



The COVID 19 Pandemic: Challenges Related Online Education on Students of Rural Areas in Sri Lanka

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ABSTRACT

COVID-19 has imposed enormous challenges on traditional education process of Sri Lanka. As a consequence of the unprecedented global pandemic, online education has become a new concept and it has created a discrimination between rural and urban students in Sri Lanka. In this background this study examined the significant challenges related online education on students of rural areas in Sri Lanka during COVID-19. This research was carried out under the qualitative dominant mixed method approach and conducted in Kotavehera educational division, Kurunegala district. Data were collected from 50 students through stratify sampling method and 8 teachers, 5 parents and 2 principals used as key informants. Questionnaires and semi-structured interviews were used as primary data collection technic through telephone conversations. According to the findings of the study it has revealed that lack of availability of infrastructure facilities and financial assistance were caused to decrease interest in the subject of students in study area, lack of physical and human resource, negative attitudes, lack of practical knowledge were challenged for create fear and anxiety using of English language and technology in online education, Parents' low socio-economic situation were prohibited online education and this situation have created lot of pressure for students, parents' personal beliefs and misconceptions, lack of technological skills and teaching methodologies of teachers were directly highlighted as challenges for online education of students, Overall, the current curriculum contents of education system in Sri Lanka is showing lack of flexibility and was not modern and innovative and online teaching methods and abilities are not familiar for students and teachers. There are need to revise the curriculum contents to eliminate the discrimination between the rural urban students and face the sudden situations and education policy makers should attention for revise and update the education curriculum according to the global changes in education. Further ministry

of education in Sri Lanka should implement necessary training programs to engage in online education within the traditional system.

Keywords: Challenges, COVID-19, Online education, Rural Areas

Introduction

COVID 19 epidemic is one of the enormous social issues confronting the contemporary world today. The catastrophe has negatively influenced the educational system worldwide. According to the recent report from UNESCO monitoring over 100 countries implemented nationwide closures, impacting over half of the world's student population(UNESCO, 2020).

Education plays a crucial role towards achieving a sustainable development in a country. But currently, education has become a critical sector affected by COVID 19. As a consequence of the unprecedented global pandemic, traditional classroom based learning and teaching process were replaced with virtual environment and it has imposed the use of new technologies. Further especially students are moving learning from classroom to homes in a hurry presents enormous challenges, both human and technical. (Lucas, 2020)

Online education is a new concept in the education system of Sri Lanka. As a consequence of the epidemic temporary closure of all education institute by government of the Sri Lanka. In response, the government is implementing the Contingency emergency response plan for general education, using e-learning platforms. However children and teachers in rural areas lack internet connectivity, access to devices and digital platforms, and the training required for distance education. Further Children in rural areas in Sri Lanka do not have equal access to online education initiatives. (Asia Pacific Alliance, 2020) Thus the pandemic has exacerbated rural-urban inequity. (Asian Development Bank, 2020)

In this background, this study explored that to examine the challenges related online education on students of rural areas in Sri Lanka, during COVID 19.

Research Problem

Why do students in rural areas face more challenges related to online education during COVID 19 pandemic than students in urban areas?

Research Objectives

The main objective of the study is to examine the challenges related online education on students of rural areas in Sri Lanka, during COVID 19.

Specific objectives of the study are,

- To identify the teachers' attitudes of online education on students of rural areas
- To identify the service system and policies related online education in Sri Lanka

Methodology

This research was carried out under a mixed method approach for collaboration of validity, reliability and generalization of research conclusion. Thus this research used 'Partially mixed concurrent qualitative dominant' status. (University of Ruhuna,2020)

According to the data of census and statistics (2016, p.1) the highest inequality of real per capita expenditure has been reported from Kurunegala district.(Department of Census and Statistics, 2016) This study focuses on students of rural areas in Sri Lanka. In order to researcher selected Kotavehera division of Kurunegala district as a study area using a multi-dimensional approach in consideration of the geographical and poverty background.

In the Kotavehera educational division out of the 9 school which categorized as a 1C schools, 2 schools were selected for the study.(Schools were limited to 2 schools, because of COVID 19) A total of 50 students which categorized as a Primary (1-5), Junior Secondary (6-9), Senior Secondary (10-11) and colleagues were selected as a sample using stratified sampling. 8 teachers, 5 parents and 2 principals participated in key informant interviews from all the two schools.

Primary data was collected using questionnaire, semi-structured interviews. Secondary data was collected from official reports, research articles and websites. The data were analyzed using the thematic method and SPSS software.

Results and Discussion

Based on the gathered data from the respondents, identified significant challenges were divided in to five main themes and furtherdivided in to sub themes. As main themes infrastructure challenges, Lack of language skills and digital literacy, Financial Challenges, Attitudes, beliefs about online education, service system and policies were emerged through collected data. lack of proper internet connection and lack of availability of devices were the two sub themes of infrastructure challenges.

Infrastructure Challenges

With the changed of education process from class room to home infrastructure facilities are most importance of the student's learning environment. Most of the students mentioned virtual teaching and learning environment was a new challenge with the availability of proper internet connection, devices and learning environment.

Lack of proper internet connection

Online education can be defined as an electronically supported teaching and learning process with the help of internet. But most of the students of rural areas reported they cannot join online classes properly, because of low-quality internet.

“Sometimes the lesson is not clear because the signal is low. So it is difficult to understand the lesson properly”

Our house does not have good signal. So I have to climb up the mango tree and join to the my class”

Source: Field Data, 2021

This explanation tells us weakness of internet. Students asserted that they cannot join the online class and cannot communicate with teacher because of the limited internet connection. 4G connection is best method for online delivery. But most of the students of rural areas have face many difficulties in getting proper connection. Further this situation led to decrease interest in the subject of students.

Lack of availability of Devices

Table 01: Lack of availability of Devices

Variables	Quotes
Lack of Devices	<i>“I don’t have a phone to join my classes. So I have to visit my friend’s house and join the classes with him.”</i>
Shortage of devices	<i>I am in grade 10 and my sister is in grade 13. We both use the same phone to join online classes. So my sister has classes every day. Because of that I miss a lot of my lessons”</i>
Outdated devices	<i>I use a phone to join online lessons that is given to me by my neighbour sister. But I can’t stay for lessons straight for two or three hours. Because of the high heat and power off it.”</i>

Source: Field Data, 2021

Technological devices are one of the main factors for success of online education. But students who lives in rural areas have a lack of proper devices. When considering the above statements, female student who learn in grade five said directly she does not have a phone to join the online classes and most of the students have missed a lot of their classes because of shortage of devices, outdated devices.

Infrastructure including devices, Internet, technical support becomes a significant part of online education. (Martin and Bolliger, 2018) and the success of online education depend on infrastructure factors. Most of the students of rural areas in Sri Lanka are facing for audio and video issues, Login problem, installation and downloading errors with online education. Further Lack of devices and internet access highlighted that as a level of poverty increases in the rural community. (Aedoyin and Soykan, 2020) Thus Lack of internet connectivity and device limitation have significant challenged for rural areas' students in Sri Lanka.

Table 02: Devices Frequently used by students for online learning

Variable	Smart phone	Lap Top	Desk Top	I phone	Tab	No Device
Frequency	36	2	3	0	1	8
Valid Percent(%)	72	4	6	0	2	16

Source: Field Data, 2021

The figure above shows devices frequently used by students for online learning in selected study area. According to the survey 72% respondents used smart phone, 4% students used desktop and 2 percent used tab. At least one of the students do not use I phone and out of the 50 students, 8 students have mentioned that they have no devices for online education.

Lack of language skills and digital literacy

Language skills and digital literacy can be identified as a challenging tasks of rural areas student in online education. According to the relevant data a respondent who is in grade 11 explained his ideas like below.

“Sometimes there were errors occurred while I was logging with online lessons, but I am not going to fix them because of the fear of something damaged further” (Source: Field Data, 2021)

Thus most of the students do not have confidence. Students do not try to solve their errors because fear and anxiety and they always depend on another support. A follow up question was asked to the students about what are the reasons for fear and anxiety? Most of the students mentioned that they have no facilities to learn English and IT in their schools.

Fear and anxiety are two psychological factors that make the process of learning difficult. (Seefa, 2017) Fear of change is the main challenges to effective online learning. (Jayasuriya, Yatigammana and Lakmal, 2021) Especially in rural areas

students face many challenges that using of English language and technology in online education. So we can identified fear is a created by several reasons such as the lack of physical and human resource, negative attitudes, lacking of practical knowledge and experience. Based on data analysis, lack of good resource and practical knowledge have challenged directly student's engagement in online education during COVID19.

Financial Challenges

“The economic shock associated with COVID-19 pandemic is likely to be significantly larger than anything seen since the financial crisis of 2008/09” (Al-Samarrai, 2020, p.1) Thus we can identified this epidemic is far more than a health crisis, it is affecting economics. (UNDP,2020) In the Sri Lankan context, especially in rural areas one enormous challenge that is ubiquitous in online education is the lack of financial assistance. In this study area most of parents of students are related to agriculture sector and their low socio-economic situation have prohibited online education of students. According to the gathered data, different family income levels were identified in the sample as given in table two.

Table 03- Family monthly income level

Variable	Frequency	Valid Percent (%)	Cumulative Percent
Family Monthly Income			
Below 10,000	14	28	28
10,000 – 20,000	20	40	68
20,000 – 30,000	9	18	86
30,000 – 40,000	3	6	92
Above 40,000	4	8	100

Source: Field Data, 2021

According to table 02, there are 14 respondents who have less than SLR 10,000 income per month. 20 have SLR 10,000-20,000 monthly income and 9 of respondents have SLR 20,000 to 30,000 of it. 3 have SLR 30,000-40,000 monthly income and other 4 respondents give monthly family income as more than SLR 40,000.

The majority of Students reported about the satisfaction of online education because of low income situation. *“I do A/L this year. My father passed away long before. Now I have only my mother. She is work a garment factory. I have to spend lot of money to buy data cards and take printouts of notes. Because of financial problem as me lots of*

students been helpless without getting proper online education” (grade 12, female student)

According to the above statement, most of the students were not in a familiar to continue their online classes with financial cost. Further this statement reflects that low financial situation has created a troublesome and lot of pressure for students of rural areas. Thus data reveal that, financial difficulties are created by several reasons such as cost of online education, socio-economic condition of parents, poverty levels and that situation has unusual challenged for students of rural areas.

Attitudes, beliefs about online education

Cultural factors, which included attitude, beliefs and traditions, parental belief have challenged for students learning process as reported by respondents in this study. When we consider about challenges of cultural factors to online education, it is essential to study about how parents traditional thinking patterns and beliefs challenge to students’ engagement in online learning process.

“ Our teacher asked to watch some extra educational videos related to our ongoing lessons on YouTube. But my parents strictly prohibited watch YouTube lonely, only give permission to watch YouTube when they are around me” (Source: Field Data, 2021)

Most of the students mentioned that their parents allowed them to use the internet with the very limited time. Some students reported that their parents considered internet as a threat one. For example: *“My father believes that internet is a threat to the school going children. So he does not give permission to log the internet”* Thus parental beliefs, traditional attitudes and norms have negatively challenged for success of online education in rural areas.

In the study area most parents depend on agriculture. In this context, teachers complained parents give lot of work load and pressure for their children. So most students reported that they have not mental happy. When we considering the teachers’ attitudes about parental support for students’ engagement, most teachers mentioned in the interview that parents do not care about online education with the negative attitudes. Teachers said: *“ Children should be involved in the study in a free environment. But parents do not work with dedication for making good environment in real”* and student who is in grade 7 asserted that *“My farther is often drunken and he make troubles and shouting loudly to others when I have online lessons. So that is a big stress for me. I wish if there was school”* From this statement it was evident that availability of free environment for students of rural areas in online education.

Major of teachers identified lack of technological skills and teaching methodologies as a challenge for students in rural areas. A teacher said, *“Honestly I do not have skill*

on how to use Zoom in teaching. So It has affected for students satisfaction” Thus good experience and using advanced technological tools can identified as a factor that influence on students’ performance of rural areas.

Positive attitudes and beliefs of society of families can identified as fundamental for sustainability of online education. Attitudes of parents about education can inspire their children. (Sandamali, 2016) Thus parents’ personal beliefs and misconceptions, teachers experience and attitudes directly highlighted as challenges for online education of students in rural areas.

Service system and policies

Sri Lanka government have introduced the free education policy to allow every child in the country an equal opportunity to receive a formal education. (Liyanage, 2014) But currently significant gap can be seen between urban and rural community in education. In the study area, most teachers and some students emphasized the need to revise the curriculum contents to eliminate the discrimination between the rural urban students and face the sudden situations.

“Online education is a new concept for our existing educational curriculum. Therefore there should be restructured our curriculum including online strategies while concerning the gap of resource distribution among rural and urban areas”
(Source: Field Data, 2021)

Current assessment system of education of Sri Lanka mainly based on traditional examination and it is show lack of flexibility. Further Liyanage (2014) mentioned that teaching methodologies in education process of Sri Lanka are not modern and innovative. (Liyanage, 2014) Therefore policy makers should attention to revise the curriculum content for provide an equal and quality education.

We can identified the quality of internet has a profound impact on students of rural areas in Sri Lanka. (Lucas,2020) A Parent who is work in private company reported that *“Students these rural areas, confront with many issues on online education due to lack of devices. Slow network connection and unaffordability of cost for data. Ministry of education and other tele communication parties should address these issues immediately while collaboration with NGOs and other relevant authorities”*
(Source: Field Data, 2021)

According to the above statement respondents recommended telecommunication parties, Ministry of education and non-government organization must give a closer attention and take a formal and topical decision to allow the challenges in online education and provide a quality education during COVID-19 pandemic.

Further in the schools of rural areas do not have highly internet access, technological devices, qualified teachers, shortage of teachers and other facilities. (Liyanage,2014)

In this study most teachers and students reported that significant issues such as shortage of teachers(Tamil, English, dancing and IT), absent of IT facilities. Thus they recommended that human and physical resource should be distributed by the educational authorities for minimizing the disparities in facilities among urban and rural schools.

Conclusion and Recommendation

The purpose of this study was to examine the significant challenges related online education on students of rural areas in Sri Lanka, during COVID 19. Based on the findings, it has revealed that lack of availability of low-quality internet, lack of devices, shortage of devices, outdated devices were caused to decrease interest in the subject of students in study area, lack of physical and human resource, negative attitudes, lack of practical knowledge and experience were challenged for create fear and anxiety using of English language and technology in online education of students of rural areas, Parents' low socio-economic situation were prohibited online education of students and this situation have created troublesome and lot of pressure for students, parents' personal beliefs and misconceptions, lack of technological skills and teaching methodologies of teachers were directly highlighted as challenges for online education of students in rural areas, Overall, the current curriculum contents of education system in Sri Lanka mainly based on traditional system and it is show lack of flexibility and was not modern and innovative and online teaching methods and abilities are not familiar for students and teachers. There are need to revise the curriculum contents to eliminate the discrimination between the rural urban students and face the sudden situations and education policy makers should attention for revise and update the education curriculum according to the global changes in education.

Thus several recommendations that are essential for the policy makers and other planners can be derived from the study.

- Education policy makers should attention for revise and update the education curriculum according to the global changes in education.
- Especially in rural areasOnline teaching methods and abilities are not familiar for students and teachers. Therefore Ministry of education in Sri Lanka should implement necessary training programs to engage in online education within the traditional system.
- The government of Sri Lanka with the other non-government agencies should organize the project to supply technological devices for students of rural areas.
- Telecommunication parties (Such as Dialog and Mobitel) must build proper internet facilities in rural areas in Sri Lanka.

- Ministry of education must give a closer attention to eliminate the disparities in the human and physical resource between rural and urban schools.

Limitation

The research was done during the COVID-19 situation in Sri Lanka. Therefore this study was conducted in only two schools in one district in Sri Lanka. Further researcher was unable to do face to face interviews and observe respondents' facial expressions. Thus conducted the interviews and questioner survey via telephone conversations and researcher had to limit time duration and limit of probing questions.

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