Impact of Parent's Satisfaction on Children's Online Learning during the Covid-19 Pandemic

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Abstract
The aim of this research is to analyze the impact of parent satisfaction on Children's online learning for Primary Education during the Covid 19 Pandemic. Independent variables are Child competency, Technical Problems, Duration of online learning, and several assignments. The research method is a quantitative approach with Primary data analysis using Google form. The population in this study was the parents of the Primary school students who are following the Bachelor of Education (Hons) in Primary Education at the Open University of Sri Lanka using a simple random sampling method. Respondents of 102 data analyses were done through descriptive statistics, Pearson Correlation, and Regression and were analyzed using SPSS. By using a structured questionnaire with five Likert scales from strongly disagree to strongly agree measured independent and dependent variables. The results of this study are independent variables had a significant impact on parents' satisfaction with online learning. But Technical Problem was not significant in parents' satisfaction with online learning. The moderation effect explains the association between the following three factors; the number of online assignments, the duration of online learning, and parents' satisfaction. According to the Child competency, Parents were more satisfied with their children's online learning. Researchers may use this article as literature or supplementary material for future research.
Keywords: Parent's Satisfaction, Online Learning, Primary Education, Covid 19

Introduction

As 2019 concluded and 2020 dawned, the world was shocked by the presence of an international epidemic caused by a virus, namely the COVID-19. The COVID-19 made new changes in regular life. This outbreak has positive and negative impacts in various fields of life, including education. According to Lase et al., 2020 Covid-19 causes a disruption in the world of education such as the activity of educators, research activities, parents, and other actors in the field of education.

During this COVID, 19 pandemic circumstances in all areas, including education, are directing its administrations online. All of the students learn from home and do not go to school. An online learning model that facilitates the continuation of learning is the result of learning from the home policy. Online learning policy is a medium that supports education but is not a substitute medium for education. Therefore, this online learning policy provides more convenience in learning and can speak directly so that the material is accepted.

In education, one possibility is to build a distant learning system, sometimes known as a Work from Home (WFH) system. The program's goal is to transfer activities and instructional processes previously done in schools to the home. (Husain and colleagues, 2020) Ministry of Education and Culture requires, based on circular, that it is the school's directs and controls the online learning process to complete the syllabus. (Lau et al., 2021) The students, parents, and

even teachers in a remote location face, where restricted access to technology and a lack of information about how to use it are common barriers to online learning (Lase et al., 2020). Most parents also find it demanding to get online because they lack the necessary devices, such as smartphones, computers, and an internet connection. Some are still challenging even if they have such devices since they are unaccustomed to operating them. Their insubstantial experience in technology, lacking motivation and personal cognition, challenging material, very limited reciprocity, and learner boredom are usual characteristics during online learning. (Soeryanto et al. 2020). Alshamrani, (2019) emphasized that e-learning is a method of managing, providing, and sending the materials, assignments and seeing their progress.

Furthermore, online learning will provide the idea that the educational system is more inventive, up-to-date, and responsive to technological advancements and applications. (Husain et al., 2020). Teachers and parents of students coordinate home-based learning activities by assignments using Whats App application hence it is a requirement for online learning that parents be present while their children study online from their home. A researcher interested to know the concept of satisfaction related to online learning of parents through a literature review. (Johanisa et al. 2020). This study looks into the link between online learning and parent satisfaction during the Covid 19 pandemic, with a focus on the moderating role of children's online learning capacity.

Research Problem

All students and parents do not know about online learning techniques. Additionally, giving online learning resources to their children by parents is restricted due to limited skills. (Rahayu & Wirza, 2020). Parents are their children's first educators. In the case of primary education, parents must ensure that their children receive the appropriate support from home. In primary education, it is a must; parents make certain suitable assistance for their children's learning. Parents have a crucial part in their children's homework, assignments, and extracurricular activities. Parent involvement

in school education, as well as encouraging and supporting parents for home learning activities, is critical to a child's education. The development of effective partnerships between parents, families, and schools to assist children's learning has been shown in research studies to improve learning outcomes. To enhance performance and conduct, teachers, parents, and schools must work together more effectively. Research studies show the building of effective partnerships between parents, families, and schools to support children's learning in improving learning outcomes. Teachers, parents, and schools need to strengthen collaboration to improve performance and behavior (Lau et al., 2021).

Based on this issue, the research is to determine the parents' satisfaction with online learning for primary education during Covid 19 Pandemic.

The Objective of the Study

To identify the impact of the parent's satisfaction with online learning

Research Questions

- What is the impact of Child Competency on parents' satisfaction with online learning?
- What is the impact of Technical Problems on parents' satisfaction with online learning?
- What is the impact of the Duration of online learning on parents' satisfaction with online learning?
- What is the impact of the number of assignments on parents' satisfaction with online learning?

Literature Review

The Covid-19 pandemic gave considerable time to parents with their children where it was possible to accompany and mentor their children when learning. That being the case, parents should be capable of assisting their children in continuing, very especially during the Covid 19 pandemic where children are required to learn from home. Children, in school get direction from their teacher hence they should be able to get direction and participation from their parents at home. Literature shows parental involvement is a crucial part of student educational progress.

Millions of parents have spent months largely confined at their homes with their children, and

they are worried about their children's learning and struggling to keep their children's education on track during this global pandemic (UNICEF, 2020). A study shows that parents are worried about their children falling behind in online learning during the COVID-19 Pandemic (Husain et al., 2020).

In this instance, parents must educate their children online using a learning-based approach. There is no problem for parents of students who are used to using technology but teaching children in settings like this might be difficult for parents of students who have never used technology. Of course, facing this curriculum transformation is not easy for all educators, especially parents. Even materialistic parents before had little time to mentor their children. Today's scenario has altered. Parental motivation towards children to participate in online learning activities and provide a conducive environment for them to do so. On the other hand, parents and teachers must establish an environment that encourages children to participate in school activities. Parents spend time developing their children and forming emotional relationships with them. The importance of parents in this curriculum is undeniable. (Johanisaet al., 2020).

According to past research, Parents contend that parental involvement in online learning is critical to their children's educational performance. Then they agree that e-learning can help them become more compact with youngsters amid the Covid-19 pandemic. Parents acknowledge that parental engagement is a significant component in their children's educational achievement. (Knoeppel and Erdener, 2018).

Methodology

The conceptual framework was developed by looking at some factors that would influence parents' satisfaction with online learning. Child Competency, Technical Problems, Length of online learning, and Number of assignments are the independent variables, and online learning is the dependent variable.
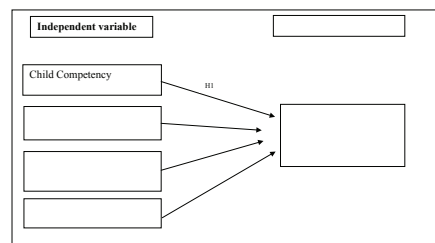

Figure 1: Conceptual Framework

Hypothesis
Hypothesis 1
- H1: There is a significant impact of child competency on Parent's satisfaction with online learning.
- H0: There is no significant impact on child competency on Parent's satisfaction with online learning.

Hypothesis 2
- H1: There is a significant impact on technical problems on parent's satisfaction with online learning.
- H0: There is no significant impact on technical problems on parent's satisfaction with online learning.

Hypothesis 3
- H1: There is a significant impact on the duration of online learning on parent's satisfaction with online learning
- H0: There is no significant impact on the duration of online learning on parent's satisfaction with online learning

Hypothesis 4
- H1: There is a significant impact on the number of assignments on parents' satisfaction with online learning.
- H0: There is no significant impact on the number of assignments on Parent's satisfaction with online learning.

The research approach of this study was a quantitative method. During the Covid-19 epidemic phase, the researchers described the parents' happiness with the application of online learning, concentrating on its benefits and obstacles. The information was acquired from the replies to the 23

questions that were sent to the parents via a Google Form. The researchers then analyzed the answers based on the benefits and barriers of online home learning.

Research Method

This research adopted the quantitative method. Quantitative research is also confirmatory because the researcher tests or attempts to confirm a set of hypotheses. The research approach focused on collecting and analyzing quantitative data while making pragmatic assumptions.

Population

The population in this study was the parents of the Primary school students who are following the Bachelor of Education (Hons) in Primary Education at the Open University of Sri Lanka using a simple random sampling method.

Sample

The sample size is relatively large as the research aims at exploring the Parent' satisfaction with Children 's online learning during the Covid-19 Pandemic. The enhancing the sample size is, the more representative it can be, showing reliable results.(Saunders et al., 2009). Regardless, sample size depends on researchers' available resources which include time, money and human resources (Saunders et al., 2009).

Hair, Black, Babin, Andersion, and Tatham (1998) suggest that at least 100 respondents should participate in quantitative research, for a statistical method of data analysis. Therefore, 1000 participants receive questionnaires, targeting a response from at least 100, and using simple random sampling method.

Data Collection and Analysis

Data collection procedure, the researcher, used Google forms to design the questionnaire and administered it via email. Using a structured questionnaire with five Likert scales from strongly disagreed to strongly agree measured independent and dependent variables. Using Closed-ended questions to test both the dependent variable and independent variables. The data collected from the questionnaires were analyzed and presented using descriptive statistics, Pearson's correlation analysis using the SPSS version. In addition, correlation and regression analysis were used to determine the impact and relationship between independent variables and the dependent variable. The use of tables, charts and graphs to make it easy for interpretation.

Results and Discussion

Table 1 shows Parent's demographic profile. Based on the findings, the majority of the selected sample represented the 31 to 40 years age category (57.8%). The most responded Parents have grade one children (47.1%). The gender distribution of the research has a higher female representation (79.4%). Most of the parents were Diploma holders.

Table 1

		Frequency	(%)
Gender	Female	81	79.4
	Male	21	20.6
Children's Grade	1	48	47.1
	2	9	8.8
	3	12	11.8
	4	14	13.7
	5	19	18.6
Parent's Education	Up to O/L	6	5.9
	Up to A/L	32	31.4
	Diploma	35	34.3
	Degree	27	26.5
	Postgraduate	2	2
Parent's Age	21-30	29	28.4
	31-40	59	57.8
	41-50	13	12.7
	51-60	1	1

Regression Analysis

The impact of independent variables on parent's satisfaction with online learning examined using Regression Analysis. The R-value represents the simple correlation, and it is indicating a higher degree of correlation if the R-value is high. The R2 value indicating how much of the total variance in the dependent variable can be explained by the independent variable.

The model summary in table 2 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables),

R Square equals 0.606. Therefore, 60.6% of changes in parents' satisfaction with online learning are explained by Child competency, Technical Problems, Duration of online learning, and Number of assignments.

A P-value of 0.000 (Less than 0.05) implies that the model for parents' satisfaction with online learning is significant at the 95-percept significance level.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.778a	.606	.590	.4641853	.606	37.305	4	97	.000

a. Predictors: (Constant), Number of assignments, Technical Problems, Child Competency, Length of online Learning

b. Dependent Variable, Parent's satisfaction with online learning

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.153	4	8.038	37.305	.000b
	Residual	20.900	97	.215		
	Total	53.053	101			

a. Dependent Variable: Parent's satisfaction with online learning

b. Predictors: (Constant), Number of assignments, Technical Problems, Child Competency, Length of online Learning

Child Competency on Parent's Satisfaction with Online Learning

- H1: There is a significant impact on child competency on Parent's satisfaction with online learning.
- H0: There is no significant impact on child competency on Parent's satisfaction with online learning

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.762a	.581	.577	.4713920	.581	138.751	1	100	.000

a. Predictors: (Constant), Child Competency

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.832	1	30.832	138.751	.000b
	Residual	22.221	100	.222		
	Total	53.053	101			

a. Dependent Variable: Parent's satisfaction with online learning

b. Predictors: (Constant), Child Competency

The Child Competency on Parent's satisfaction with online learning was significant at 0.000, which is less than the significance level of 5% (0.05). Hence, the null hypothesis (H0) was rejected, and the alternative hypothesis (H1) was accepted. (See Table 4) Consequently, that the Child Competency has a significant impact on parents' satisfaction with online learning. R square is 58.1%%, which means that the Child Competency can be described up to 58.1%.

Technical Problems on Parent's Satisfaction with Online Learning

- H1: There is a significant impact on Technical problems on parent's satisfaction with online learning.

- H0: There is no significant impact on Technical problems on parent's satisfaction with online learning.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.181a	.033	.023	.7163636	.033	3.381	1	100	.069

a. Predictors: (Constant), Technical Problems

Table 7: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.735	1	1.735	3.381	.069[b]
	Residual	51.318	100	.513		
	Total	53.053	101			

a. Dependent Variable: Parent's satisfaction with online learning

b. Predictors: (Constant), Technical Problems

The Technical problems on parents' satisfaction with online learning were not significant at 0.000, which is higher than significant level of 5% (0.05). Hence, the null hypothesis (H0) was accepted, and the alternative hypothesis (H1) was rejected. (See Table 6)Consequently, the Technical Problems has no significant impact on Parent' satisfaction with online learning.

Duration of Online Learning on Parent's Satisfaction with Online Learning

- H1: There is a significant impact on the duration of online learning on parent's satisfaction with online learning

- H0: There is no significant impact on the duration of online learning on parent's satisfaction with online learning.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.477[a]	.227	.219	.6403239	.227	29.393	1	100	.000

a. Predictors: (Constant), Duration of online Learning

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.051	1	12.051	29.393	.000[b]
	Residual	41.001	100	.410		
	Total	53.053	101			

a. Dependent Variable: Parent's satisfaction with online learning

b. Predictors: (Constant), Duration of online Learning

The Duration of online learning on parents' satisfaction with online learning was significant at 0.000, which is less than the significance level of 5% (0.05). Hence, the null hypothesis (H0) was rejected, and the alternative hypothesis (H1) was accepted. (See Table8) Consequently, the Length of online learning has an impact on parents' satisfaction with online learning. R square is 22.7%, which means that the Length of online learning can be described up to 22.7%% by the impact on parents' satisfaction with online learning.

Amount of Assignment on Parent's Satisfaction with Online Learning

- H1: There is a significant impact on the number of assignments on parents' satisfaction with online learning.
- H0: There is no significant impact on the number of assignments on parents' satisfaction with online learning.

Table 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.378[a]	.143	.135	.6742371	.143	16.704	1	100	.000

a. Predictors: (Constant), Amount of assignment

Table 11: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.593	1	7.593	16.704	.000[b]
	Residual	45.460	100	.455		
	Total	53.053	101			

a. Dependent Variable: Parent's satisfaction with online learning
b. Predictors: (Constant), Amount of assignment

The number of assignments on parents' satisfaction with online learning was significant at 0.000, which is less than the significance level of 5% (0.05). Hence, the null hypothesis(H0) was rejected, and the alternative hypothesis (H1) was accepted. (See Table10) Consequently, the number of assignments has impact on parent's satisfaction with online learning. R square is 14.3%, which means that the number of assignments describes the impact on parents' satisfaction with online learning.

Hypotheses Testing

Hypotheses	P-Value	R-Value	Accepted/Rejected
Hypothesis 1 H1: There is a significant impact on child competency on Parent's satisfaction with online learning	0.000	0.581	Accepted
H0: There is no significant impact on child competency on Parent's satisfaction with online learning			Rejected
Hypothesis 2 H1: There is a significant impact on Technical problems on parent's satisfaction with online learning	0.069	0.033	Rejected
H0: There is no significant impact on Technical problems on Parent's satisfaction with online learning			Accepted
Hypothesis 3 H1: There is a significant impact on the length of online learning on parent's satisfaction with online learning	0.000	0.227	Accepted
H0: There is no significant impact on the length of online learning on Parent's satisfaction with online learning			Rejected
Hypothesis 4 H1: There is a significant impact on the number of assignments on parents' satisfaction with online learning.	0.000	0.143	Accepted
H0: There is no significant impact on the number of assignments on Parent's satisfaction with online learning			Rejected

Correlation Analysis

Pearson correlation analysis was adopted for this research to determine the relationship between the parent' satisfaction with online learning. The correlation coefficient for Child competency was 0.762. The technical problem was 0.181, the Length of online learning was 0.477, and the Number of assignments was 0.378. According to the correlation analysis, there is no relationship between Technical problems and parents' satisfaction with online learning. There was a strong relationship between Child competency and Parents' satisfaction with online learning. The relationship between the Duration of online learning and the Number of assignments on parents' satisfaction with online learning is moderate.

Correlations

		Dependent Variable	Child Competency	Technical Problem	Duration of Online Learning	Amount of assignment
Dependent Variable	Pearson Correlation	1	.762**	.181	.477**	.378**
	Sig. (2-tailed)		.000	.069	.000	.000
	N	102	102	102	102	102
Child Competency	Pearson Correlation	.762**	1	.089	.485**	.439**
	Sig. (2-tailed)	.000		.373	.000	.000
	N	102	102	102	102	102
Technical Problem	Pearson Correlation	.181	.089	1	.274**	.340**
	Sig. (2-tailed)	.069	.373		.005	.000
	N	102	102	102	102	102
Duration of Online Learning	Pearson Correlation	.477**	.485**	.274**	1	.695**
	Sig. (2-tailed)	.000	.000	.005		.000
	N	102	102	102	102	102
Amount of assignment	Pearson Correlation	.378**	.439**	.340**	.695**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	102	102	102	102	102

**. Correlation is significant at the 0.01 level (2-tailed).

Discussion

This study examined the associations of the number of learning assignments, duration of online learning, and parents' satisfaction, as well as the moderating effect of child competence in the associations. Results from the path analysis showed that parents were more likely to be satisfied with online learning.

The first, third, and fourth hypotheses of this study are only partially supported. The major influence of a child's independence in learning was considerable, but the technical issue was not. Previous research has shown that a child's skill has a significant impact on parents' happiness with online learning (Dong et al., 2020). This research further supports those parents are likely to be satisfied when a child's competence in independent learning is high.

The previous findings showed Parents highly involved in children's homework, concerns about their children's reliance on them for checking and explaining homework. Parents will consider online learning to be appreciate and beneficial when their children have a high-level proficiency in completing online learning independently (Lau et al.,2021).

The moderating effect could explain the links between the number of learning tasks and the length of online learning and parent satisfaction. The findings showed that when children were more capable of completing online learning on their own, parents were more likely to be satisfied when the duration of online learning was long. When children were less capable of completing online learning on their own, parents were less likely to be satisfied, even if the volume and length of online learning

was high. Parents were more satisfied with their children's online learning, according to the Child, competence. As a result, parents are more likely to see the advantages of online learning and report a higher degree of satisfaction with it.

Conclusion and Recommendations

The researcher attempts to identify the Parent' satisfaction with online learning. As discussed above, the researcher used correlation analysis and multiple regression analysis. After considering all the above factors researcher has identified several key relationships. According to the result of regression analysis, Child competency, Length of online learning, and Number of assignments have significantly impacted parents' satisfaction with online learning. Three hypotheses were accepted, and one hypothesis was rejected. That means there is no significant impact between Technical problems and parents' satisfaction with online learning.

The COVID-19 pandemic has forced the Sri Lankan education system changing from offline to online. Online learning or e-learning is an alternative system of learning for public health and health as well as academic activities. It is necessary for to carry out learning activities from home.

The good news is that parents say that offering access to a variety of reading materials through online learning will improve pupils' reading proficiency. Many parents accept that studying at home will deepen their bonds with their children while also allowing them to learn more effectively online.

Parents also believe that reading online allows them to track their children's growth. The majority of parents appreciate the fact that their children can attend school from the comfort of their own homes. Because they have more time at home, parents may spend more time with their children.

The corona virus (COVID-19) has posed significant obstacles to all social groups around the world including Sri Lanka.

The coronavirus pandemic (COVID-19) has brought new challenges to all social groups worldwide including families in Sri Lanka. In today's world, technology is necessary for fulfilling online learning process. Based on this report, Teachers must provide learning innovations ensuring learning is not monotonous while studying at home.

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