

ICONSPADU 2021**International Conference on Sustainable Practices, Development and Urbanisation 2021****EDUCATION INEQUALITY AND STUDENTS' PERCEPTION
TOWARDS ONLINE LEARNING DURING COVID-19 PANDEMIC**

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fariha@unisel.edu.my**Abstract**

The outbreak of COVID-19 has had a significant impact on the global educational system. It has prompted the closure of educational institutions, which has had a negative impact on the global student fraternity. Therefore, this paper seeks to investigate what are the major education inequalities that have been encountered by the foundation students during the COVID-19 pandemic in Universiti Selangor. This paper also aims to explore the relationship between education inequalities and students' perception towards online learning. The researcher used a questionnaire survey to collect data from 120 foundation students of Universiti Selangor that were distributed randomly through online form. Descriptive analysis was used to analyse the personal information and all measured variables meanwhile Pearson correlation analysis was used to determine whether there is an association between educational inequality and students' perception towards online learning. The findings shows that internet connection, adapting the shift from traditional to online distance learning and no proper digital learning device are the education inequalities faced by the foundation students of Universiti Selangor. It was also found that there is a relationship between education inequality faced by the students and the students' perception towards online learning. Collectively, this study would be of interest to both public and private educational institutions interested in identifying major challenges encountered by students during online learning and determining what students expect from the quality of education available to them.

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1. Introduction

The COVID-19 pandemic has impacted Malaysians' livelihoods (Elengoe, 2020). It has been estimated that because to the COVID-19 epidemic, 1.5 billion pupils from more than 165 nations are absent from school (Wan, 2020). Most Malaysians have had to contend with the cessation of traditional classroom learning in schools, colleges, and universities since 2020 (Sufian et al., 2020). Parents, in particular, are hopeful that things will return to normalcy as quickly as possible so that their children can resume schooling and formal classroom instruction (Hasan, 2020). However, the pandemic situation has worsened, and nationwide institution closures have been enacted since mid-March 2020 (Jidin, 2020). By using internet connection and technology, most educators have switched their traditional classroom activities to online distance learning, both online and offline (Al-Kumaim et al., 2021). The COVID-19 pandemic has investigated academics' preparedness to adopt such technologies, as well as students' readiness to use such technologies in their online learning activities (UNESCO, 2020). As a result, during the COVID-19 period, many university students had no alternative but to finish their learning activities using online learning (Chang & Yano, 2020). As reported by Al-Kumaim et al. (2021), online distance learning requires a strong support from the community and students to attain the best results in terms of student advancement as in a face-to-face classroom. Most institutions improvise policies on teaching and learning procedures meanwhile others are still struggling developing their policies (Chang & Yano, 2020). However, quality became a big concern due to the rate of transforming physical class into online class. Many instructors have relied on trial and error to integrate online learning during the pandemic (Nurhaiza & NurNaddia, 2020). Nonetheless, the abrupt full usage of these online platforms during COVID-19 may have a physical and financial impact on students due to several barriers that will most likely impair many students' learning process such as difficulty to understand (Sufian et al., 2020). Therefore, this paper begins by examining the relevant circumstances of the COVID-19 epidemic up to this point, before focusing on Malaysian higher education institutions. It will next describe the methodology of this study and analyse the results, which will show the education inequalities faced by the students and the relationship between education inequality with the students' perceptions of online learning.

2. Problem Statement

Education for sustainable development aims to prepare individuals, society, and governments for long-term social and economic viability (Anyolo et al., 2018). Based on the 2030 Agenda for Sustainable Development, access to education equality allows everyone to have accessible and equitable quality education and promote lifelong learning experience. Rawls (1971) stated that the notion of educational equality was founded on three fundamental concepts in educational systems which are educational facilities, providing a minimum education for everyone, and developing infrastructure and specific arrangements for each disadvantaged group.

Providing equal conditions for having access to the equal educational opportunities is important from different political, social and economic aspects (Nelson, 2012; Shahzad et al., 2021). Also, according to Hart (2019), an increased involvement in higher education centres minimises educational

opportunity inequality and leads to equality and justice. It is crucial for several political, social, and economic perspectives to provide equitable conditions for equal educational possibilities (Nelson, 2012; Shahzad et al., 2021). In addition, increased involvement in higher education centres, according to Hart (2019), reduces educational opportunity inequality and contributes to equity and justice. As a result, efforts to ensure equality of opportunity in educational institutions should focus on providing educational facilities for those who meet the necessary criteria, as well as basic education for all.

Due to the COVID-19 epidemic, educational inequality has become one of the most urgent global issues (Di Pietro et al., 2020). Our children have a large digital gap due to COVID-19 (Burgess, 2020). Online distance learning continues to be a challenge for educators, students, and even parents. However, the expected online learning condition during this pandemic does not reflect the reality of daily online distance learning (World Bank, 2020). Furthermore, insufficient digital technology and a hostile learning environment make success establishment of online distance learning challenging. More than 670,000 parents and 900,000 pupils do not have access to online learning devices (Rachel, 2020). Technical issues and poor internet connection also contribute to the failure of achieving quality education (Winthrop, 2020). The lack of fibre optic networks caused the internet speed becomes slower and affecting connectivity of the country (Hawati & Khalidi, 2020). Due to the number of classes and assignments that the students have, the 1 GB mobile data provided daily by the government is not enough for the online learning and poor students cannot afford to reload their data more frequently due to financial insufficiency (Hawati & Khalidi, 2020). Moreover, people from rural areas in Peninsular, Sabah and Sarawak are at disadvantage not only because of the limited internet coverage but also some of them do not even have access to electricity or timely electricity (Wan, 2020). Other than that, many educators and parents are caught struggling to balance between working from home and children online learning resulting in skipping the lessons (Rachel, 2020). There are some students who use smartphones for their online learning because they do not have laptop (Menon, 2020). However, for those students who have several school-going siblings might find that sharing one device for online learning as troublesome and overcrowding (Hawati & Khalidi, 2020). Apart from that, the workloads assigned to students depend solely on the educators (Shukri, Nasir & Razak, 2020). It is very difficult for students to consult their educators during this pandemic as they have to adhere to the standard operating procedure (SOP) set by the government (Palansamy, 2020). Other than that, greater number of tasks and assignments were given to support student's understanding of the topics learnt also affecting the smoothness of self-learning. Online learning also disables the practical application and focus more on the theories (Al-Baadani & Abbas, 2020). To conclude, it is difficult to adopt or adjust to online learning in response to a rapid epidemic such as COVID-19 without experiencing several issues and hurdles.

3. Research Questions

Therefore, this paper seeks;

- i. To investigate what are the educational inequalities that have been encountered by the foundation students of Universiti Selangor during the COVID-19 pandemic

- ii. To explore the relationship between educational inequality and students' perception towards online learning in Universiti Selangor.

4. Purpose of the Study

The purpose of this quantitative study is to identify the major problems faced by the students and to determine whether there is an association between educational inequality and students' perception towards online learning among the students of Centre for Foundation and General Studies (CFGS), Universiti Selangor. The significance of the association may relay an understanding of how educational inequality affect students' perception towards e-learning. This study would be of interest to both public and private educational institutions interested in identifying major challenges encountered by students during online learning and determining what students expect from the quality of education available to them.

5. Research Methods

Participants in this study included 120 foundation students from the Centre for Foundation and General Studies (CFGS), Universiti Selangor, Bestari Jaya Branch, Malaysia, who were enrolled in four study programmes and taking ESL Writing. A random sample of students was used to select them. Data for this study is gathered through the use of questionnaires. The sample size is sufficient based on the number of respondents ($n = 100$), as the population of CFGS students is 240.

For this analysis, the researcher constructed a questionnaire and was administered to UNISEL students for the aim of the study; which includes the educational inequalities and students' perception. The questionnaire consisted of three sections. The first section was personal and demographic characteristics of respondents, the second section was on the major educational inequalities of online learning faced by the students which were expected to have an association with the third section which was on the students; perception. Questions was measured using the five-point Likert-scale strongly disagree to strongly agree. Cronbach's alpha was used to determine the internal consistency of the entire scale. Pallant (2001) considers reliability scores greater than 0.70 to be acceptable. Table 1 shows different Cronbach's Alpha value for the variables. Both variables are showing more than 0.7 value of acceptable Cronbach Alpha. Therefore, it shows that the variables have strong internal reliability.

Table 1. Reliability scores

Variables	No of items	Cronbach's Alpha
Educational inequalities of online learning faced by students	9	0.866
Students' perception of online learning	12	0.853

6. Findings

6.1. Participants' Demographic Information

The demographic information collected from respondents to the questionnaire used in this study can be seen in Table 2 below. Of the participants, 29% were male and 71% were female. 89% of all participants were between 18 and 20 years, which makes up the largest group. In contrast, the smallest percentage, 11%, were 21-23 years. 50% of the participants are in semester three, 22% in semester two and 23% are in first semester. About 60% of the participants are from middle income group and only 12% are from high income group.

Table 2. Demographic information

Demographics	Description	Percentage
Gender	Female	71%
	Male	29%
Age group	18-20	89%
	21-23	11%
Semester	1 st semester	23%
	2 nd semester	22%
	3 rd semester	50%
Family Income	Lower income group	28%
	Middle income group	60%
	High income group	12%

6.2. Education inequalities that have been encountered by the students of Centre of Foundation and General Studies Universiti Selangor during the COVID-19 pandemic

Table 3. Mean score interpretation by Norasmah (2002)

Mean score	Interpretation of mean score
1.00-2.00	Low
2.01-3.00	Moderately low
3.01-4.00	Moderately high
4.01-5.00	High

To determine the education inequalities that have been encountered by the students of Centre of Foundation and General Studies Universiti Selangor, the responses to 9 education inequalities under this variable were analysed (Table 3). The researcher used 5-point Likert scale to explore the education inequalities faced by the students. Therefore, mean score interpretation following Norasmah (2002) was used to analyse this variable by looking at the mean and standard deviation (see Table 4).

Table 4. Education inequalities faced by the students

Education inequalities	Mean	SD
Poor financial	3.61	1.5
Self-discipline	4.24	1.3
Internet connection	4.72	1.3

Teacher- student communication	3.61	1.2
No proper digital learning device	4.55	1.2
Social isolation	4.15	1.4
Greater number of tasks and assignments	3.98	1.4
More focus on theory rather than practice	2.05	1.1
Adapting the shift from traditional to online distance learning	4.63	1.2

The age of 120 participants ranged from 18-42 years, with 29% male and 71% female, which were distributed as follows: Under 22 years old (83%), 23 – 27 years old (17%). The means and standard deviations of the responses addressing the education inequality faced among the students of Centre of Foundation and General Studies Universiti Selangor are provided in Table 4. It can be seen that internet connection has the highest mean (M=4.72, SD=1.3) followed by adapting the shift from traditional to online distance learning as the second highest mean (M=4.63, SD= 1.2). The third highest mean is no proper digital learning device (M=4.55, SD=1.2). The moderately low mean is focus more on theory rather than practice (M=2.05, SD=1.1).

6.3. The relationship of educational inequality on students’ perception towards online learning in the students of Centre of Foundation and General Studies Universiti Selangor

Table 5. Descriptive statistics of educational inequality on students’ perception towards online learning

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Education inequalities	120	1	4.75	3.06	0.98
Perception	120	1.40	4.8	3.44	0.87
Valid N (listwise)	120				

The results of the descriptive statistics in Table 5 indicate that the mean values obtained from analysis of data are more than expected average of 3. It is clear that the major problems of educational inequality in this study have a significant effect on students’ perception of online learning. According to the means of each independent variable (perception=3.44 and major = 3.06), we can conclude that the independent variables in this study have a significant effect on students’ perception of online learning.

Table 6. Correlation between educational inequality on students’ perception towards online learning

Correlations			
		Perception	Major
Perception	Pearson Correlation	1	.956
	Sig. (2-tailed)		.000
	N	120	120
Major	Pearson Correlation	.956	1
	Sig. (2-tailed)	.000	
	N	120	120

According to the Table 6, it is observed that sig= .000 < .01. H0 was rejected with 99% of certainty and H1 confirmed, and the relationship is significant. The correlation between two variables is

+0.956 percent which indicates direct relationship between two variables. Coefficient of determination between educational inequality and students' perception towards online learning is 0.9139, which indicates that the independent variable could explain the dependent variable to the amount of 91.39 percent. Therefore, there is a significant relationship between educational inequality and students' perception towards online learning.

H0: $r_{xy}=0$ there is no significant relationship between educational inequality and students' perception towards online learning.

H1: $r_{xy}\neq 0$ there is a significant relationship between educational inequality and students' perception towards online learning.

7. Conclusion

The goal of this quantitative study is to identify the key difficulties that students encounter and to see if there is a link between educational inequality and students' perceptions of online learning among students at Universiti Selangor's Centre for Foundation and General Studies (CFGS). The importance of the connection may provide insight into how educational disparity influences students' perceptions of e-learning. The researcher discovered that students of Centre of Foundation and General Studies Universiti Selangor encountered a range of severe obstacles and concerns during the COVID-19 epidemic after collecting and analysing 120 data sets.

To answer to research questions 1 on the education inequalities faced by students during the COVID-19 pandemic online learning, the findings discovered three major categories of issues; internet connection, adapting the shift from traditional to online distance learning and no proper digital learning device. To begin, it was discovered that majority of the students agreed that poor internet connection is the main disadvantage of online learning. This is in line with the previous studies by Nur Salina et al. (2020), low internet access affecting students' engagement in online class. Next, the sudden change from traditional to online classroom makes it difficult for the students to adapt with the situation. A similar conclusion was reached by Dziuban et al. (2018) wherein students' adaption to e-learning takes time since they are unfamiliar with online e-learning and also, majority of students lack the necessary learning devices for online learning, such as a laptop that can support back-to-back online classes. Meanwhile for research question 2, it was found that there is relationship between education inequality faced by the students and the students' perception towards online learning. González-Gómez et al. (2012) stated that demographic and cultural consideration are the two elements that need to be considered in online learning. According to Keengwe et al. (2012), students' perception towards online courses is highly impacted by learning convenience and the effectiveness of learning tools. From this study, the education inequality that affecting students' perception can be seen on the ineffectiveness of learning tools and internet connection.

As conclusion, online learning during pandemic should prioritise learning objective by addressing education inequalities faced by the learners, understand social and economic trend, fostering compassionate, accepting, and non-discriminatory behaviour. Educational equality must be struck

between defining key abilities that will be required to continue learning and increasing education's broad and humanistic nature without succumbing to pressure.

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