

## The Internet Use for Autonomous Learning During COVID-19 Pandemic and its Hindrances

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**Abstract**—The outbreak of COVID-19 pandemic has brought the dependence on the online activities as new behaviors in various aspects of society including education. It defines the reliance upon internet access for learning practices and the tendency toward learning autonomy. Yet, the sudden emergence of the pandemic causes problematic circumstances for learners. Not all learners are ready to be autonomous and to have internet infrastructure. Within this context, the current study addresses learners' attitudes toward learning autonomy and examines what hinder them to be autonomous. As a descriptive research, this study involves 101 respondents living in Bitung city, a fast growing and harbor city in North Sulawesi, Eastern Indonesia. They are asked to fill the kind of Likert questionnaire which constitutes the source of data which are statistically analyzed. The results indicates that learners dominantly show positive attitude toward the idea of being autonomous in this pandemic era. In addition, several factors such as bad signal, distraction, self-discipline and lack of motivation occupy the dominant factors hinder learners to establish learning autonomy.

**Keywords**—Internet, learning autonomy, attitude, hindrance, covid-19 pandemic

### 1 Introduction

In Indonesia, English is viewed as a foreign language. The learning process in schools follows practice manuals for learning English as a foreign language. Its aim is mainly to help learners in all of the levels to able to communicate appropriately both spoken and written in the target language. Teachers are directed to use books and modules or teaching material provided by government and partners, not to mention various training and workshop programs, in order to achieve the aim. These efforts contribute to the making of learners' language knowledge. On the other side, learners are engaged with assignment and practice both from manual and online resources to

shape their fluency. Being distinguished from the manual ones, as the learning process and assignments go online, they tend to turn to rely upon learners' autonomy. That means the learners' independence is mostly required. It raises more awareness to realize that EFL learners from the secondary to tertiary education level lack opportunities to expose themselves using the target language. These learners have adequate knowledge, but they do not have communication skill to express ideas [1]. Under this situation, it is possible if the students are not able to speak in target language autonomously. Having a good knowledge will be useless unless the students have opportunities to practice. As a result, conventional learning method must be shifted into a new method which focuses on student-centered activities. Autonomous learning can be fostered by implementing student-centered learning, so the students get accustomed to becoming autonomous learners [2]. It is believed that the autonomous learning is successful if the students have responsibility and awareness on the process and the goal of learning activities. Students will not solely depend on teachers' feedback and guidance, and they must develop their creativity to build their autonomy in learning [3]. However, it is a challenge to implement this proposition during the COVID-19 pandemic due to the much lower frequency of face-to-face interaction in classes or in other public learning centers.

Recently, COVID 19 has hit the world, making people all across the world face its staggering effects. During the outbreak, the virus has infected people in every continent without exception. In Indonesia, the number of transmission cases and the death due to COVID-19 are increasing. Consequently, the government has temporarily shut all schools, universities, colleges and recreational places. All teachers, lecturers, and students must stay at home. This policy is undertaken to slow down the rapid transmission of corona virus and protect the society. Reference [4] argues that public places such as schools can serve as potential clusters for the rapid transmission of corona virus. It leads all learning activities not only in Indonesia but also all over the world to shift from traditional learning method to digital learning. Classes may temporarily be postponed, but the success of learning activities must be sustained [5]. Under this undesirable condition, thereby, teachers, lecturers and students must perform remote learning by using digital platforms.

During the outbreak, digital platforms such as computers, smartphones, laptops and tablets become the main instruments. Nowadays, the application of modern method in accomplishing all tasks is preferable in almost all sectors in modern life compared to a traditional method due to the rapid advance of technology. Education sector in particular also undergoes the same transformation pattern [6]. The use of digital platforms and the internet access gives a hint for all institutions to begin initiating online learning as a new learning method. This new method provides more opportunities for the students to perform self-directed learning [7]. To support this new method, students are encouraged to access e-learning platform by connecting their account to one of e-platforms, so they are able to join the learning activities. E-learning platforms such as 'Zoom', 'Voxvote', 'Bluejeans', 'Google Classroom', and others can support e-learning activities which enable to students and teachers to have interaction from different places. In spite of the disadvantages due to COVID-19, this new learning method motivates teachers, lecturers and students to further explore digital learning method. It also increases their awareness to make a good use of digital tools in e-learning interaction [8]. Due to less face-to-face interaction between teachers and students, students must be able to be

autonomous and responsible for the online learning by using digital tools. Thus, based on the previous explanation, the research questions, which define the purpose of this study, can be formulated as follows:

1. How do students perceive the use of internet in studying English during the independent learning?
2. What obstacles they face during the independent learning and what solutions can be undertaken to solve those obstacles?

## **2 Literature review**

### **2.1 Concepts of autonomous learning**

Autonomous learning has many definitions, but it is always associated with the terms ‘responsibility and awareness on learning process’. Reference [9] asserts that autonomous learning refers to someone’s awareness to be responsible and involve in learning process based on particular learning style or learning preferences. Further, students are able to set their own learning goal, evaluate their learning track and select learning media or tool suitable for the success of learning activities. Reference [10] explains that autonomous learning can be defined as a learner’s ability to take control on the course of learning and his/her full responsibility on the decision regarding learning track. Those definitions support recent research.

Reference [11] observes the learners’ behavior outside the class, particularly on to what extent students access internet to help them learn independently. The research’s finding shows that the learners have developed their self-directed learning because they automatically access any website whose main content is English songs and movies. Moreover, they also watch English programs by using the internet. Self-directing learning as one of characteristics in autonomous learning refers to the ability to measure capacity and the skill to select suitable learning material. Thus, learning activities must be fun and free from staggering pressure.

Reference [12] conducted the study which involves control group and experiment group. Experiment group uses student-centered activities, while the other group does not use this method. The result shows that experiment group have better performances in achievement, language, attitude and autonomous learning than control group. Communicative activities can serve as method in autonomous learning aiming at motivating the learners to provide critical solution by using their innovation and creativity. It can be stated, thereby, that communicative activities foster not only autonomous learning but also positive attitude and language capacity. To sum up, autonomous learning is an effort to foster learners’ responsibility during the learning activities, so these learners will get better learning experiences.

### **2.2 Characteristics of autonomous learning**

A scholar [10] summarizes four important features in Autonomous Learning. First, students have better awareness in their learning environment either inside

or outside the class. Second, students are able to set and adjust their learning goal independently and quickly. Third, students are able to find strategies beneficial for them. Fourth, students can evaluate their learning process and adjust it with the material. These four characteristics lead the students to have better learning experience.

Another research conducted reference [13], explicates the characteristics of autonomous learners. First, they have less dependence on the teachers. Autonomous learning encourages the students to study and search the materials on their own because this learning method looks more fun than that under the guidance of the teachers. Second, they have more self confidence. The more they have knowledge and can do something, the higher their self confidence. Third, they have higher creativity level due to student-centered activities. Due to these activities, they do not hesitate to express themselves. Finally, their metacognitive skill increases.

Further, Reference [14] have formulated four indicators in autonomous learning. First, students know to learn something. It means that they have skills to learn particular material and set suitable strategies to learn without difficulties. Second, students have problem-solving skill. This skill is important to have longer life as an individual. Third, self-efficacy increases due to independent learning. Lastly, they love studying. The perception that learning something as an obligatory subject will subside. They will voluntarily study. The explanation on indicators and characteristics of autonomous learners provides clearer insight for the researchers on the autonomous learners.

### **2.3 Teachers' roles in autonomous learning**

The implementation of autonomous learning in educating learners changes the role of teachers. Unlike the conventional method, the method places the teachers to be facilitators or counsellors. The advance of digital technology leads the teachers to have pivotal role to manage the learning track of the students. Reference [15] strongly explains that the teachers as facilitators or counsellors are required to guide the students to set learning goal and evaluate their learning track. Teachers and lecturers are required to motivate the students to follow their learning track. Students might have internal stimulus to learn, but they need external stimulus to encourage them to study [16]. Reference [17], in their research, aim to explore the roles of teachers in mixed learning. According to them, teachers must be able to (a) provide synergy between learners and learning goal. Teachers must inform them about the learning goal, thereby learners are able to get into the learning process; (b) encourage the students; (c) evaluate their attitude. Teachers must build good perception on the material, so the learners will also have better attitude and (d) provide an assignment leading them to have more comprehensive learning. Organizing assignment and time frame encourage them to study more. Assignments must include discussion on the related topic or on uncommon topic to build their critical thinking. Teachers must also inform learning goal to raise the students' awareness to learn.

Some research have been conducted to reveal teachers' perception on the practice of autonomous learning. One of the studies promotes autonomous learning using experience-based activities and case-based activities [18]; It attempts to change learning methodology from teacher-centered method to student-centered method which then

makes the learners to be more active. As a matter of fact, this is not a challenging task. However, the effort to change old methodology takes patience and needs appropriate guidance. Building the attitude of learners and giving the constructive feedback are important in learning activities. The use of a new approach in delivering the material is expected to build students' independence. Further, teachers must have positive attitude as a learning reference [19]. Although teachers have positive attitude, it is interesting to point out that teachers find it difficult to develop this attitude due to students' low learning motivation and passive attitude. Pressures in teaching such as curriculum, learning sources and failure to understand the goal of autonomous learning also contribute to this condition. Reference [20] states that teachers have positive attitude on the practice, but they are less motivated to perform productive and effective autonomous learning. The main obstacles are curriculum, lack of understanding on the goal, time constraint, and the perception of students on the subjects as they perceive them as obligatory subjects.

### **3 Methodology**

This research employs quantitative approach. Descriptive research design aims at exploring the learners' attitude on the internet use and their perception on autonomous learning. It also aims to explore the obstacles which hamper them to perform e-learning via the internet. Qualitative approach is often used to provide systematic description, accurate fact and characteristics of certain population or of any field of study by using frequency table, proportion diagram and mean score and so on as a descriptor [21]. In short, this design is used to explain general description on the recent situation. A simple random sampling is also performed. It is readily available, quickly prepared and readable to manage.

Using random sampling method, the researchers obtain 101 respondents as the samples of students in Bitung, Sulawesi Utara, Indonesia. These respondents range from the students of secondary schools to tertiary schools. They are deliberately chosen based on the assumption that they have experiences in using the internet and have basic knowledge on autonomous learning. Of these 101 participants, 67% of whom are female respondents and 33% are male respondents.

The instrument was adapted from reference [22]. Questionnaire was translated into Bahasa Indonesia, and then undergoes back-to-back translation from English to Bahasa Indonesia to avoid misunderstanding in semantic and contextual aspect on each item. The next step is to distribute this questionnaire online by using Google Form.

Questionnaire is then distributed to the participants and collected in 1 day. Questionnaire consists of three parts. The first part, question no 1 to no 4, reveal personal information such as sex, how they access internet, the time spent to access internet in a day and their reasons to go online. The second part, Question 5 to 6, is formulated to reveal the participants' perception on the use of internet during the independent English learning. The third part, question 7 to 10, is formulated to reveal the participants' opinion on autonomous learning and the obstacles they face during the autonomous learning using internet. This research uses Likert Scale which consists of 5 types of responses. 1 refers to 'strongly disagree', 2 means 'disagree'; 3 means 'neutral'; 4 refers to 'agree' and 5 refers to 'strongly agree'. The responses on the questionnaire is systematically analysed and presented as the findings.

## 4 Results

The research finding shows that the number of female respondents exceeds that of male respondents (Figure 1). Respondents' gender does not serve as the main concern of this research. However, it gives a general description that more female students access the internet compared to male students.

Figure 3 shows that 48 % of respondents spend more than 5 hours a day to access the internet. 27 % of respondents spend 3 to 5 hours a day. 19% of them spend 1 to 2 hour(s), and only 6% of respondents spend almost 1 hour to access the internet in a day.

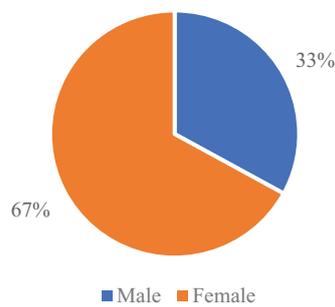


Fig. 1. Respondents' gender

The research finding also shows that most respondents (95%) access the internet via their smartphone. Only 5% of them use computer to access the internet (Figure 2).

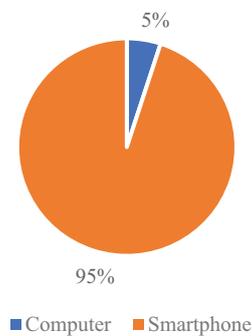


Fig. 2. Instruments used to access the internet

Most respondents prefer to browse the internet using their smartphone than a computer even this easiness may trap them to plagiarism. The main reason is that the smartphone has a simple interface, available to be used in every place and time.; Besides, the smartphone is easy to operate. Users simply use their fingers to switch off their smartphone, scroll up and scroll down the screen and do many other things. Meanwhile, only a few respondents use a computer to browse anything on the internet. The respondents use computers only if they do the assignments or have piles of tasks that must be accomplished using a more sophisticated interface. Further, computers serve as an alternative for smartphones.

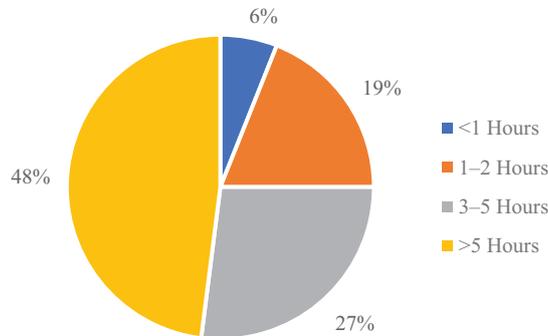


Fig. 3. Average time spent

Most respondents spend more than 5 hours a day to go online. It happens because the users access the internet to study, seek entertainment, play games, shop online, work, and do many other activities. Moreover, the COVID-19 pandemic reduces the number of activities people do at home, so they spend time browsing the internet and so on. Based on the data presented, teachers and lecturers in Indonesia must consider to deliver the material to their students and assign them project or tasks which encourage them to perform independent learning. Teachers and lecturers must guide the students so that they will spend time to the fullest.

Figure 4 illustrates the general activities to reveal the respondents’ reason to access the internet. The researchers obtained 99 responses out of 100 because one respondent did not respond to this matter. The research finding can be illustrated as follows; entertainment makes up the highest percentage (83.8%). The second highest percentage is to access social media, amounting to 75.8%. The remaining reasons are online learning, game, and online shopping, with 58.6%, 35.4%, and 16.2%.

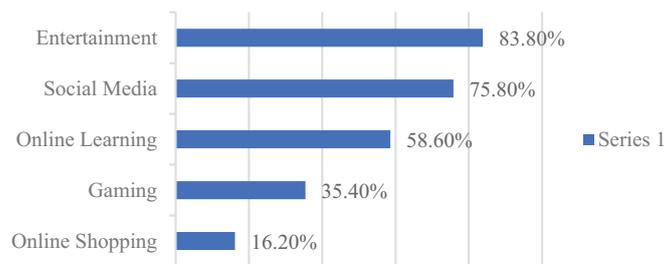
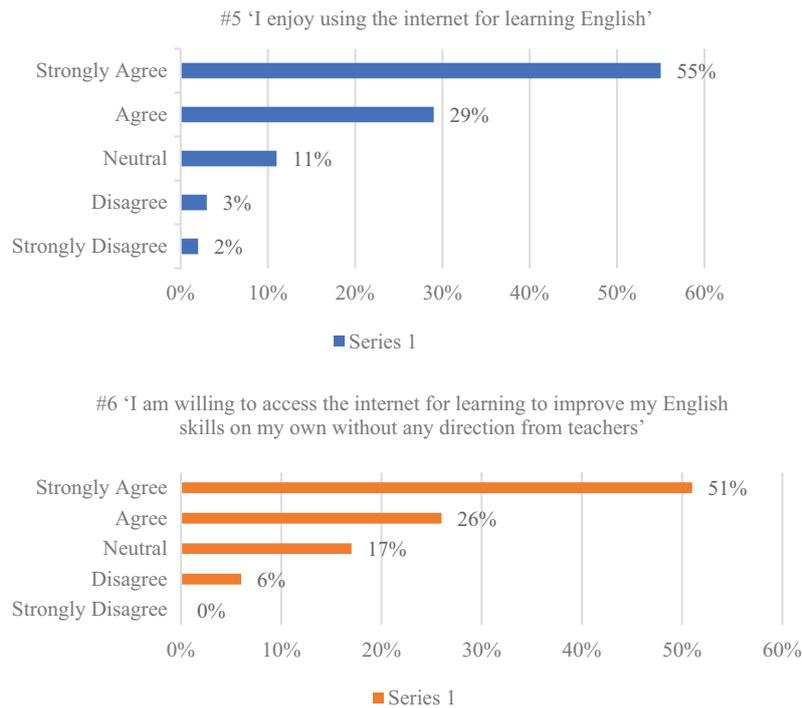


Fig. 4. Students’ reasons to access internet

The entertainment aspect becomes the main reason to go online. It is easy to connect the internet from any gadget such as smartphones and computers to access entertainment content from many famous websites such as YouTube. Students access this website to watch movies, listen to music, and watch video clips or fun clips with any topics to get entertaining. The second most commonly accessed is social media. Users make fair use of social media to communicate with relatives, friends, and acquaintances from any part of the world without any boundaries. The third reason is related to the

academic purpose or online learning. Although educational purpose becomes the third reason, it provides a positive sign that students can be good independent learners.

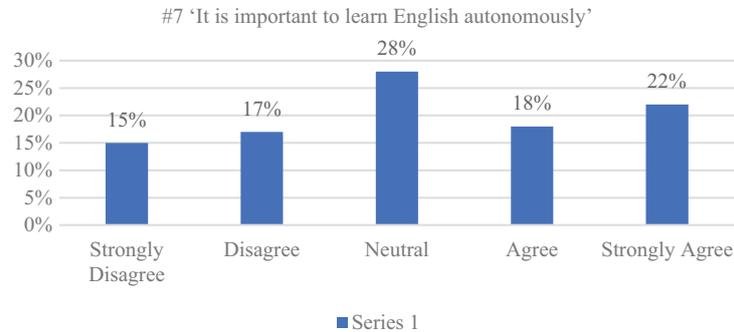
Figure 5 represents the respondents' attitude, item no 5 and no 6, on the use of the internet to promote autonomous English learning. These items are formulated to measure how ready they are to participate in online learning using the internet. The findings are presented as follows:



**Fig. 5.** Learners' attitude

By applying 5 Likert scales, the researchers find out that learners have a positive attitude toward the idea (see Figure 5). Statement no 5 'I enjoy using the internet for learning English' gets a positive attitude in which 84% of respondents choose 'strongly agree' and 'agree'. Statement no 6 'I am willing to access the internet for learning to improve my English skills independently without any direction from teachers' also gets a good response. Seventy-seven percent of respondents choose 'strongly agree' and 'agree'. Thus, the findings emphasize the notion that learners have a positive attitude toward the idea.

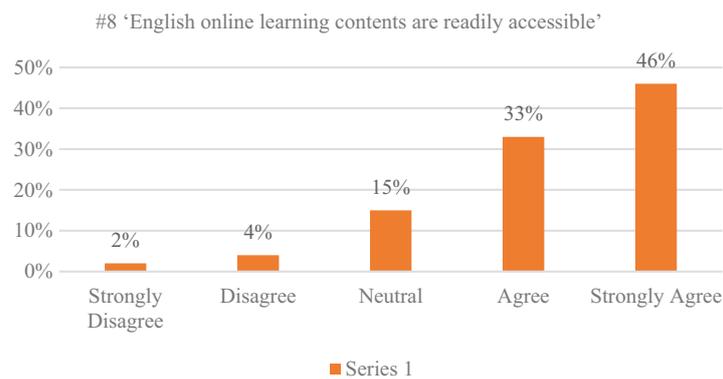
Figures 6, 7, and 8 represent statements 7 to 9, which disclose the respondents' perception of using the internet in autonomous learning. These statements are meticulously formulated to reveal how good they are at dealing with autonomous learning combined with internet access. Using Likert scale, the researchers obtain the following results:



**Fig. 6.** Students' perception

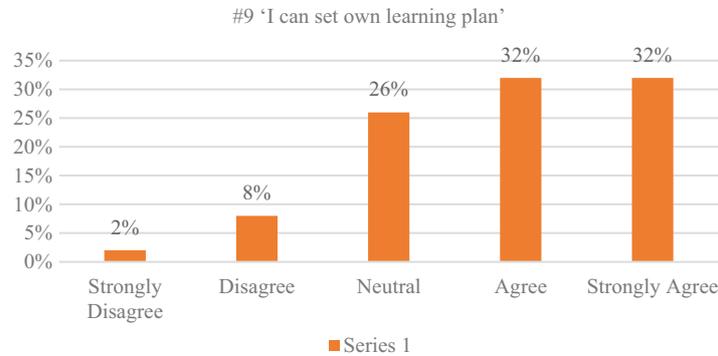
Participants show positive responses on statement no 7 'It is important to learn English autonomously'. 40% of them choose 'strongly agree' and 'agree'. It implies that almost all learners possess a positive perception of their ability to learn English without teachers' direction. In this stage, the learners have developed self-awareness, which is beneficial for their need to study. Further, 32% of participants choose 'strongly disagree' and 'disagree'. 28% participants choose 'neutral'. These responses imply that they have different perceptions on the topic. It is possible that they have not developed good self-awareness. These learners still perceive that teachers' guidance and direction in learning activities are essential to keep learning. In short, they have a high dependence on the teachers.

Figure 7 represents item 8 'English online learning contents are readily accessible'. This figure shows exciting results. 79% of respondents choose 'strongly agree' and 'agree'. Only 6 % of respondents choose 'strongly disagree' and 'disagree'; and 15% of them choose 'neutral'. The figure implies that English online learning contents are readily accessible, and they are beneficial for learners to learn English autonomously. Thus, it is crucial to promote autonomous learning.



**Fig. 7.** Students' perception

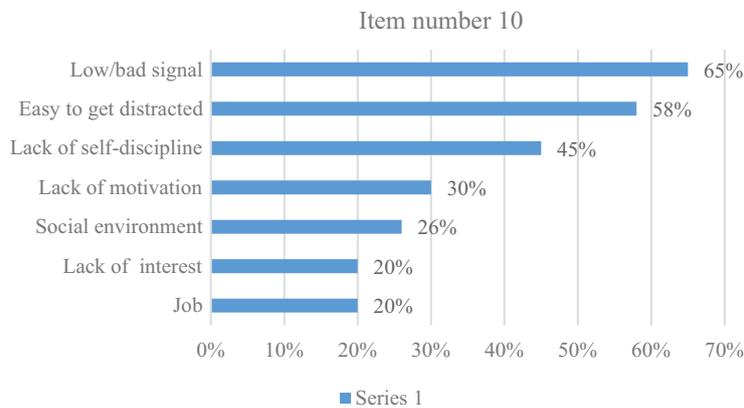
Figure 8 describes item 9 'I can set own learning plan', and it shows a promising result in which 64% of respondents choose 'strongly agree' and 'agree'. Only 6 % of respondents choose 'strongly disagree' and 'disagree'; and 26% choose 'neutral'.



**Fig. 8.** Students' perception

The figure implies that English online learning content available on the internet can be easily accessed. It gives positive effects for learners, one of which is high self-confidence to set good learning plans. Setting their own learning plan is a pillar to foster autonomous learning. Their responses (see Figures 6, 7, and 8) highlights the notion that students enjoy learning English via online platforms. Nowadays, many online platforms use English, enabling students to learn and get knowledge of English. Various types of online media such as podcasts, videos, English animation, songs, or other audio files are quite enough to help students set their learning plans. It can be said that the advance of technology serves as a learning source, particularly during the pandemic.

Figure 9 illustrates some obstacles which the students encounter in autonomous learning. These factors are also carefully combined with some general descriptions on the recent situation, and it will be explained as follows:



**Fig. 9.** Hindrances

Students must face obstacles during autonomous learning via the internet and explained in the data (see Figure 9). The responses show that 'low/bad internet signal' is the most common obstacle in having virtual meetings. Undeniably, it happens in such a small area as Bitung, which does not have a good internet connection. As a result,

learners cannot access the material having been uploaded on the internet. There are many ways to solve this problem. First, the local government must take part in providing a good internet connection for society overall. The provision should not be given to society living in the city.

Further, teachers and all lectures must build direct contact by visiting the students at home to explain the material and assign the project to them. Teachers and lecturers then will return to collect students' assignments. Consequently, this practice helps learners to continue the learning process and keep up with other students. Another problem in autonomous learning is that the students are easy to get distracted. When studying online, students easily get distracted by pop-ups or advertisements, their desire to play the game, listen to music, etc. These stimuli are strong enough to divert students' attention from doing learning activities. To solve this problem, learners as internet users must build a strong commitment to study. They must be wise to restrain their desire to seek entertainment while accomplishing their assignment. Studying in a quiet environment is strongly recommended to maintain cozy atmosphere. It will be good to sharpen their focus in learning. Besides, learners must foster their high self-discipline to maintain motivation, commitment, and perseverance in learning. Both teachers and parents must give them constructively, inspiring, and motivating feedback.

## **5 Discussions**

### **5.1 Socio-pedagogical implication**

Internet makes everything easier to do. In obtaining better resources as the learning outcome, the use of the internet must be beneficial for education sector to ensure more efficient learning process. Internet-based learning activities should not impose burden for the students, so they are able to focus on learning. Internet-based learning activities can be developed in many ways. Internet serves as a tool for teachers to deliver and transfer the material to the students. Moreover, students can communicate to each other during the discussion session. Thus, the internet is expected to help achieve better understanding skills without face-to-face interaction [23]. The activities stimulate students to learn autonomously. It has been previously explained that teachers have a role in directing them via 'learning diary' or learning track', which contains certain topics related to materials having been explained. To guide the students to make this, they can access certain websites such as TEDTalk, BBC, Podcast, and so on. Learning diary can be completed daily, weekly, or monthly to make sure that the students keep learning. Teachers must provide it with a question or comment column in which the students can disclose their thought and opinion and review the material. Every week or every month, students must submit this learning diary so that teachers will give their feedback. A discussion session is also important to dig out further their perception.

Learning diary method has been practiced [24]. The research which has been conducted shows that students who complete learning diary continuously listen to the material. They enjoy learning, and this method can increase their language skills also. Learning diary also have many benefits for students such as acquiring new knowledge because they listen various education contents from YouTube, podcast, and other

platforms. Students are also more productive and have better writing and listening skills. Further, students are more independent and confident in speaking. This approach is recommended for teachers and researchers when researching the future.

Unlike this research, another research from reference [25] has examined internet users' behavioral difference based on gender. The findings show that female students mostly access the internet for certain purposes such as learning, accessing social media, and accomplishing assignment. Meanwhile, male students access the internet mainly to find entertainment content, watch film and watch animation. The finding underlines that female students have better awareness on the use of internet. It also provides a general description of both female and male students' behavior while accessing the internet. It is recommended for other researchers to include this information in further research.

It is strongly believed that students' positive attitude and perception in learning will increase their motivation, spirit, creativity, responsibility, and self-confidence. All these good traits are going to provide benefits for their academic achievements [26]. Positive attitude and perception in promoting autonomous learning led the students to possess better social skills, better empathy and sympathy, and good language learning skills [27]. As a preventive measure, it is recommended for parents and teachers to give support and stimulation if the students show low motivation in using the internet for autonomous learning. This measure should be undertaken to ensure the success of online learning. Thus, this preventive action is essential during online learning in order to build a sense of responsibility [28].

However, a few students have low awareness of learning autonomously. This rises from the assumption that students perceive English or other subjects only as materials they must study at schools. As a result, if they quit school, they will no longer continue learning these subjects [29]. To solve this problem, teachers and parents must give support, encouragement, and inspiring motivation. The learning process can take place at home, especially in this situation. Home is a new place to study, so students must deal with the situation and start learning. No instant result from this process, so teachers at school and parents at home must have the commitment to succeed in the learning process. Teachers' and parents' direction plays the most important aspect to guide the students to use the facilities to the fullest. Teachers and parents must make sure that the facilities will not be used without any fruitful result.

## **5.2 Research limitation**

The first limitation is the sampling technique. Due to the COVID-19 pandemic, random sampling techniques is considered as the best option. Data have been collected and used to provide a general description; however, the respondents of this research are only students from High School and Universities. The respondents also consist of adults, workers and so on who have randomly chosen and receive the link to access the instruments. This technique is recommended, if possible, to avoid the use of simple random sampling to make sure reliability and data validity for further research. The next limitation is related to the questionnaire content. This research does not focus on exploring the difference between female and male students' behavior in accessing the internet, although gender is used in this research. For further research, other researchers

must consider this aspect to provide a comprehensive explanation of the difference between female and male students' behavior. The instruments used in this research are not designed to explore whether the internet as the learning sources can increase academic performance, self-confidence, self-respect, and skills (listening, writing, speaking, and reading) that the students have sharpen when using the internet. For further research, the researchers recommend some aspects which have been previously explained to other researchers, so they are able to conduct beneficial research and elaborate broader topics in the future.

## 6 Conclusion

It seems that COVID-19 outbreak will not subside soon, meaning that online or remote learning becomes 'a new normal' in this recent situation. This new normal condition will continue to happen. The autonomous learning can be continuously done as a new approach in learning in the future after the pandemic is over. From the findings, it is critical aspect to be noted is that encouraging autonomous learning is not solely the responsibility of the students. Teachers, parents, peers, and society must facilitate the students to achieve success in online learning. All of society elements are responsible for guiding the learners to use time wisely when surfing the internet, encouraging them to use the internet for learning purposes, and introducing the internet to other students who have not been familiar with it.

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