

Analytical View of Online Learning Among Malaysian Secondary School Students

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Abstract

This study aimed to examine students' attitudes toward online learning, specifically prioritising social interaction, self-concept, self-direction, and online learning skills. These qualities represent the sub-dimensions in a multi-dimensional questionnaire that was administered to 31 randomly selected students from Kuala Lumpur's public secondary schools. Home-based online learning was administered as an intervention approach and evaluated after its implementation. A total of 25 adopted questions and two opinion-based questions were included in the questionnaire. The 25 items included a Likert-scale rating and were modified from the McVay (2001) inventory and Bernard et al. (2014) to collect the opinions of the 31 secondary school students after the online-learning intervention. To ascertain the students' quantitative and qualitative perceptions, the results were evaluated based on each item on the questionnaire. According to the survey results, most of the respondents were aware of and receptive to the online learning concept. The majority also expressed willingness to participate in online learning and were accustomed to using online platforms. In addition, working students who studied online were found to benefit from having ubiquitous access to their course materials. However, some students complained that the instructors' presentation styles made it difficult to comprehend the course material. As well, they mentioned other challenges, including Internet network and quotas, that contribute to instructors and students' lack of engagement. When learning online, students were able to connect and converse with their instructors and other students more readily, both during and after class. Students were also typically prepared to continue taking online classes because they recognised the benefits and convenience of having access to course materials from any location.

Keywords: learning skills, online learning, perception, self-concept, self-direction

1. Introduction

During the recent pandemic that prevented students from physically attending face-to-face or in-person learning at school, online education was introduced to replace these traditional learning techniques (Basilaia & Kvavadze, 2020). The Ministry of Education Malaysia released its Professional Circular No. 3 Year 2020 on 17 March 2020 entitled, "Guidelines for the Implementation of Teaching and Learning During the Movement Control Order Due to the Spread of COVID-19 Infection." This circular detailed the Ministry of Education's dedication to

guaranteeing that all students were not put at a disadvantage, and could pursue education in a secure setting (Ministry of Education (MOE), 2020, p. 1). To achieve this objective, educators were mandated to engage in remote teaching, wherein they provided guidance to students using easily accessible communication platforms and applications. Additionally, they were encouraged to promote the utilisation of technology-based online learning (MOE, 2020, p. 6), which was applicable in the absence of physical attendance by both teachers and students at educational institutions. Prior research has demonstrated the efficacy of employing online learning modalities in the context of pandemics (Basilaiia & Kavavadze, 2020; Wajdi et al., 2020). The successful and effective implementation of online learning has been found to be influenced by various factors, including the presence of a suitable technical infrastructure, sufficient support mechanisms, and proper preparation (Basilaiia & Kavavadze, 2020; Sintema, 2020). Furthermore, in online learning environments that are less focused on the teacher, students are expected to adopt a more proactive approach in their education. This entails taking on increased responsibility for the organisation and management of their own learning (Hsu & Shiue, 2005).

Similar to lockdowns and quarantines enforced in numerous other countries, the Movement Control Order (MCO) in Malaysia was implemented with the objective of mitigating the transmission of the COVID-19 virus. According to a statement made by the Malaysian Ministry of Higher Education (2020), both public and private universities in Malaysia were expected to begin conducting their teaching and learning activities exclusively through online platforms from the start of the pandemic until December 2020. Following the lifting of the MCO on 15 June 2020, students were instructed to resume their studies physically at school. This directive was accompanied by a month-and-a-half long transition period (from 15 June to August 2020) to facilitate the return to school. In managing their duties during the pandemic, educators began utilising Google Classroom to deliver instruction, provide guidance, and offer assistance to students since the start of the MCO on 18 March 2020. In August 2020, due to the worsening situation surrounding COVID-19, educational institutions were again instructed to revert to online learning. Taking into account these conditions, it is thus vital to understand student perspectives regarding their online education experience, and effectively tackle any obstacles or difficulties they may face.

2. Literature Review

2.1. Perception

N.D. William and E. William (2018) explain that perception is the process through which sensory stimuli are turned into structured experiences. The sensation arises from the confluence of perceptual processes and external stimuli. The examination of the relationships between different stimuli, such as light and sound waves, and the corresponding perceptions they elicit, provides valuable insights into the features of the perceptual process. According to Schacter (2011), perception can be described as the cognitive process by which individuals acquire, identify, and interpret sensory information, thus enabling them to develop a comprehensive understanding of their environment. Perception encompasses all nervous system impulses that arise from the chemical or physical activation of the sensory organs. For example, hearing is facilitated by the propagation of sound waves, olfaction relies on the detection of fragrance molecules, and vision is initiated by the stimulation of the retina of the eye by light. The determinants of perception encompass cognitive processes like learning, memory, hope, and attention, which actively contribute to the formation of perceptual experiences, rather than relying solely on passive reception of external cues. As a fundamental aspect of the complicated functioning of the neurological system, perception seems to be absent from consciousness due to its occurrence outside of conscious awareness (Gregory, 1987). Perception, as defined by

Gregory (1987), concerns the extent to which sensory attributes, such as sound, smell, or colour, manifest in objective reality rather than just within the subjective realm of the perceiver.

2.2. Learning Skills

According to Clarke (2008), the acquisition of certain abilities or competences necessary for students to effectively gather, analyse, and articulate knowledge, as well as advance in their pursuit of lifelong learning, is sometimes referred to as learning skills. An effective learning strategy is created by combining various methods and learning abilities. Each skill and ability serves a certain function and is appropriate for particular circumstances, settings, time periods, and geographical locations.

2.3. Self-Concept

According to Helper (1995), individuals possess a self-image or self-perception. This is occasionally described as an individual's self-concept and encompasses a comprehensive overview of our behaviours, physical characteristics, as well as inherent abilities and limitations. The idea of self-concept pertains to an individual's assessment or impression of their own identity, encompassing both good and negative aspects. The interdependence between our self-perceptions of talents, personal experiences, and future events is significant. Additionally, receiving input from others contributes to the development of one's self-perception. A person's self-concept involves their subjective perceptions and evaluations of their own skills, including self-confidence and self-esteem, as well as their cognitive representations of themselves and their environment through sensory experiences. The construct of self-concept encompasses both psychological and physical dimensions.

2.4. Self-Direction

According to Brockett and Hiemstra (1991), self-direction is the ability to behave autonomously, without being hindered by internalised barriers. To develop an accurate perception of reality, unclouded by idealised notions instilled throughout childhood, it is imperative to liberate oneself from the acquired knowledge and beliefs accumulated throughout one's formative years. The state of being self-directed does not necessitate the complete abandonment of the values assimilated throughout one's developmental years. Instead, being self-directed signifies our ability to carefully observe, evaluate, and subsequently make independent decisions on what is most advantageous for our present circumstances.

2.5. Social Interaction

Berger et al. (1977) describes social interaction as the dynamic social relationship that exists between people, groups, and the interaction between individuals and groups. Social interaction is a vital aspect of our daily existence, serving as a means of expressing the interdependent nature of social connections. The necessity for social connections is inherent to human nature, as people are inherently social beings who engage in lifelong interactions within society.

2.6. Online Learning

Online learning refers to the educational process conducted through the Internet, wherein students have the flexibility to engage with teachers and fellow learners at their own convenience, regardless of time and location (Singh & Thurman, 2019). Online learning offers several advantages, including increased flexibility in terms of time, place, and speed, enhanced accessibility to a broader array of knowledge, and fewer financial burdens. In the era of global

digitalisation, government entities, educational establishments, and enterprises worldwide are increasingly promoting the adoption of e-learning. Consequently, a shift has been taking place in the educational landscape, with traditional in-person classrooms being replaced by distance learning and online learning methods (Aldhafeeri & Khan, 2016). Aldhafeeri and Khan (2016) also explained that the use of e-learning can provide a comprehensive and genuine learning environment that facilitates student collaboration and interdependence, particularly in light of advancements in communication technologies.

2.7. Learning Process

According to Bafadal (2005), the inclusion of teacher-student contact and reciprocal communication is deemed essential for the achievement of learning objectives. Teachers and students are integral constituents of the educational process. To achieve optimal educational outcomes, a symbiotic relationship must be established between the two. Hence, every effort aimed at delivering effective and efficient guidance for acquiring knowledge can be categorised as learning. As demonstrated in the findings of Winkel (2017), the learning process may be understood as a cognitive or psychological endeavour, through which individuals actively interact with their surroundings and subsequently modify their cognitive constructs, i.e., their knowledge, understanding, abilities, and aptitudes.

2.8. Objectives and Research Questions

The primary aim of this study was to examine secondary school students' perception of online learning. This research endeavoured to examine multiple perspectives to yield significant insights that can inform educational practices and facilitate the successful implementation of online education. In order to accomplish this goal, the study involved two research questions:

- i. What are the perceptions of secondary school students toward online learning, including their overall perception and specific perceptions related to learning skills, self-concept, self-direction, and social interaction?
- ii. What are the differences in perceptions of online learning, including overall perception and perceptions related to learning skills, self-concept, self-direction, and social interaction, between male and female secondary school students?

3. Methodology

This research employed a post-intervention survey design to assess the attitudes of secondary school students regarding at-home online learning that was implemented as an intervention study strategy. A survey comprising 25 standardised questions and two subjective questions was formulated and disseminated to a sample of 31 students enrolled in public secondary schools in Kuala Lumpur. Drawn from the McVay (2001) inventory and Bernand et al. (2014), the survey instrument consisted of 25 items measured on a Likert scale. Participants were asked to indicate their level of agreement on a scale of one ('strongly disagree') to five ('strongly agree'). The data acquired was analysed to determine the students' quantitative and qualitative impressions. Each component of the questionnaire was assessed accordingly.

3.1. Respondents

The respondents in this study were randomly selected from a group of 31 public secondary school students in Kuala Lumpur. The questionnaire consisted of 25 adopted questions that

focused on various aspects of their learning skills, self-concept, self-direction, and social interaction. These three dimensions were chosen as the sub-dimensions within a multi-dimensional questionnaire.

4. Findings

4.1. Overall Perceptions of Online Learning

Table 1. Descriptive Statistics for Online Learning and its Constructs

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Learning Skills	31	66.67	100.00	84.95	11.80	.07	.42	-1.42	.82
Self-Concept	31	57.50	100.00	81.94	15.79	-.18	.42	-1.69	.82
Self-Direction	31	56.00	100.00	79.35	13.82	-.22	.42	-1.21	.82
Social Interaction	31	60.00	100.00	83.44	12.19	.13	.42	-.78	.82
Online Learning	31	61.60	100.00	82.50	12.37	-.05	.42	-1.44	.82
Valid N (listwise)	31								

The descriptive statistics for the students’ general views of online learning and their specific views of the constructs (e.g., learning skills, self-concept, self-direction, and social interaction) within online learning are summarised in Table 1. The data show that the students generally regarded online learning highly, with a percentage mean of 82.50 (SD = 12.37). Their specific views of each of the four constructs within online learning were equally high: in descending order, the percentage mean was 84.95 (SD = 11.80) for learning skills, 83.44 (SD = 12.19) for social interaction, 81.94 (SD = 15.79) for self-concept, and 79.35 (SD = 13.82) for self-direction.

4.2. Difference of Online Learning Perception by Gender

Table 2. Descriptive Statistics and Results from the Independent Samples’ t-test by Gender

	Gender	N	Mean	Std. Deviation	t	df	p
Learning Skills	Male	12	83.3333	13.02678	-.598	29	.554
	Female	19	85.9649	11.19849			
Self-Concept	Male	12	80.0000	13.65151	-.536	29	.596
	Female	19	83.1579	17.25709			
Self-Direction	Male	12	74.0000	12.70648	-1.775	29	.086
	Female	19	82.7368	13.73091			
Social Interaction	Male	12	84.4444	12.00449	.359	29	.722
	Female	19	82.8070	12.58370			
Online Learning	Male	12	80.6667	12.59302	-.651	29	.520
	Female	19	83.6632	12.42883			

The descriptive statistics by gender for the students’ general view of online learning and their specific views of learning skills, self-concept, self-direction, and social interaction within online learning are summarised in Table 2. The results indicated no significant difference between the general perception of males and females towards online learning ($t = -0.651, p = .520 > .05$). Equally, there were no significant differences between males and females with regard to their views of learning skills ($t = -0.598, p = .554 > .05$), self-concept ($t = -0.536, p = .596 > .05$), self-direction ($t = -1.775, p = .086 > .05$), and social interaction ($t = 0.359, p = .722 > .05$).

Table 3. Questionnaire Statistics

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			N=31
No.	Item	1	2	3	4	5	Mean	Std. dev.	Tendency / Interpretation
	Online learning skills								
1	*I am able to easily access the Internet needed for my studies.	2 6.5%	-	8 25.8%	7 22.6%	14 45.2%	4.00	1.15	Agree
2	*I am comfortable communicating electronically.	-	4 12.9%	6 19.4%	12 38.7%	9 29%	3.84	1.00	Agree
3	*I am comfortable with written communication.	-	2 6.5%	5 16.1%	15 48.4%	9 29%	4.00	0.86	Agree
4	I possess sufficient computer keyboarding skills for doing online work.	-	2 6.5%	3 9.7%	16 51.6%	10 32.3%	4.10	0.83	Agree
5	I feel comfortable composing text on a computer in an online learning environment.	-	-	6 19.4%	12 38.7%	13 41.9%	4.23	0.76	Agree
6	I feel comfortable communicating online in English.	-	4 12.9%	7 22.6%	7 22.6%	13 41.9%	3.94	1.09	Agree
Average mean and standard deviation for items 1-6							4.02	0.95	Agree
	Self-concept								
7	*I feel that my background and experience will be beneficial to my studies.	-	1 3.2%	8 25.8%	10 32.3%	12 38.7%	4.06	0.89	Agree
8	I am motivated by the material in an Internet activity outside of class.	-	2 6.5%	4 12.9%	18 58.1%	7 22.6%	3.97	0.80	Agree
9	Learning is the same in class and at home on the Internet.	4 12.9%	11 35.5%	4 12.9%	3 9.7%	9 29%	3.06	1.48	Neutral
10	I can practice English grammar during Internet activities outside of class.	2 6.5%	1 3.2%	8 25.8%	8 25.8%	12 38.7%	3.87	1.18	Agree
11	I feel that I can improve my listening skills equally well using the Internet and in class.	2 6.5%	4 12.9%	4 12.9%	10 32.3%	11 35.5%	3.77	1.26	Agree
12	I believe that learning on the Internet outside of class is more motivating than a regular course.	4 12.9%	2 6.5%	9 29%	8 25.8%	8 25.8%	3.45	1.31	Agree
13	I believe a complete course can be given through the Internet without difficulty.	2 6.5%	5 16.1%	8 25.8%	8 25.8%	8 25.8%	3.48	1.23	Agree
14	I believe that the material in an Internet course is better prepared than for a traditional class.	3 9.7%	3 9.7%	7 22.6%	8 25.8%	10 32.3%	3.61	1.31	Agree
Average mean and standard deviation for items 7-14							3.66	1.18	Agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			N=31
No.	Item	1	2	3	4	5	Mean	Std. dev.	Tendency / Interpretation
Self-direction									
15	I could pass a course on the Internet without any teaching assistance.	3 9.7%	6 19.4%	10 32.3%	5 16.1%	7 22.6%	3.23	1.28	Neutral
16	*When it comes to learning and studying, I am a self-directed person.	-	2 6.5%	5 16.1%	17 54.8%	7 22.6%	3.94	0.81	Agree
17	*In my studies, I am self-disciplined and find it easy to set aside reading and homework time.	-	3 9.7%	6 19.4%	12 38.7%	10 32.3%	3.94	0.96	Agree
18	*I am able to manage my study time effectively and easily complete assignments on-time.	-	1 3.2%	7 22.6%	14 45.2%	9 29%	4.00	0.82	Agree
19	*In my studies, I set goals and have a high degree of initiative.	-	1 3.2%	7 22.6%	11 35.5%	12 38.7%	4.10	0.87	Agree
Average mean and standard deviation for items 15-19							3.84	0.95	Agree
Social interaction									
20	*I am willing to actively communicate with my classmates and instructors electronically.	-	3 9.7%	8 25.8%	8 25.8%	12 38.7%	3.94	1.03	Agree
21	As a student, I enjoy working with other students in groups.	-	1 3.2%	5 16.1%	13 41.9%	12 38.7%	4.16	0.82	Agree
22	I feel that face-to-face contact with my instructor is necessary for learning to occur.	-	-	5 16.1%	9 29%	17 54.8%	4.39	0.76	Strongly agree
23	I can discuss with other students during Internet activities outside of class.	1 3.2%	1 3.2%	3 9.7%	16 51.6%	10 32.3%	4.06	0.93	Agree
24	I can work in a group during Internet activities outside of class.	1 3.2%	1 3.2%	6 19.4%	17 54.8%	6 19.4%	3.84	0.90	Agree
25	I can collaborate with other students during Internet activities outside of class.	1 3.2%	1 3.2%	4 12.9%	14 45.2%	11 35.5%	4.06	0.96	Agree
Average mean and standard deviation for items 20-25							4.07	0.90	Agree
Average mean and standard deviation for items 1-25							3.88	1.01	Agree

NB: Items with an * were adopted from the original McVay (2001) inventory.
Adopted from Bernand et al. (2004)

Table 4. Interpretation of mean score

Average mean	Interpretation
1.00 – 1.80	Strongly disagree
1.81 – 2.60	Disagree
2.61 – 3.40	Neutral
3.41 – 4.20	Agree
4.21 – 5.00	Strongly agree

4.1. Online Learning Skills

There were 25 items used to explore the students' perspectives of online learning, as shown in Table 3. With the exception of two students who strongly disagreed with this statement, the majority agreed that they could easily access the Internet for their online learning process (mean = 4.00). With the exception of four students, the majority felt comfortable communicating electronically (mean = 3.84). With the exception of two students, most felt at ease with written communication, through which they could send written messages to friends and teachers via online learning (mean = 4.00). Only two students claimed to have inadequate skills using the computer keyboard for conducting online work (mean = 4.10). Additionally, most students agreed that they felt at ease writing text on a computer in an online learning environment in which they could display their written work to their peers and teachers (mean = 4.23). With the exception of four students, the majority also agreed that they felt comfortable interacting in English online (mean = 3.94). Items 1 through 6 demonstrate the students' high levels of learning abilities in online courses; the mean score for these abilities was 4.02.

4.2. Self-Concept

All except one student believed their background and experience would be helpful to their studies (mean = 4.06). Except for two students, the majority of students felt motivated by the content in an Internet activity outside of class (mean = 3.97). In response to item 9, half of the students agreed that learning takes place both in-person and online, and the other half dissented (both respective means = 3.06), the latter of which comprised 11 students who disagreed and four who strongly disagreed. With the exception of one student who disagreed and two students who strongly disagreed, the majority felt they could practise English grammar when engaging in Internet activities outside the classroom (mean = 3.87). The majority also believed they could develop their listening abilities both in and out of the classroom (mean = 3.77). Only four students disagreed while another two strongly disagreed with this statement. The majority agreed that online learning is more inspiring than in-person learning (mean = 3.45), with the exception of two students who disagreed and four who strongly disagreed. The majority of students believed they could easily complete a course utilising online learning (mean = 3.48). However, five students disagreed and two strongly disagreed. Finally, the majority of students (mean = 3.61) agreed that online learning materials are better prepared than those utilised in traditional classes, with the exception of three students who disagreed and three others who strongly disagreed. Items 7 through 14 demonstrate the students' high level of self-concept; their self-concept average was 3.66.

4.3. Self-Direction

With the exception of six students who disagreed and three who strongly disagreed, most respondents agreed that they could complete a course through online learning without any assistance from teachers (mean = 3.23). The majority also considered themselves self-directed in their learning and studying (mean = 3.94). However, six students disagreed and three others strongly disagreed with this statement. With the exception of three students, the majority agreed they were self-disciplined and found it simple to set aside time for reading and assignments (mean = 3.94). All but one student was able to properly manage their study time and finish their assignments on-time (mean = 4.00). Again, all but one student agreed that they set goals and took significant initiative in their studying. The high level of self-direction among students using online learning is demonstrated by items 15 through 19, which had an average mean of 3.84.

With the exception of three students, the majority agreed that they were willing to actively connect with their classmates and teachers via online learning (mean = 3.94). Most also agreed that they liked working in groups with other students, with the exception of one who disagreed (mean = 4.16). For question 22, every student agreed that having in-person interactions with their teachers was essential for learning to take place (mean = 4.39). With the exception of one student who disagreed and one student who strongly disagreed, most students agreed that they could hold dialogues with other students during online learning (mean = 4.06). All but two students agreed that they could collaborate in groups during online learning activities (mean = 3.84). Similar to the above, all but two students agreed that they could collaborate with other students during online learning activities (mean = 4.06). Items 20 to 25 demonstrate a high level of social engagement among these students, with a mean average of 4.07.

The average mean for items 1 through 25 in Table 3 is 3.88, and the standard deviation is 1.01. This demonstrates that students in Kuala Lumpur's public secondary schools have a positive attitude towards the use of online learning in the educational process.

4.4. Students' Opinions

People have the freedom to choose their preferred job location and schedule without any restrictions. Online education primarily appeals to students burdened with additional financial obligations. In the current digital era, Internet resources and platforms have significantly facilitated access to study materials and submission of assignments. Students who complete their tasks by the due date will have the opportunity to select the precise time and location for submitting their work.

Furthermore, students have the ability to promptly engage in a comprehensive examination of the lecture material. Students can efficiently acquire knowledge from their instructors by utilising a diverse range of web applications, such as engaging with recorded audio, capturing video content, or perusing lecture transcripts. A significant number of students experience discomfort when required to engage in public speaking in the classroom. The utilisation of online platforms facilitates the flow of ideas among students. Online education frequently promotes increased engagement within the virtual learning environment.

Conversational components are commonly integrated into online education platforms, often in the form of forums or panel discussions. In certain instances, students may be prompted to engage in spontaneous verbal expression during classroom discussions, during which they are expected to refrain from pausing to deliberate and instead provide immediate decisions or recommendations. In the context of an online learning environment, students have the flexibility of allocating ample time for the contemplation and refinement of their individual ideas. Consequently, dialogues may exhibit enhanced dependability and subtlety.

Students do not need to be concerned about the potential distortion of their message due to body language, as research indicates that a significant majority (93%) of non-verbal communication occurs in online contexts. Online learning eliminates the tangible elements that can enhance the fluidity of discussions, despite the fact that scholars prioritise ideas over non-verbal communication.

Numerous academic curricula incorporate diverse forms of collaborative work or collective assignments. Conversely, distance learning courses foster collaborative online interactions and provide students the opportunity to engage with their peers using various communication platforms such as chat, email, and other practical methods. Students are often required to comply

with instructions over extended periods of time. While numerous online programmes incorporate PowerPoint presentations and supplementary materials that students can access in tiny increments, it is important to note that these resources may vary in terms of their creation process. Alternatively, it is possible to divide the initial portion of a study session on one day and allow the remaining portion to be completed on the subsequent day. This could prove advantageous to individuals who are averse to staying in an enclosed and poorly ventilated environment.

Students could realise financial savings by forgoing various supplementary expenses associated with on-campus education, including tuition, laboratory fees, transportation, parking, and accommodations. This is true even if the cost of an online course is equivalent to or greater than that of a traditional course. Online students have the opportunity to register for physics courses under the guidance of one instructor, as well as participate in English writing sessions led by a different instructor, all from the comfort of their own residences.

Engaging in post-class discussions with instructors can pose challenges within traditional educational settings. The teachers' office hours are often limited to one or two hours per week, resulting in a substantial number of students who have to wait their turn for consultation. The utilisation of web-based technology facilitates efficient communication between a teacher and multiple students simultaneously, even if it may be expected that online teachers would have to be more at hand to engage with students. Educators have the ability to use online resources to address inquiries posed by students and provide feedback outside of class hours or at designated intervals.

4.5. Students' Complaints

The students' feedback indicates that the current state of online learning is not adequate to cater to the needs of rural areas, mostly due to poor Internet access in such locations. The efficacy of online learning is contingent on the presence of a reliable and uninterrupted Internet connection. During the process of acquiring knowledge, certain students exhibit a preference for face-to-face interaction with their peers. Certain students place importance on the utilisation of a blended learning approach in their academic pursuits.

The findings of this study elucidate the sentiments of secondary school students regarding online learning. Importantly, the study was conducted in an area with a high number of urban students. Conducting the poll in areas with a mostly rural population may yield more comprehensive and insightful findings. The sample population of this study comprised individuals who were enrolled in secondary education. Comparable investigations could be conducted within the contexts of primary or tertiary education.

5. Conclusion

The findings of this study show that the majority of students were aware of and receptive to the concept of online learning. Students were also aware of the benefits online learning has over more conventional methods. It is admirable that much time and attention was devoted to learning the method. This demonstrates that students had a positive opinion of online education. In order to realise the ninth shift in Malaysia's current national education development plan, i.e. 'Globalised Online Learning', all parties, including management, educators, and students, are expected to enhance their utilisation of online learning. Overall, the students' opinions of the online learning environment were positive. Nearly all students were willing to participate in

online learning and familiar with using an online platform. Additionally, it was discovered that students who study online while working benefited from having access to course materials from anywhere. However, some students also expressed frustration with the lecturers' delivery style, saying that this made it difficult for them to understand the subject. Numerous other factors, including Internet networks and quotas, contributed to the lack of engagement between instructors and students. Additionally, students could connect and converse with professors or other students more easily while learning online, both during and after lessons. Students were typically willing to continue taking classes online because they recognise the benefits and convenience of being able to access study materials from any location and at any time.

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