communication among teachers and students.	1.58	Negative
16	Online learning improves a course's pedagogic value.	2.25	Moderately Negative
17	When I consider using online learning for my classes, I get a terrible sense.	4.03	Moderately Positive
18	Online learning is ineffective for student learning.	4.06	Moderately Positive
19	It is critical to have high-quality online learning materials.	3.25	Moderately Positive
20	More and more online learning should be implemented in schools.	2.06	Moderately Negative
Total		2.85	Moderately Negative

Table 5 shows that the students' attitudes toward those 22 statements were varied. Of the 22 items, the highest mean score was item 7 (It's tough to manage online learning, which makes it frustrating to utilize = 4.09), followed by item 18 (Online learning is ineffective for student learning = 4.06), item 17 (when I consider using online learning for my classes, I get a terrible sense = 4.03), and item 1 (Other types of teaching and learning will never be replaced by online learning = 3.94) respectively. On the contrary, the lowest mean score was on item 15 (Online learning enhances communication among teachers and students = 1.58), followed by item 12 (Learners can be more engaged with online learning than with other types of learning = 2.04), and item 22 (More and more online learning should be implemented in schools. = 2.06)

sequentially. It is interesting to notice that the lowest mean score was about the communication intensity between students and teachers. The findings from the current study imply that, during the online learning, the students did not communicate very well with their teachers. It was probably caused by most of the teachers only sent the teaching materials and/or learning task on social media (e.g. WA Groups, Google Classroom) and they did not give sufficient explanation to the students.

Three of the respondents in the interviews informed that, initially most of the students had negative attitude toward online learning. The students' negative attitude were caused by some factors, such as: students' unfamiliarity with virtual learning system, lack communication intensity (both between students and teachers, and among students themselves), the unstability of internet access, and the expensiveness of internet quotas. Some previous research have also mentioned students' difficulties using the internet during the Covid - 19 pandemic (e.g. Cahyani et al., 2020; Putra et al., 2020). Cahyani et al. (2020) discovered that using an unreliable internet access to join in online learning caused annoyance and lowered students' enthusiasm to learn. A solid internet network became a major determinant in successful online learning (Putra et al., 2020). Linjawi and Alfadda (2018) also support the findings by stating that getting reliable internet access are critical for successful e-learning uptake.

In term of lack communication intensity, both between students and teachers, and among students themselves, the participating students informed that despite the fact that they still met with their teachers and peers via zoom and/or google teams on occasion, the quality and amount of the meetings were much lower than in traditional classroom learning activities. The study findings confirmed the study results by Lin et al. (2017) that pointed that students' attitude and motivation were lower in virtual learning when compared to traditional face to face classroom learning activities. It was caused by the lack interaction between teachers and students, and between students themselves. Aji et al.'s (2020) study findings also confirmed that the success of virtual learning activities during the pandemic were determined a lot by a good coordination and collaboration between teachers and students.

All participants in the interview declared that they have learnt new somethings in online learning. These new somethings were mostly related to education technology, such as the use of internet media in conducting teaching process and delivering learning materials. They all agreed that their knowledge and skills of learning technology have improved during virtual learning. That competence improvement has also influenced their positive attitude towards online learning, including English online learning. The study findings have similarities with the study findings from Srivara Buddhi Bhuvaneswari and Dharanipriya (2020) that when students trust themselves to utilize computers (technology devices), they have a good attitude toward computer-assisted instruction, and they showed a moderate to extremely favorable attitude toward e-learning. A study by Indriani and Widiastuti (2021) also found that another important aspect influencing students' views toward the learning process is their ability to use technology. The stronger a student's skill to use technology, the more enthusiastic they are about online learning. The attitudes of students during the virtual learning activities impacted their participation in the learning process (Nurani & Widiati, 2021).

The current study's findings, in general, provide insight into the aspects that affect students' readiness and attitude toward online learning. This knowledge is important because if a certain feature of online learning is found to have a beneficial impact on students' readiness and attitude, it will help researchers better understand the role of readiness and attitude in students' online learning participation. The findings from this study can provide a better understanding of the aspects of online learning that can reduce students' enthusiasm and active engagement during virtual learning. Teachers must adapt their teaching techniques and strategies to fit students' virtual needs, as learning approaches and strategies appear to play a critical role in online learning success.

The research findings are necessary because despite many studies have investigated factors (such as motivation, learning facilities, school support, and attitude) that affect students' involvement in online

learning, those studies did not investigate the interplay between students' readiness and attitude using mixed methods. Investigating students' level of involvement in online learning due to their readiness and attitude using mixed methods is necessary to know whether or not readiness and attitude affects students' participation in online learning significantly and this study found that these two aspects significantly affected students' active involvement in online learning.

CONCLUSION

Both students' readiness and attitude have been found to impact their level of involvement in English online learning. The results from the questionnaire showed that the level of students' readiness is categorized as a moderate level of readiness, which means that the participating students had the moderate degree of readiness in following English online learning. The participating students indicated that most students were not ready to shift from face to face learning to fully virtual learning at the beginning of the implementation of online learning. Some factors influenced the students' readiness, such as: lack of technological understanding in relation to digital learning platform, technological devices for virtual learning, quotas, and internet access. However, the students also indicated that they need to participate actively in the online learning to meet the standard of attendance set by their school and to learn and gain new knowledge. The technological skills the students learn and use during online learning have been found to be fun and worth, and therefore the innovative technique of leveraging digital platforms in online learning has enhanced the students' motivation to learn.

Students' attitudes toward the LAQ items were varied with the highest mean score were about virtual learning is hard to use and as a result, frustrating, and virtual learning is ineffective to be implemented fully for student learning. On the other hand, the lowest mean score were about online learning improves communication between students and teachers and online learning can engage learners more than other forms of learning. Most of the students had negative attitude toward online learning at the beginning of the implementation of online learning. The students' negative attitude were caused by some factors, such as: students' unfamiliarity with virtual learning system, lack communication intensity between students and teachers and among students themselves, the unstability of internet access, and the expensiveness of internet quotas. Online learning had provided the students to learn new somethings in relation to education technology. The students' knowledge and skills of learning technology have improved during virtual learning and influenced their positive attitude towards online learning, including English online learning.

The research findings provide insight into the aspects that affect students' readiness and attitude for virtual learning. This knowledge is important to help researchers to better understand the role of readiness and attitude in students' online learning participation. A tiny sample size and non-random selection are two key flaws in the current research. Because of the non-random selection, the results' generalizability is limited. A larger sample size and random selection procedures need to be used in future studies. Because the outcomes of the study are entirely based on students' perceptions, involving teachers in future studies may assist to clarify the challenges that teachers face when it comes to online learning. The results the current study are mostly based on the perceptions of students on English online learning. Other subjects may produce more critical results if they are included.

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