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## Perceptions, Accessibility and Mental Readiness of Secondary School Students Towards ESL **Online Learning: A Case Study**

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#### **Abstract**

The educational issues in one of the public schools in the northern region of Malaysia were worrying due to the lack of English teachers. There were only two English teachers out of 45 for all 343 pupils, translating to an instructor-to-student ratio of 1:171. This scenario brought a negative impact on the hopes of parents, the possibilities for students to succeed in English, and their self-esteem. The aim of this study was to investigate the perception of students towards online learning, the online accessibility level of students, and the mental readiness level of students for English online learning. The school consists of students who reside in suburban and rural areas. This study discovered that students' perceptions of online learning, online learning accessibility, and mental readiness for English online learning were all below the moderate level, indicating that they were struggling with online learning. This study was conducted to contribute adequate information on the condition of the students in the urban area towards online learning, and it can be used as a guide for policymakers in developing education policies that are both effective and feasible, allowing them to take the necessary steps to avoid students from falling behind in the exam.

Keywords: Accessibility, ESL Student, Mental Readiness, Online Learning, Perceptions, Secondary School

## Introduction

E-learning, internet learning, distributed learning, network learning, tele-learning, virtual learning, computer-assisted learning, web-based learning, and distance learning are all synonyms for online learning (Ishak & Talaat, 2020). However, all of these terms refer to learning methods that will take place in a variety of situations, regardless of location, through the use of the internet. If internet access is limited, having a computer alone is insufficient (Saleh & Rosli, 2020). As a result, using the internet in the educational process is now a requirement, not an option. Furthermore, the use of multimedia has monopolized the 21stcentury society.

One of the psychological factors influencing students' acceptance of online and distance learning (ODL) as the new normal mode of learning is mental readiness. Mental preparation is essential not only for working purposes, but also for teaching and learning, as learners are the primary concern when it comes to determining their success (Widodo, 2016). Mental

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preparedness is one of the psychological factors that influence students' acceptance of ODL as a new normal learning mode where cognitive and behavioral processes occur when learners develop mental readiness in L2 online learning (Irma et al., 2022). Therefore, students' mental readiness should be listed as one of the challenges of online learning.

Perception is a natural part of life. It is an attempt to approach and comprehend what will, is, and has occurred in life. Perception is a person's interpretation of reality. It is the human process of making sense of his surroundings. Desiderato (1976) defined perception as the experience of things, events, or relationships gained through inference and interpretation of data. Thoha (1999) claimed that everyone engages in perception as a cognitive process in order to fully comprehend everything about their environment, whether through vision, hearing, appreciation, feeling, or smell. Every human being, according to Ibrahim (2007), constantly faces trials and tribulations in life.

Among the possible responses are disappointment, regret, and self-pity. When that happens, people tend to think that the sky is falling and our lives are over. Then people understand that trying will ultimately be advantageous. That is a change in perception for the better. According to Alan Saks and Gary Johns (2011), perception has three components: the personal factor of the observer, the target factor and the situational factor. Thus, this research included these three elements of perception in the questionnaire so the results could be further discussed in detail.

The educational issues arose in the English subject at the public secondary school in one of the northern state of Malaysia were very worrying in this era of 21st century learning. One of the issues in this school was lack of English teachers. According to the data provided by the District Education Office, there were only two English teachers out of 45 for all 343 pupils in this school, translating to an instructor-to-student ratio of 1:171. Lack of English teachers in the school was widely known and has become a concern to the residents in this state. As a result, teachers did not have sufficient time to prepare for effective classroom practice, increasing the probability of students scoring low and failing in exams.

Other than that, parents were generally disappointed by their children's' potential in English language, lower possibilities for students to further their studies in the overseas, and their self-esteem to speak English were gradually alleviated day by day. The worst-case scenario was students were unable to even use the technologies, read labels, or make transactions at stores if they did not meet the minimum target of the English skills learning standard. This scenario was very concerning as Malaysia is widely moving towards the utilization of universal language in which English is used for socializing, making connections, and communicating, whether online or offline.

Results of examinations alone were inadequate for educators to tackle the roots of this issue. In other words, students did not get the rights they deserved if no appropriate action being taken. Hence, the difficulty level of challenges faced by the 10th grade students at the public secondary school was crucially needed to be studied immediately in the aspect of online learning accessibility, mental readiness, and perception so that the educators and other stakeholders would also be knowledgeable on the condition of their students towards L2 online learning and English language learning.

Thus, the purpose of this study was to investigate the perception of students towards online learning, online accessibility level, and mental readiness level of secondary school students in English online learning.

#### **Background of the Study**

The COVID-19 pandemic in Malaysia has prompted the government to issue the first Movement Control Order (MCO) on 18 March 2020, in order to halt the spread of the disease (Azman & Abdullah, 2021). The Prime Minister directed the Ministry of Education to implement home-based learning initiatives during the pandemic. Hence, online learning was displacing face-to-face learning. Although schools has been fully opened after the pandemic on 24 June 2022, synchronous and asynchronous online learning continues to be practiced as there are still a number of COVID-19 cases happening. This method demonstrates how important online education is for continuing the teaching and learning process even after the pandemic. The same thing happens in other countries where most countries were affected by COVID-19 had access to online education (Moawad et al., 2020).

Dhawan (2020) found changes in the way education was received and delivered during the COVID-19 pandemic as a step toward implementing innovation and change in face-to-face teaching methods. This situation was also benefited the education sector and may lead to more innovation in the educational system. However, students who did not have access to all online technologies must be taken into account because this scenario created a digital divide, widening the gap of inequality. Mohd Amirul (2020) also stated that online learning involving rural students could not be fully implemented, the relative rate of the digital gap or digital divide, in which, those who have access to information and those who do not have access to information due to differences in internet speed, will be involved. Understanding that online learning in this country has advanced to the point where it can be carried out without incident necessitates a thorough audit. It was not only about infrastructure, but also about the economic capability background and the level of readiness of the parties involved in the online learning environment itself.

Apart from that, it must have been challenging at first to adjust and exert an impact on all parties, particularly the teachers and students at home, when the decision to move the date of the public examination in 2020 was made to allow examination candidates who were affected by school closures to return to school in early 2021 to adequately prepare for the examination (Ministry of Education Malaysia, 2020b). In this case, teachers must prepare and arrange appropriate teaching and learning methods in a situation of limited movement, while learners, including prospective students who sat public exams in 2020, must be prepared to face learning sessions entirely online.

#### Significance of the Study

Based on literature review, it was difficult to find any study on the L2 online learning challenges faced by the secondary school students. Studies on the online learning challenges faced by secondary student were also very uncommon and limited in Malaysia. Most of the targeted population related to this study were university students and college students in tertiary education level. There were many articles from foreign countries such as China, India, Saudi Arabia and Indonesia that targeted high school students but they were inaccurately reliable in Malaysia as the education system and the trend of COVID-19 cases happened in each country was different with each other. Therefore, this study was done to fill the research gap that existed.

This study was also important to be carried out in order to help solve the problems faced by students especially in the northern part of Malaysia. Educational research on the challenges of L2 online learning also needs to be multiplied and proven in the context of students in Malaysia as a reference by other researchers in the future. In addition to

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researchers, English language teachers in Malaysia can refer to and benefit from the discussions and research findings. Finally, the reader of the study can gain new knowledge, such as how the researcher implemented the methods used in this study, the educational issues that arose in the school and the difficulty level of challenges faced by the 10th grade students at the school participated.

#### **Literature Review**

#### **Perception Towards Online Learning**

Alan and Gary (2011) claimed that perception consists of three components: the observer's factor, the target factor, and the situational factor. A variety of factors can influence the perceiver's perceptions towards L2 online learning which the major factors are motivation, emotional state, and experience. All of these factors, especially motivation and emotion, influence how a person perceives a situation. During the learning process, he or she may frequently only perceive what he or she wants to perceive, even if the stimulus acts on his or her senses.

Next, the perception object incorporated into the target factor is of something or someone. The amount of data gathered by the perceiver's sensory organs affects show the target is interpreted and comprehended. Finally, situational factors are influenced by environmental factors, timing, and stimulation intensity. When uncertain stimuli can occasionally be converted into one or more perceptions occurs, a procedure called "multistable perception" occurs.

Past studies showed challenges students faced with online learning. Khan et al. (2021) found in their study that students in India moderately believed that taking classes online would enable them to continue improving their academic performance despite the pandemic. However, those students faced with some difficulties when taking online courses. The study also revealed school students in Delhi felt about online learning, which boosted students' technological literacy, reduced travel time, and offered greater flexibility, in terms of time and location than traditional classes.

However, the vast majority of survey participants expressed disappointment with the lack of teacher interaction in online classes and a lack of motivation to learn as a result of numerous home distractions. Besides, limitations placed on outdoor activities and group projects to stop the virus's spread cause some students to experience social isolation. As the mean value of the combined perception was higher than the negative perception to maintain their academic growth, students generally had a positive perception of virtual learning during the COVID-19 pandemic (Khan et al., 2021).

Nasimah and Mohamed (2022) found that the level of enjoyment and happiness of students regarding online learning were moderate and they believed that online learning brought many problems, such as boring, tiring, and uninteresting. For that reason, they were more comfortable attending learning classes using face-to-face methods compared to online learning. The overall findings of this study also showed the ease of learning equipment and students' perception of online learning was at a moderate level with an overall average value of 3.0 with a standard deviation of 0.468, and an average value of 3.31 with a standard deviation of 0.305. While the findings on assessment and learning activities were at a high level with an overall average value of 3.57 with a standard deviation of 0.412.

Hence, the article by Nasimah and Mohamed (2022) revealed that their research respondents, consisted of diploma and bachelor-level students in the field of Arabic studies at Selangor International Islamic University College preferred either the conventional or

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traditional method of learning rather than the new pedagogy introduced. Other than that, it was possible to assume that the participants had rarely or never been introduced to interactive approaches such as gamification in learning and blended learning as it was not mentioned in their research, especially in one of the research variables, namely, learning assessment and activities.

On the other hand, Mailis et al. (2020) investigated the attitudes of 160 Melaka Islamic University College Early Childhood Education diploma students toward the implementation of online learning during the COVID-19 pandemic. They investigated five aspects of perception: learning content, online interaction, lecturer feedback, lecturers' motivational strategies, and the ease of accessing online learning applications. The obtained overall mean value was on the moderate side.

Next, Amin and Nasri (2021) discussed the attitudes of 562 Malaysian high school students toward online learning during the COVID-19 pandemic. This study examined three aspects of perception: I) the benefits and drawbacks of online learning, ii) the comparison of face-to-face learning and online learning in terms of increasing knowledge, technology skills, information, and social skills, and iii) student acceptance of online learning. The first factor was assessed using descriptive analysis, which included average values, percentages, and frequencies. Meanwhile, the mean score value was used to assess the second and third aspects.

From previous research, it was clear that perception was a challenge that could occur in many aspects and components, especially in online learning. ODL is still considered new in this field, but it can grasp and differ from many perspectives from all over the world and from every side of human thought.

#### **Online Learning Accessibility**

Technology has altered how we do things. The use of equipment and gadgets that were once regarded as distractions from important tasks (particularly learning) has now evolved into a medium of information and knowledge transfer. Learning is the process of connecting disparate sources of specialized information. Furthermore, learning may reside in non-human appliances, and now learning resides in the use of technology, which necessitates the use of the internet and appropriate learning equipment (Don et al., 2022).

Siemens (2005) concept of connectivism also accepts that technology is an important part of the learning process and that our constant connectedness allows us to make choices about our learning. Nonetheless, several previous studies on the challenges of online learning accessibility have been found conducted by Nasimah and Mohamed (2022), Najib et al. (2020), Ainul and Ishak (2021), Nor (2020), as well as Norhayati et al. (2022).

Najib et al. (2020) in their textbook stated that there were numerous studies demonstrating the difficulties associated with online learning around the world. Among them were the issues of reliance on internet access when learning occurs concurrently, the difficulty for teachers in obtaining teaching materials online, and the presence of teachers and students who lack the necessary digital skills to teach and learn online. This situation can exacerbate the teaching and learning process. However, this research did not mention students but instead teachers having a struggle obtaining teaching resources online. Hence, there were several past studies regarding this aspect of online learning accessibility.

Nasimah and Mohamed (2022) again revealed in their study on the challenges of online learning where learning equipment accessibility and students' perception of online learning was moderate compared to another aspect of learning assessment that was higher in their

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findings. This could be because, despite their agreement with the learning content, methods, and assessment, the new norm pedagogy during the COVID-19 pandemic will undoubtedly present a great challenge to 11 students, especially for those who came from low and moderate-income family backgrounds that were in need for conducive learning equipment facilities.

Next, Ainul and Ishak (2021) revealed in their qualitative study on Malaysia's approach during the COVID-19 pandemic that not all parents and students had digital devices and internet access at home, or access that was sufficient to allow the online learning process to continue indefinitely, especially students who lived in rural areas and had no means. This issue was also acknowledged by the Senior Minister of Education, who stated that there were flaws in the implementation of online learning because it was new to teachers, students, and parents.

Furthermore, due to limited access to communication technology, many students were unable to follow online learning. As a result, when compared to face-to-face methods, the effectiveness of online learning based on home-based learning was quite limited. The Prime Minister of Malaysia emphasized the issues and challenges in online learning, suggesting that the Ministry of Education continued to empower the digitization process by using online platforms or virtual learning for the future of this country's education. Teachers were also encouraged to improve their teaching skills online and to make home-based learning a new teaching habit (Ministry of Education Malaysia, 2020d). Plus, school administrators must ensure that online learning planning and management were done carefully, efficiently, and effectively to avoid subject overlap and the dumping of assignments/training for students. Meanwhile, parents or guardians must contribute to its success by assisting children at home in obtaining and accessing learning information via the online learning method according to the sessions determined by the teacher (Ministry of Education Malaysia, 2020a).

On the other hand, Mohamad (2021) with her qualitative study through exploration of various library resources by examining books, journals, and reports of stakeholders in the issue of COVID-19 in Malaysia on pedagogical challenges of the new norm at the Perlis Islamic University College during the COVID-19 stated that many students were unable to attend scheduled learning sessions since the internet network in certain areas, particularly villages and rural areas, or in some housing, was inadequate. As a result, they lagged far behind in their understanding of the subject they were studying. Due to insufficient internet access or data exhaustion, some of them were unable to download the provided teaching materials. Although almost all students have smartphones, they were less capable of retrieving data or connecting to the internet. It must be difficult for students who were less able, and who did not have gadgets such as laptops, to follow all online learning, making it a challenge for students. If a student's phone, laptop, or computer breaks unexpectedly, it will be difficult for them to keep up with all of the online learning that the lecturers were working on, causing them to fall behind their less able peers who have no cost to repair the device.

Apart from that, Zain et al. (2022) in their interview sessions among 20 teachers in Seremban District, Negeri Sembilan revealed that the online learning medium availability among them was a challenge. The government decided to continue education through online learning following the implementation of MCO. As a result, electronic devices were required for online learning. In Malaysia, however, not every household has enough computers, laptops, or mobile phones for their children. There were also cases where only parents have the gadgets, preventing the children from learning during the day. As a result, they were unable to receive and complete tasks within the timeframe specified.

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Hence, this research aimed to investigate and observe if the students were also having difficulty obtaining teaching materials online, issues of reliance on internet access when learning occurs, and lack digital skills to learn online.

#### Mental Readiness in Online Learning

Irma et al. (2022) stated that mental preparedness was one of the psychological factors that influence students' acceptance of ODL as a new normal learning mode where cognitive and behavioral processes occur when learners develop mental readiness in L2 online learning. They also concluded that the students in their study were mentally prepared as they admitted to knowing how to use the internet, submitting assignments, being familiar with the online platform, and being ready to use platforms. Nonetheless, they were hampered by limited internet access, a positive environment, and their own self-assurance.

However, the research above did not highlight the challenges of online learning but instead investigated the involvement of behavior and cognition to develop mental readiness for online learning. The goal of this study was to ensure that learners' readiness in terms of ability, emotion, and feeling aids in their adaptation to the new era of learning. Without such preparation, online learning, or learning from home, which relied heavily on computer technology and the internet, could be difficult. Besides, this article did not suggest a more suitable pedagogy or theory that involve cognition and behavior such as behaviorism or cognitivism to solve the weakness that occurred in the world of online learning. Hence, this research explained how mental readiness was strongly related to one of the factors in L2 online learning challenges.

Next, a quantitative survey by Ahmad (2021) showed there was a positive correlation between student performance and mental preparedness among students in the fifth and sixth semesters of Bachelor in Office System Management at a public university in Malaysia. Hasmiati et al. (2021) discovered both positive and negative aspects of online learning among 25 students during the pandemic. The interview results were frequently unfavorable, indicating that students were not yet prepared for online learning. Student's readiness for learning was determined by how prepared they were mentally, and they preferred in-person instruction to online instruction.

On top of that, findings by Hossains et al. (2022) on secondary students in Bangladesh during COVID-19 demonstrated that students' psychological readiness had a strong positive association with the online learning environment in order to guarantee high-quality education. Hence, this result showed that in order to reduce future uncertainty, it was important to assess the mental readiness of school-aged students.

Finally, Garcia-Bolanos et al. (2022) in their quantitative study that assigned 130 respondents from a background of 11th grade STEM students revealed the transition from online to blended learning was something that senior high school students were prepared for on both a physical and mental level. Additionally, a significant positive correlation between students' physical and mental preparedness was discovered. According to the survey, respondents were prepared to prioritize their mental health while studying for blended learning.

Therefore, the purpose of this study was to determine whether the students find it difficult to be mentally prepared for online learning, which included using the internet, submitting assignments, becoming familiar with the online platform, being ready to use platforms, and deciding whether they would rather receive training in person or online.

#### L2 Online Learning Challenge

L2 learners speak and learn English as a second language rather than their first. Nonetheless, EFL students occasionally incorporated L2 into their studies. As a matter of fact, this literature review of L2 online learning included research on the challenges that ESL and EFL learners face. Khalid and Mohammed (2022), Esra et al. (2021) and Subekti (2021) found both positive and negative views on online learning from their L2 participants. Subekti (2021) found that students who took English for Academic Purposes (EAP) exhibited high levels of resilience. They were founded to have high levels of self-control and realistic optimism, the two key components of resilience. They did, however, reported having a marginally reduced level of capacity for multitasking. Hence there was a significant, moderate, and favorable correlation between learners' resilience and their self-directed learning (SDL). Here, multitasking was seen as a challenge for their mental state in this fast-paced society.

On the other hand, participants in a study by Esra et al. (2021) described a variety of reasons for their lack of motivation in the online learning process, including dissatisfaction with the course materials and content, a lack of self-discipline to follow the course, a lack of communication among the group of teachers and students, and a lack of a private space to study. Overall, the researcher said that maintaining students' motivation to pursue their goals of learning a second language presented many challenges with online learning.

Meanwhile, Khalid and Mohammed (2022) in their data analysis revealed that the vast majority of students from Saudi universities wholeheartedly agreed that incorporating online learning into education was a great idea. More than 90% of the responses preferred the learning method. However, some students claimed that the speed and clarity of the video lessons were too slow for them to understand.

Based on their research, it was fair to say that L2 students were clearly motivated and enthusiastic to learn English online, but they were hampered by the internet connection and other factors. If internet connectivity as the main problem cannot be resolved, teachers as learning designers need to be creative with their pedagogy and assessment methods in order to meet the learning objectives for this subject. In other words, teachers may need to shift away from occupying fully traditional and conventional methods to a more interactive method for an increment of connectedness in learning.

Perception of students is a challenge when they do not portray a positive attitude and environment towards L2 online learning. Next, online learning accessibility involves internet access and earning equipment facilities that need to be taken into account by the stakeholders especially the government as it is the main basic need to unlock connectivism in the digital learning age. Finally, mental readiness as a psychological factor is fundamental to be observed as one of the benchmarks to enhance students' L2 learning techniques in the 21st Century online learning.

#### Methodology

#### Research Design

For this study, a quantitative approach was used with a survey research design and descriptive statistical analysis. The most appropriate measurement for this study were the Measures of Distribution by using frequency distribution to organize data.

#### **Research Sampling**

The sample in this study was randomly chosen from the population using the simple random sampling technique under the probability sampling method. The Krejcie and Morgan

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Sampling Method (1970) was used next to simplify the process of determining the sample size for this research using its formula and table. In terms of genders, the number of female students was 35 (60.3%), outweighing the number of male students which was 23 (39.7%).

#### **Participants**

There were 58 out of 65 form 4 students (10th grade students) at a public secondary school in the northern state of Malaysia involved in the survey. They were assumed to have similar background knowledge since they followed the same curriculum and syllabus. Most of the participants located in a suburban area with residents of low and middle socioeconomic status.

Participants were chosen due to the fact that form 4 students must have at least a wide range of English skills from low to high level because they will be taking the Malaysian Certificate of Education on the following year. An identification of the difficulties they encountered while learning a second language online could aid educators in creating more interactive and effective teaching methods that encourage students to use English words in their daily lives, which enhanced their speaking, listening, reading comprehension, and creative writing skills.

Furthermore, Malaysian stakeholders and authorities would be able to fix and improve flaws in the Malaysian education system and education fund planning if they accurately acknowledged the problems that arose in this country, such as a lack of appropriate learning devices and an unstable internet connection.

#### **Instruments**

In order to collect the data, close-ended questions were used as the instrument of this study. The questionnaires were divided into two parts; Section 1 and Section 2. Section 1 provided close-ended questions on the demographic of the respondents. The second section was divided into three subsections. Sections 2(a), 2(b), and 2(c) consisted of Likert scale questions with scales such as Strongly Disagree (SD) = 1, Disagree (D) = 2, Neutral (N) = 3, Agree (A) = 4, and Strongly Agree (SA) = 5. This section included questions about students' perceptions, accessibility, and mental readiness for online learning. The questionnaires used in this study were adapted from previous studies by Nasimah & Mohamed (2022) and Irma et al. (2022).

#### **Procedures**

There were several stages to the research procedures. Phase I began with identifying the research population, the potential study location, the potential study respondents, and then obtaining their consent to be selected as research participants. A suitable data collection method and research instrument were also identified. They were chosen based on the study's objectives in this phase. Phase 2 involved preparing the questionnaire to answer all of the research objectives. Previous studies on online learning in rural areas were reviewed, and questionnaires tailored to the research objective were developed.

Phase 3 involved data collection, which included administering questionnaires to research participants. The respondents were informed of the specifics, such as the confidentiality of the data collected. The questionnaires were given to all 58 respondents. The questionnaire responses were submitted via Google Forms by the respondents. Phase 4 involved data analysis, in which each completed Google Form questionnaire was checked and converted to an Excel sheet for more accurate and simple analysis.

#### **Data Collection**

According to Cohen et al. (2018), quantitative data, such as instrument scores, provide specific figures that can be statistically analyzed to determine the frequency and size of trends. This empirical study collected data using the typical 5-point Likert ordinal scale questionnaire. This questionnaire was adapted from Nasimah & Mohamed (2022) and Irma et al. (2022), which consisted of 3 constructs, 6 items for each construct, and 18 items in total.

#### **Data Analysis**

Descriptive statistical analysis was utilized to interpret all data for this study. Measures of Frequency was used for demographic information and the data were presented in two distinct visual graphics. For gender of students, pie chart were presented using percentage and for household number of students, cumulative frequency polygon graph or ogive were presented using cumulative frequency. The number of observations in a data set that were above or below a specific value could be found using cumulative frequency.

#### Validity and Reliability

The pilot study included five participants who also the students of the participated school but were not included in the actual study sample, which consistent with Bolarinwa's viewpoint (2015). The goal of the pilot study was to determine the suitability and validity of the research questionnaire used for actual study respondents, as well as the reliability of the research instrument based on the Cronbach's Alpha coefficient, which ranged from 0.65 to 0.95 (Chua, 2012). The validity of this study was also strengthen by the questionnaires that has been checked by experts.

SPSS analysis revealed a Cronbach alpha of 0.900, showing a high internal reliability of the instrument used. Data was collected offline via physical questionnaire handout. Data was then analyzed using SPSS version 26. Analyzed data was presented in the form of percentages, mean scores and visual graphics to answer the three research questions.

#### **Results**

#### **Demographic Information**

For the first section of the questionnaire, participants were asked about their demographic information such as gender and their household numbers. Both male and female subjects were involved in this study. 77.5% of the subjects are female and 23.3% of the subjects are male. This indicated that most respondents are female.

Table 1 showed the frequency distribution and percentage of students' household number while Figure 1 displayed the cumulative frequency distribution of students' household number.

Table 1
Frequency Distribution for Students' Household Number

Range of Household	Fraguency	Cumulative	Percentage o	f
Number	Frequency	Frequency	Frequency (%)	
1-5	30	30	51.7	
6-10	27	57	46.6	
11-15	1	58	1.7	

51.7% respondents had household number with a range of 1-5 people, 46.6% with 6-10 people, and 1% with 11-15 people in their respective house during online class. This result indicated that the highest range for household number of respondents is 1-5 people while the lowest is 11-15 people.

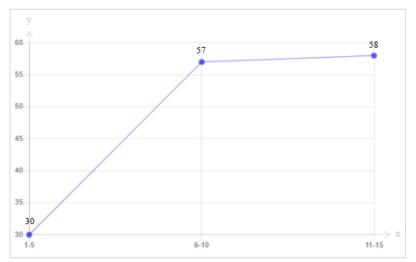


Figure 1. Cumulative Frequency Distribution of Respondents' Household Number

#### **Findings of Research Questions**

For the second section of the questionnaire, participants were asked six questions relating to research questions "What are the students' perceptions towards online learning?" Then for the second part in this section, participants were given six questions concerning to research question, "What is the level of online learning accessibility do the students have?" Finally for the last part in this section, participants were requested to answer six questions to answer the last research question in this study which is, "What are the students' level of mental readiness for English online learning?"

#### Perception of Participants towards Online Learning

The first finding was to answer the question 1, "What is the perception of students towards online learning?" This question was to determine their attitudes towards online learning and their level of comfort with it. Item 6 ("I feel more comfortable following the class learning through face-to-face methods than through online learning.") with a percentage of none strongly disagreed or disagreed, 13.79% neutral, 29.31% agreed, and 56.9% strongly agreed. This statistic was indicative of a strong preference for face-to-face instruction among students. This was an important consideration for instructors and administrators, who should recognize the importance of providing both online and face-to-face instruction to meet the needs of all learners.

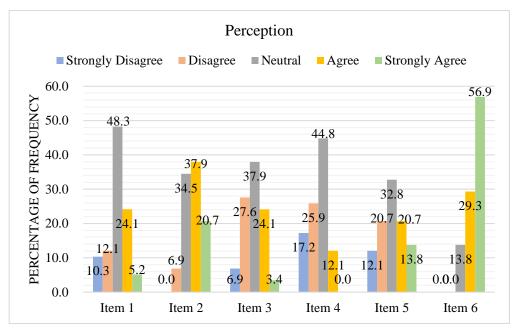


Figure 2. Frequency Percentage of Perception of Students towards Online Learning

Next, Item 2 ("I enjoy online learning because it includes many interactive and interesting games and quizzes.") where none strongly disagreed, 6.9% disagreed, 34.48% neutral, 37.93% agreed, and 20.69% strongly agreed. This result indicated that although most students preferred face-to-face instruction, they still appreciated the interactive and engaging elements of online learning. This appreciation of online learning highlighted the importance of instructors and administrators providing a blend of both online and face-to-face instruction to cater to the needs and preferences of all learners.

Item 5 ("I am always disturbed at home by family members or pets during online learning."), with a percentage of 12.07% strongly disagreed, 20.69% disagreed, 32.76% neutral, 20.69% agreed, and 13.79% strongly agreed. This result indicated that the home environment for some students could be a challenge when it comes to online learning. To address this, instructors and administrators must provide assistance to students who live in less-than-ideal environments in order for them to engage with the content more effectively.

Item 1 ("I love and enjoy following online learning because I can collaborate with my peers easily."), showed 10.34% strongly disagreed, 12.07% disagreed, 48.28% neutral, 24.14% agreed, and 5.17% strongly agreed. This data indicated that many students found it difficult to collaborate with their peers during online learning. In order to address this, teachers must make sure that there are enough opportunities for students to interact and work collaboratively with their peers in a secure setting.

Item 3 ("I feel much more comfortable doing online learning at home with my family."), with a percentage of 6.9% strongly disagreed, 27.59% disagreed, 37.93% neutral, 24.14% agreed, and 3.45% strongly agreed. This data suggested that many students may be uneasy about learning from home, which can affect their level of engagement and overall learning experience.

Finally, Item 4 ("I rarely have difficulty following online learning."), where 17.24% strongly disagreed, 25.86% disagreed, 44.83% neutral, 12.07% agreed, and none strongly agreed. This result implied that many students were still having difficulty keeping up with their online learning, suggesting that they may require additional support in order to ensure a more successful learning experience.

Overall, the highest percentage in their perception indicated that the majority of students preferred face-to-face learning over online learning. Meanwhile, the lowest percentage indicated that students frequently struggled to keep up with online learning.

## Online Learning Accessibility of Participants

The second finding was to answer the research question 2, "What is the level of online accessibility for the students?" This question was to identify their access to connectedness in learning, particularly in relation to the internet.

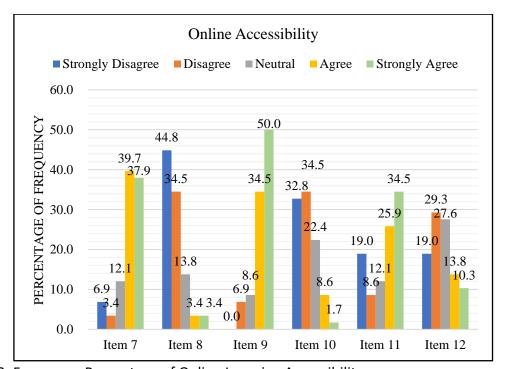


Figure 3. Frequency Percentage of Online Learning Accessibility

Item 9 ("I use my own mobile data for the learning process.") had a percentage of none strongly disagreed, 6.9% disagreed, 8.62% neutral, 34.48% agreed, and 50% strongly agreed. According to the result, half of the respondents strongly agreed that they use their own mobile data, either spending their own money or relying on their parents for internet access. This also implied that they either did not receive the benefits or preferred to use their own learning tools.

Next, Item 7 ("I attend online classes using my mobile phone, laptop, or tablet.") with a percentage of 6.9% strongly disagreed, 3.45% disagreed, 12.07% neutral, 39.66% agreed, and 37.93% strongly agreed. This result showed that a large number of students also use their own devices. In the context of owning devices, it could be that they shared devices with parents or siblings who live in the same house.

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Item 11 ("I use my home internet connection – Unifi, Maxis, Celcom, and others.") had a strong disagreement rate of 18.97%, a disagreement rate of 8.62%, a neutral rate of 12.07%, an agreement rate of 25.86%, and a strong agreement rate of 34.48%. These data indicated that while the majority of respondents were using their own mobile data, there was a significant number that rely on their home internet connection too.

Item 12 ("I have strong and stable internet access at home during the learning process.") indicated that the majority of students did not have strong internet access with a strong disagreement rate of 18.97%, 29.31% disagreed, 27.59% neutral, 13.79% agreed, and 10.34% strongly agreed. This data indicated that while the majority of students had some form of internet access at home, it was not necessarily reliable or fast enough to enable them to learn effectively. They resided in rural or suburban areas, making it challenging to find a telco that can reach the location. Rapid internet use during the pandemic also weakened connections due to the location.

Item 10 ("I make use of the government's free Wi-Fi and mobile data.") with 32.76% of those polled strongly disagreed, 34.48% disagreed, 22.41% neutral, 8.62% agreed, and 1.72% strongly agreed. This data showed the vast majority did not use the free Wi-Fi provided by the government. This scenario could probably due to MCO restrictions that prohibit going out to public places that have high-speed internet, such as district offices, to get high-speed internet. This may also be due to the fact that outside the city, it was difficult to find government-run public places that provide free and fast Wi-Fi apart from the district office and the main playground in this district.

Finally, Item 8 ("I use the government's free learning device – tablet or phone.") with 44.83% strongly disagreed, 34.48% disagreed, 13.79% neutral, 3.45% agreed, and 3.45% strongly agreed. This showed that school students in these rural areas did not use the incentives provided by the government, such as free devices. Only a few used it. Furthermore, the incentives provided by the government were often seen as inadequate in terms of data amounts or were underdeveloped, making it difficult for students to complete online tasks.

The overall findings in this construct showed that the majority purchased their own data or use Wi-Fi at home during the pandemic, compared to using the incentives provided by the government. In addition, the internet connection was not always strong, especially for students who lived in suburban or urban areas. This lack of access to quality internet could lead to disadvantages in education, as students could not participate in online lessons, did not have access to enough data for school tasks and assignments, or even worse, could not access the internet at all. The result for this construct indicated that their online learning accessibility was below the moderate level.

## Mental Readiness of Participants towards Online Learning

The last construct in this study was to answer the research question 3. "What is the level of mental readiness of students towards online learning?". This was done to gauge their level of mental preparedness for the challenge, particularly with regard to English-related subjects.

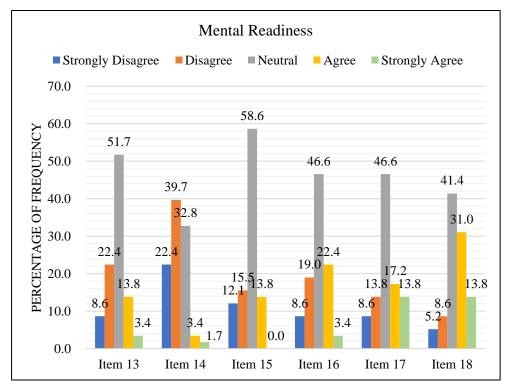


Figure 4. Frequency Percentage of Mental Readiness towards Online Learning

Item 18 ("I understand how to use the internet for online English learning.") with a percentage of 5.17% strongly disagreed, 8.62% disagreed, 41.38% neutral, 31.03% agreed, and 13.79% strongly agreed. This data indicated that there were still a number of people who did not have the skills to use the internet. This could lead to the assumption that English language was insufficient to improve their understanding and skill in English or they used their native language, Malay, to access the internet.

Then, Item 17 ("I am always willing and ready to use an online platform for my English classes.") with a percentage of 8.62% strongly disagreed, 13.79% disagreed, 46.55% neutral, 17.24% agreed, and 13.79% strongly agreed. This result suggested that more people were open to using an online platform for their English classes than those who were against it.

Item 16 ("During my English online class, I can access notes and documents.") with 8.62% strong disagreed, 18.97% disagreed, 46.55% neutrality, 22.41% agreed, and 3.45% strongly agreed. This result indicated that more respondents were slightly more likely to agree with this statement than disagree with it, yet the majority of respondents still felt neutral about it. If some of them were unable to access the lecture notes, it was possible that they cannot read English. This also indicated that the students who scored 3, 4, or 5 were more likely to have better English language skills and knowledge, while those who scored 1 or 2 might not be as competent.

Next, Item 13 ("I can turn in all of my assignments for my online English class") with a percentage of 8.62% strongly disagreed, 22.41% disagreed, 51.72% neutral, 13.79% agreed, and 3.45% strongly agreed. The survey results demonstrated that the majority of respondents were neutral about the topic, with nearly 52% indicating no strong feelings one way or another.

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Item 15 ("I am able to complete all of the activities in my English online class."), which had a percentage of 12.07% strongly disagreed, 15.52% disagreed, 58.62% neutral, 13.79% agreed, and none strongly agreed. Most respondents to the survey felt neither strongly in agreement nor strongly in disagreement with the statement, demonstrating a trend of neutrality.

Lastly, Item 14 ("I understand the lessons in my online English class."), which had a percentage of 22.41% strongly disagreed, 39.66% disagreed, 32.76% neutral, 3.45% agreed, and 1.72% strongly agreed. This result suggested that although more respondents were open to using an online platform for their English classes, there was still a large portion of respondents who did not understand the lessons in their online English class.

Overall, the mental readiness of students for this construct was below the moderate level. It was possible that those who performed poorly in exams did not have access to the same resources as those who performed well, resulting in a lack of exposure and practice with the language. This data showed that there was a clear need for more educational support to ensure that those who have access to online English classes can make use of the resources available and understand what they are learning.

#### Discussion

Based on research question 1, which was on the topic of perceptions of students towards online learning, the most significant result was students clearly preferred face-to-face learning to online learning. This statement was consistent with earlier research by Nasimah and Mohamed (2022), who discovered that their respondents preferred conventional or traditional learning methods over the newly introduced pedagogy.

Next, the most significant result was students favored gamification in online classes. This finding indicated that students not only appreciate gamification but also find it was engaging in an online setting. Gamification is one of the interactive initiatives in online learning (Filomena Faiella & Maria Ricciardi, 2015). According to a systematic review by Hamari et al. (2014), gamification has been proven successful in a number of industries, particularly education. Additionally, by encouraging students to share their perspectives through the use of online forum software, teachers could incorporate social components and collaboration into online teaching and learning (Ommi Alfina, 2020). In order to engage students, teachers should use this game element in person.

Students can also increase their understanding through discussion, information sharing, and critical analysis (Muhammad Azhar Stapa et al. 2017). For instance, a study about conversations in the WhatsApp Group application revealed an improvement in students' comprehension of a topic (Sri Seti Indriani & Ditha Prasanti, 2020). Other items, like showing they were neutral, could be supported or contradicted by a lack of motivation to learn as a result of numerous home distractions, according to Khan et al. (2021).

Referring to the findings of research question 2, which was on the topic of online accessibility for students, the level that can be said for them was still below average because the majority still used phones compared to suitable devices such as laptops. Although they usually used their own devices, it was difficult for them to get stable internet because they were in rural areas. This made their learning process even more difficult. This coincided with previous studies on connectedness in learning.

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Other than that, the research finding was also consistent with study by Zain et al. (2022), as well as Ainul and Ishak (2021) in Malaysia, where not every household had enough computers, laptops, or mobile phones for their children. In some cases, only the parents had access to the gadgets, preventing the children from learning during the day. As a result, they were unable to accept and finish tasks in the allotted amount of time. Household surveys provided valuable insight into economic behaviour and its implications for policy. Household size increases with household size, but at a decreasing rate. All family members used the same amount of commodities, and two or more people consumed the same amount (White & Masset, 2003).

Mohamad (2021) also supported the study's findings by reporting that many students were unable to attend scheduled learning sessions due to inadequate internet access or data exhaustion. Despite the fact that almost all students owned smartphones, they have less ability to access the internet or retrieve data. This made it difficult for students to keep up with all their online learning when they lacked of technological devices such as laptops, or were less able to do so. Additionally, online learning made students to keep up with their phone, laptop, or computer breaks unexpectedly, causing them to lagged behind their less capable peers who had no cost to repair the device. Therefore, home-based learning was less effective when compared to face-to-face methods.

Lastly, for research questions 3 which is on the mental readiness of participants in English online learning. The findings indicated that the challenge level of their mental readiness was at above moderate and could be assumed to be influenced by a lot of factors. The income of the majority of rural students' parents was low. Parents, who are mostly self-employed and farmers, were among the factors that could be said to influence the mental readiness of students for online learning. Besides, the schools lacked of teachers. It could also be assumed that the school administration did not take proactive and appropriate actions to foster students' interest in English language. Nonetheless clearly, the effect of two years of COVID-19 has caused them to not be able to study perfectly.

This finding was also consistent with a study by Hasmiati et al. (2021), who discovered that students were not yet ready for online learning. Students preferred in-person instruction over online instruction, and their readiness for learning was determined by their mental preparedness. Findings of this study could also be supported by Irma et al. (2022) that revealed students were mentally prepared, such as being able to use the internet, turning in assignments, being familiar with the online platform, and being prepared to use platforms, but they were hindered, though, by the limited internet access. However, contrary to Garcia-Bolaos et al. (2022), respondents in their quantitative study were willing to prioritize their mental health while studying for blended learning.

# Limitations of the Research Research Sample

The sample selected for this study was specifically the students who lived in a suburban or rural area, located in one of the northern state in Malaysia. They were also 10th grade students (form 4) at a government secondary school. Hence, the results and the generalizations obtained in this study might not be applicable to students outside of this designation.

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#### **Data Collection and Presentation**

This study had a number of limitations that related to the data collection and presentation. First, descriptive analysis was used to analyze the data for this study, and results were reported as frequencies, and percentages. To get a variety of results for this study, another study utilizing inferential statistical analysis such as t-test and ANOVA should be carried out. Further research should also be conducted on parents, teachers, administrators and others to obtain a more holistic perception and be able to be used as a more effective reference in this field.

## Implications of the Research Implications to Researchers

There were few implications of this study. First, this research provided a resource for other researchers on the state of online learning outside of urban areas. It indicated that, although online learning has become more prevalent, access to the technology and support needed for a successful online learning experience were still not equal for all.

#### Implications for Teaching and Learning

Second, to inform the government on students' achievement in rural areas where it was low due to socioeconomic and geographical obstacles that prevented them from succeeding. Third, this study could be used to understand the effects of implementing distance learning program in rural areas and guided policy makers in crafting education policies that are both effective and feasible. As a result, the ministry must therefore take the required actions to prevent them from falling behind in the exam. This demonstrated the actual achievement gap and factors of achievement between rural and urban students.

Finally, this study was a reference for school community so that they could raise the same issue and take the necessary steps to help students and others, as well as provide guidance to educators in rural areas on how to use technology to promote student success. Besides, this study could be used to develop and implement strategies to overcome barriers associated with rural education.

### Recommendations

#### **Instruments and Structure**

Future research should focus at more detailed instruments to strengthen the answer for each research objective. Future research can consider both qualitative and quantitative study structures for better results. Researchers can conduct interviews from more pupils in northern state of Malaysia to gain additional information about students' achievement, socioeconomic and mental readiness in rural areas towards online learning especially in that area to fill the research's gap.

#### Conclusion

A number of conclusions can be drawn from the findings. First, students preferred in-person learning more than online learning. In-person learning offers many advantages, such as face-to-face interaction with teachers and peers, a structured learning environment, and immediate clarification of doubts that many students found beneficial (Adnan & Ritzhaupt, 2018). However, incorporating interactive and collaborative elements into online learning such as game-playing and teamwork can help transform mundane tasks into exciting learning activities (Adnan et al., 2020). Gamification can make learning more fun and engaging,

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fostering a sense of healthy competition and achievement (Donny & Adnan, 2022). Teamwork in an online environment can promote communication, enhance collaborative skills, and create a more dynamic learning setting (Adnan & Sayadi, 2021). Thus, balancing the strengths of both in-person and online approach can be a key strategy in ESL learning.

Second, connectivity issues could pose significant challenges for students. According to Norman et al. (2022), social economic status, living in rural areas with poor connectivity, and other infrastructure issues are some potential reasons for connectivity struggles among students. To improve online learning access, schools could explore partnerships with internet service providers by providing Wi-Fi hotspots, particularly in underserved areas. Schools could also discover engagement with industry and community to provide devices to students in need, either on a loan basis or through donations. Norman et al. (2022) also added that addressing connectivity challenges requires a collaborative effort between schools, industries, communities, and policymakers to ensure that all students have equitable access to education.

Last but not least, mental readiness levels among students in online learning. Educational supports such as providing training on basic digital literacy skills (Donny & Adnan, 2022), providing additional assistance in language proficiency (Adnan & Sayadi, 2021) and offering technical support are important to make sure that students with access to online English classes can effectively utilize the available resources and understand the content. By focusing on these crucial aspects, students not only have access to online English classes but also receive the necessary support to succeed in their language learning journey.

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