

Children's Engagement during Prolonged Closure of Schools due to COVID-19 Pandemic in India

Prof. Mohd. Moshahid¹, Dr. Naushad Husain²

¹Professor & Head, Department of Education & Training, Maulana Azad National Urdu University, Hyderabad-500032 (TS), India

²Assistant Professor, Department of Education & Training, Maulana Azad National Urdu University, Hyderabad-500032 (TS), India

ABSTRACT

The present study was carried out to find the school-going children's engagement during the prolonged closure of schools due to the COVID-19 Pandemic in India. The descriptive survey method was adopted to realize the objectives of the study. Random sampling technique was employed to select the parents of 216 students studying in the Pre-primary and Lower Primary levels of schools in northern India. Researchers' self-constructed questionnaire (Google Form) was administered to the parents for gathering the information of children's routine activities during prolonged closure of schools due to COVID-19 pandemic. The data was analyzed through statistical techniques of Frequencies, percentages, and Pearson's chi-square. The findings revealed that students' Gender was not significantly associated with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic; while students' Residential Background was significantly associated with their Academic engagement during the prolonged closure of schools; whereas students' Types of Educational Institutions were significantly associated partially with responses on certain items. The findings of the study may help to develop an insight to the parents, teachers, administrators, policy-makers, government and non-governmental organizations to deal with such types of situations in near future, if arise.

Keywords: Children's Engagement, COVID-19 Pandemic, Descriptive Survey, Lower-primary, Pre-primary, Prolonged Closure.

INTRODUCTION

The lives of human beings had never ever been adversely affected in history globally like humanity has witnessed recently due to the outbreak of COVID-19 attack since November, 2019 (Kachari, 2021) and then spread all over the world (Garbeet *al.* 2020). For preventing its spread among children, closure of schools was enforced at different moments in different countries across the world (Ribeiro *et al.*, 2021) and distance/ home-based remote learning programs implemented for children, in different countries at the different juncture, so as by the Indian government in the latter half of March 2020 (UNICEF, 2021). The Indian Government has issued safety protocols and guidelines from time to time. In this connection, a chain of online education has been initiated from pre-primary to tertiary level of education. To provide online learning for children, different means and platforms of ICT including computers, smartphones were used. The report of UNICEF (2021) indicated uncertainty of accessing online learning and its modalities (UNICEF, May 2021). When our lives were about set to normalcy, then the second wave of COVID-19 had emerged. Again when we almost recovered from both of these attacks of COVID-19 the another threat termed as Omicron emerged. But, our Pre-primary and Lower Primary education could not be revived completely.

The most affected components were children and their education; resultantly in the paradigm shift in our education system (Comanet *al.* 2020); and families' involvement in children's learning (Gordon & Burgess, 2020; Ribeiro *et al.*, 2021). This effect varied as per the socio-demographic factors like; Gender, Caste, Creed, Race, Religion, Region, Socio-economic Status, Disability, Vulnerability, Access to Teachers and to Learning Resources (Gordon & Burgess, 2020), Knowledge and Skills of handling ICT gadgets.

The pandemic poses some issues and challenges like; suffering the parents and children from psycho-socio-emotional issues (Lase *et al.* 2020), children's restricted social interaction leads to lagging in socialization (Bhamaniet *al.* 2020) and personality development; lagging of schools due to non-preparedness for online teaching (Comanet *al.* 2020; Li

&Lalani, 2020); increased economic burden on parents (Putriet *al.* 2020). Parents and teachers play a crucial role in children's all round development (OECD, 2020). But, they failed to achieve this primary aim of education. There are some challenges that students, teachers and parents face commonly, like casual attitude (non-seriousness), digital divide, excessive technological expenses, quality of online teaching-learning (Dhawan, 2020; Putriet *al.* 2020); lacks of eye-contact between teacher and students, and digital literacy,. But some specific problems faced by students of pre and lower primary levels are, time management (Dhawan, 2020), delayed feedback, feeling of isolation (Yusuf & Al-banawi, 2013; Aboagye, Yawson, & Appiah, 2020), lacks of concentration, interaction, involvement/ engagement (Dhawan, 2020), family support and internet access (Li &Lalani, 2020).

According to Putriet *al.* (2020) parents faced challenges like affordability (Dhawan, 2020), increased burden and responsibilities (Garbeet *al.* 2020), lack of ICT knowledge and skills to assist their children. They have to manage their official and household duties from home along-with increased demand of involving children in learning (Putriet *al.* 2020). It was challenging to handle and keep them engaged in a constructive way. Lase *et al.* (2020) observed that the lack of parental involvement and support in children's learning at home is generally due to the lack of time and their inability to guide children in academic activities. Some parents evolved their own way and managed to keep their children involved in constructive activities and utilized the time of lock-down fruitfully whereas others weren't able and wasted this opportunity. There is an urgent need to address the parents' changing role and increased responsibilities (Garbeet *al.* 2020). Some children who mostly engage with smart-phones for entertainment purposes tend to deteriorate in their academic performance, mental and physical health. Similarly, teachers also faced some challenges like, adoption of suitable teaching methods (Dhawan, 2020), uncertainty about students' involvement, lack of technical skill (Comanet *al.* 2020), infrastructure, training and technical support.

REVIEW OF RELATED LITERATURE

Research revealed that students felt online teaching boring and non-engaging because it gives over flexibility (Song *et al.*, 2004; Parkeset *al.*, 2014). Van Voorhiset *al.* (2013) suggests that family involvement and support is important for children's learning. Parental involvement in children's academic activities at home leads to improvement in their achievement. Whereas, students had a positive attitude towards E-learning, considering it useful in the time of the pandemic (Allo, 2020). Finding of Garbeet *al.* (2020) showed that the parents agreed with the school closure policy during the lock-down and were satisfied with the support provided by school administrations pointing to their difficulties in balancing responsibilities, learner motivation, accessibility, and learning outcomes (Garbeet *al.* 2020). According to Gordon and Burgess (2020), the majority of children (96%) admitted that their schools had provided remote education. There is an increased parental involvement in children's education after the pandemic (Winthrop, 2020). Though some schools evolved innovative teaching strategies and that proved beneficial too. Children's achievement depends upon school-family relationships and parental engagement in their education. The lowest level of a parent's engagement is to ask the children about their homework / classwork (Winthrop, 2020) and to monitor and supervise them (Ribeiroet *al.*, 2021). Parents' satisfaction was related with the length of online learning and the amount of assignments (Lau *et al.*, 2021).

Report of a comprehensive survey conducted by UNICEF (2021) in six states of India, suggested three core remote learning solutions during pandemic 1) Traditional Tools and modalities- Textbooks and visits to homes; 2) Technology-enabled tools- Whatsapp, Youtube, TV, Radio; and 3) Blended modalities- a combination of face-to-face with e-learning. Students at lower levels, from marginalized societies were used online learning less than the other section of the society. Improved learning and better preparation for examinations are major stimuli for students to return back to the schools after recommencement. Most of the parents feel that students' learning has been reduced during the closure of schools. Also, online modalities reduce opportunities for students and teachers to engage directly. Further, the report describes that teachers agreed on students' lagging behind overall. Teachers face several challenges with remote teaching and one-third of them perceive no benefits to teaching remotely as compared to face to face teaching. Inability to access the students and lack of class discipline were the problems reported by the 75% and 51% of teachers respectively. Whereas some acknowledged little benefits of teaching remotely, (UNICEF, 2021). Also, according to this report, many parents want support with textbooks and other printed materials. Awareness and access to technology (by 36% of government teachers) were reported as the primary challenges for students not using remote learning. Report further unveils that 20% of government teachers were not in touch with students and more than half had spent less time on planning and teaching. The study suggests that teachers should be encouraged to engage in remote learning and the need for improving basic digital infrastructure in schools. It also suggest to improve the learning experiences of children from marginalized groups; Drive re-enrolment campaigns to prevent students from dropping out and provide support to relieve financial challenges; Publicize guidelines on re-opening and set-up monitoring units; Preparing to cater students with a wide range of learning loss; Going beyond the basics to deepen the quality of learning and addressing the holistic

well-being of students, teachers and parents; Explore ways to increase the effectiveness of commonly used tools; Developing lighter Apps downloadable through low-cost smart-phones and operable with 2G internet; and Taking advantage of digital tools to provide blended learning even after school resumes.

A. Rationale

The COVID-19 pandemic compelled us to go with online teaching-learning universally, instead of face-to-face traditional classroom teaching (Bhamani *et al.* 2020; Coman, *et al.* 2020; Dhawan, 2020; Garbe, *et al.* 2020; OECD, 2020). As a result, a remarkable increase in online teaching-learning through various digital platforms has been reported across the globe (Li & Lalani, 2020). Online teaching-learning has many positive aspects such as its student centeredness and flexibility (Coman, *et al.* 2020; Dhawan, 2020); being adopted in its various forms in the past and proved quite enough effective alternative of face-to-face teaching in pandemic (Li & Lalani, 2020; Winthrop, 2020; Kachari, 2021) for students; teachers and parents (Bhamani *et al.* 2020). It was not an easy task for any educational institution to switch over from traditional face-to-face teaching-learning to completely online mode. Even the higher education system, where the maturation level of the students is quite high, faces a lot of challenges in online learning (Fischer *et al.* 2014). From this we can imagine the problems faced by the students of pre-primary and lower-primary levels of schools. Out of these, effectiveness of online teaching-learning was a highly burning issue during prolonged closure of schools.

The effectiveness of the online teaching-learning mechanism is relative and conditional. Lase *et al.* (2020) reported a decline in learning motivation and cognitive abilities of children during this extended closure. Their findings also revealed that parents did not favor online teaching-learning for the next academic session. As Li & Lalani (2020) opined that, though the effectiveness of online teaching-learning varies amongst various age groups depending upon maturity, concentration, memory, exposure, etc. The common thing is that it needs a well planned and structured environment. If one intended to utilize the online teaching-learning—especially at pre-primary and lower-primary levels—in an effective manner, an attempt should be made systematically to integrate or replace the traditional approach with ICT enabled tools for the academic engagement of students (whether they are in home or in schools) in unprecedented situations.

Online education can enhance the effectiveness of the teaching-learning process provided that teachers integrate ICT in education effectively. According to Tham and Werner (2005), “Effectiveness of online education can be determined through the means of applying the tools of ICT by the institution (teachers), ensuring pupil-teacher attention, interaction and creativity in a children-friendly environment and by bringing students closer, creating a stronger bond and connecting them with ICT so that they may not feel isolated due to absence of their colleagues”.

Hence a need was felt to provide inputs for enhancing the effectiveness of online teaching-learning by studying the perceptions of parents towards their children’s engagement during the prolonged closure of schools due to unprecedented situations. The present study entitled “*Children’s Engagement during Prolonged Closure of Schools due to COVID-19 Pandemic in India*” examines the children’s engagement on the basis of their parents’ perceptions during the prolonged closure of schools caused by the COVID-19 pandemic.

B. Objectives

The study was carried out with the following objectives:

1. To study the Perception of parents towards their children’s engagement during prolonged closure of schools due to COVID-19 Pandemic.
2. To find out the children’s Engagement during prolonged closure of schools due to COVID-19 Pandemic.
3. To find out the children’s Academic Engagement during prolonged closure of schools due to COVID-19 Pandemic.
4. To find out the Parents’ Role in their children’s engagement during prolonged closure of schools due to COVID-19 Pandemic.
5. To find out the Association of children’s Academic engagement with Gender, Residential Background and Types of Educational Institution during prolonged closure of schools due to COVID-19 Pandemic.

C. Null Hypothesis (H₀)

For objectives (1), (2), (3) and (4) no hypotheses were needed to construct, whereas a hypothesis was required to realize the fifth objective of the study which is as under:

There will be no significant association of children’s Academic engagement with Gender, Residential Background and Types of Educational Institution during prolonged closure of schools due to COVID-19 Pandemic.

MATERIALS AND METHODS

The present study was conducted by using the Descriptive survey method. Students studying in Pre-primary and Lower-primary levels of schools from northern India comprised the population for the study and a sample of 216 students was drawn from the population through the random sampling technique. Researchers’ self-constructed questionnaire (Google Form) was shared to the parents for gathering the information of children’s (of pre-primary and lower-primary level) routine activities during prolonged closure of schools caused by COVID-19 pandemic. The tool comprised 24 closed-ended items spread over four aspects: Parents’ Perception, Parents’ Role, Children’s General Engagement, and Children’s Academic Engagement. Frequencies, percentages, and Pearson’s chi-square were employed for analyzing the data, and interpretation of the obtained output are discussed in the following section.

RESULT AND DISCUSSION

Results obtained from data analysis have been presented in the respective tables and discussed as per objectives. The first Objective of the study was to study the Perception of parents towards their children’s engagement during Prolonged closure of schools due to COVID-19 Pandemic. For achieving this objective, items related to Parents’ Perception were analyzed with the help of frequencies and percentages. The item-wise responses and their analysis have been given below in Table-1 and Table-2.

Table 1: Distribution of Three Category Responses Related to Perception of parents towards their children’s engagement

S. No.	Items	Responses			
		Yes	No	Somewhat	Total
1	I think this lock-down gives children the opportunity to spend the full time with parents/ family members.	72 (34.3%)	5 (2.4%)	133 (63.3%)	210 (100%)
2	This lock-down provides a good opportunity to interact with the child with working parents. (Response of one parent was irrelevant hence, rejected.)	73 (34.0%)	11 (5.1%)	130 (60.5%)	215 (100%)
3	During this period, the health of the child deteriorates.	6 (2.8%)	201 (94.4%)	6 (2.8%)	214 (100%)
4	It was difficult to adhere to the rescheduled time table for child and parent / guardian both.	37 (38.5%)	22 (23.0%)	37 (38.5%)	96 (100%)

It is evident from Table-1 that, in response to the first item, almost one third of the parents thought that the lockdown was an opportunity to spare the time with family members whereas some do not believe so. In reply to second item, one third of the working parents in the Metro cities thought that the lockdown was an opportunity to interact with the children with them because in an earlier routine, they had to leave the home for offices before waking up their children and returned back after children got sleep down whereas some do not believe so. Further, in response to third item, almost all of the parents denied that their children’s health deteriorated during the lockdown. Finally, in response to fourth item, the numbers of the parents who found difficulty in adhering to the rescheduled time-table during the lockdown was higher than those of having found no difficulty.

Table 2: Distribution of Five Category Responses Related to Perception of parents towards their children’s engagement

S. No.	Items	Responses					Total
		SDA	DA	UD	A	SA	
1	I think this lock-down adversely affects the normal routine of the child.	4 (4.1%)	10 (10.3%)	28 (28.9%)	44 (45.4%)	11 (11.3%)	97 (100%)
2	The child utilized this period fruitfully / judiciously and effectively engaging all the types of activities in a balanced way.	7 (7.2%)	13 (13.4%)	48 (49.5%)	27 (27.8%)	2 (2.1%)	97 (100%)

From the Table-2, it is clear that, in response to the first item most of the parents (11.3% + 45.4%) were in favor that the lock-down affected the normal routing of the children adversely. In response to the second item, it implies that most of the parents (27+2=29 favored as compared to 7+13=20 against) affirmed that their children utilized the lock-down effectively and in a balanced way.

The second Objective of the study was to find the Engagement of Pre-primary and Lower Primary School children during Prolonged closure of schools due to COVID-19 Pandemic. For achieving this objective, items related to children’s engagement were analyzed with the help of frequencies and percentages. The item-wise responses and their analysis have been given below in Table-3 and Table-4.

Table3: Distribution of Three Category Responses Related to Engagement of Pre-primary and Lower Primary School children

S. No.	Items	Responses			Total
		Yes	No	Somewhat	
1	The child has enjoyed and spent very fruitfully this lock-down period.	47 (21.9%)	116 (54.0%)	52 (24.2%)	215 (100%)
2	The child is engaged in watching TV throughout the day.	17 (7.9%)	165 (76.7%)	33 (15.3%)	215 (100%)
3	The child has been involved in playing household games throughout the day.	32 (14.9%)	144 (67.0%)	39 (18.1%)	215 (100%)
4	The child has been engaged full time in smart-phones.	9 (4.2%)	172 (80.0%)	34 (15.8%)	215 (100%)
5	The child has nothing to do in this period and becomes lazy/ idle.	13 (6.1%)	186 (86.9%)	15 (7.0%)	214 (100%)
6	During this period, the child gets irritated and seeks concentration.	18 (8.4%)	169 (79.0%)	27 (12.6%)	214 (100%)
7	During this period, the child disturbed / interrupted me to carry out my activities assigned as work from home.	31 (15.3%)	149 (73.8%)	22 (10.9%)	202 (100%)

Table-3 shows that, in response to the first item, most of the parents thought that the lockdown was not joyful for their children and their children weren’t spent it fruitfully. In reply to the second item, it can be inferred that, three fourth of the parents admitted that their children didn’t spend the time watching the television during the lockdown. Moreover, in response to the third item, it is evident that more than two third of the parents admitted that their children didn’t spend the time playing the household games during the lockdown. In reply to the fourth item, it may be concluded that four fifths of the parents admitted that their children didn’t spend the time in navigating the smart-phones during the lockdown. In response to the fifth item, it can be revealed that more than two third of the parents admitted that their children didn’t get lazy or idle during the lockdown. Furthermore, the responses to the sixth item indicates that more than three fourth of the parents affirmed that their children didn’t get irritated during the lockdown. Finally, responses to the seventh item shows that more than two third of the parents denied that their children disturbed or interrupted them in carrying out their official work from home during the lockdown.

Table4: Showing Percentages of Responses towards Children’s Engagement in Different Activities

S. No.	Activities (Total Responses=88)	%
1	Playing games with Toys	17%
2	Playing games without toys	6.8%
3	ICT enabled recreational activities	3.4%
4	Helping in household activities	10.2%
5	Learning and practicing new skills	14.8%
6	Accomplishing the assignments and syllabus	1.1%
7	Helping in official work to be carried out from home	0%
8	Constructing and creating the Art in which she / he interested	9.1%
9	Balanced combination of all the above activities	37.5%

Table-4 indicates that the most of the parents claimed that their children were engaged in all types of activities in a balanced way followed by ‘playing games with toys’; ‘Learning and practicing new skills’; ‘Helping in household

activities’; and ‘Constructing and creating the Art’ at second, third, fourth and fifth places respectively during the prolonged closure of schools due to lock-down.

The third Objective of the study was to find the Academic Engagement of Pre-primary and Lower Primary School children during Prolonged closure of schools due to COVID-19 Pandemic. For achieving this objective, items related to children’s academic engagement were analyzed with the help of frequencies and percentages. The item-wise responses and their analysis have been given below Table-5.

Table5: Distribution of Three/ Two Category Responses Related to Academic Engagement of Pre-primary and Lower Primary School children

S. No.	Items	Responses			
		Yes	No	Somewhat	Total
1	The child has been engaged full time and navigated the smart-phones independently to view / listen educational stories / rhymes / cartoons etc.	18 (10.8%)	101 (60.5%)	48 (28.7%)	167 (100%)
2	Assignment(s) has / have been given by school to the child for accomplishing the syllabus during this period.	65 (56.0%)	51 (44.0%)	-	116 (100%)
3	The child has taken the help of ICT / Computer/ Smartphone to accomplish the assignments.	35 (36.1%)	37 (38.1%)	25 (25.8%)	97 (100%)
4	The child finds difficulties to accomplish the assignments with the help of ICT / Computer/ Smartphone.	24 (24.5%)	46 (46.9%)	28 (28.6%)	98 (100%)

Table-5 depicts that in response to the first item, most of the parents denied that their children independently engaged in academic work through smart-phones during the lockdown. Whereas, in response to the second item, most of the parents accepted that assignments were given to their children in order to complete the syllabi during the lockdown. While, in reply to the third item, almost one third of the parents admitted that their children took the help of ICT in doing academic work through computers or smart-phones during the lockdown. The number of parents who denied this was slightly higher than those of admitted ones. In response to the final item of Table-5, almost one fourth of the parents admitted that their children found some difficulties in accomplishing assignments with the help of ICT during the lockdown. But the numbers of parents whose children found no difficulties in accomplishing assignments with the help of ICT during the lockdown was considerably higher than those of having difficulties.

The fourth Objective of the study was to find the Parents’ Role in School going children’s engagement during Prolonged closure of schools due to COVID-19 Pandemic. For achieving this objective, items related to parents’ role were analyzed with the help of frequencies and percentages. The item-wise responses and their analysis have been given below Table-6.

Table6: Distribution of Three/ Two Category Responses Related to Parents’ Role in School going Pre-primary and Lower Primary children

S. No.	Items	Responses			
		Yes	No	Somewhat	Total
1	The child has been engaged full time in smart-phones under the supervision of parents/ elder members of the family to seek guidance in navigating educational story / rhymes / cartoons etc.	19 (13.2%)	74 (51.4%)	51 (35.4%)	144 (100%)
2	As a Parent/ Grandparents/ Sibling/ Relative, I rescheduled the time-table for the child to balance the routine activities.	71(74.0%)	25 (26.0%)	-	96 (100%)
3	As a Parent/ GrandParent/ Sibling/ Relative, I installed an Interactive / Educational App on my smart-phone/ computer for her/ him.	58 (59.8%)	39 (40.2%)	-	97 (100%)

In reply to the first item of Table-6, it may be concluded that almost half of the parents claimed that their children didn’t engage in smart-phones in their supervision for doing academic work through smart-phones during the lockdown. While in response to the second item, it can be inferred that almost three fourth of the parents had rescheduled the time-

table for their children to balance the routine activities during the lockdown. Further, in reply to the third item, it may be revealed that most of the parents get installed an educational app on their device for children.

The fifth Objective of the study was to find the Association of Students' Academic engagement during Prolonged closure of schools due to COVID-19 Pandemic with Gender, Residential Background and Types of Institution. The concerned Null Hypothesis (H0) to this objective was: *There will be no significant Association of Students' Academic engagement during prolonged closure of schools due to COVID-19 Pandemic with Gender, Residential Background and Types of Institution.* This H0 further divided into three H0 to test the Association of Students' engagement during prolonged closure of schools due to COVID-19 Pandemic with Gender, Residential Background and Types of Institution. Therefore, the three H0 were:

- a) *There will be no significant Association of Students' Gender with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic.*
- b) *There will be no significant Association of Students' Residential Background with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic.*
- c) *There will be no significant Association of Students' Types of Educational Institutions with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic.*

To test these Null Hypotheses, Pearson's Chi-square test was employed and the obtained outputs have been presented in the tables followed by their interpretation.

a) Association of Students' Academic engagement during prolonged closure of schools due to COVID-19 Pandemic with Gender

The concerned H0 was: *There will be no significant Association of Students' Gender with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic.* To test this H0, responses on relevant items were analyzed with the help of Chi-square technique. The responses on 'Engaging in Educational content through smart-phones'; 'Help taken from parents to complete Assignment through ICT'; and 'Difficulty in completing Assignment through ICT' were considered as the components of Academic engagement for finding its association with Gender (i.e. Boys and Girls), if any. The item-wise, numbers of responses and output obtained have been presented and discussed below:

Item 1. The child has been engaged full time and navigated the smart-phones independently to view / listen educational stories / rhymes / cartoons etc. Responses to this item have been presented in the table-7 followed by output of Chi-square analysis in table-8.

Table7: Cross-tabulation (2X3 contingency table) of Gender X Engaging in Educational content through smart-phones

		Yes	No	Somewhat	Total
Gender	Girls	7	54	16	77
	Boys	11	47	32	90
Total		18	101	48	167

Table8: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.730 ^a	2	.057
Likelihood Ratio	5.806	2	.055
Linear-by-Linear Association	1.541	1	.214
N of Valid Cases	167		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.30.

From the above table-8, the value of Pearson Chi-Square is $\chi^2 (2) = 5.73$ and $p = .057$ which is not significant. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Gender with responses on Engaging in Educational content through smart-phones during prolonged closure of schools due to COVID-19 Pandemic.*” is not rejected. It can be inferred that students’ Gender and responses on Engaging in Educational content through smart phones are not significantly associated with each other or alternatively both are independent to each other. Both types of Gender i.e. boys and girls have similar type of engagement in educational content through smart-phones during the pandemic.

Item 2. The child has taken the help of ICT / Computer/ Smartphone to accomplish the assignments. Responses to this item have been presented in the table-9 followed by output of Chi-square analysis in table-10.

Table9: Cross-tabulation (2X3 contingency table) of Gender X Help taken from parents to complete Assignment through ICT

		Yes	No	Somewhat	Total
Gender	Girls	19	13	10	42
	Boys	16	24	15	55
Total		35	37	25	97

Table10: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.836 ^a	2	.242
Likelihood Ratio	2.837	2	.242
Linear-by-Linear Association	1.491	1	.222
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.82.

From the above table-10, the corrected value of Pearson Chi-Square is $\chi^2 (2) = 2.84$ and $p = .242$ which is not significant. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Gender with responses on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic*” is not rejected. It can be inferred that students’ Gender and Help taken from parents to complete Assignment through ICT are not associated with each other or it may be said that both are independent to each other. Both types of Gender i.e. boys and girls have taken similar type of help from parents to complete Assignment through ICT during pandemic.

Item 3. The child finds difficulties to accomplish the assignments with the help of ICT / Computer/ Smartphone. Responses to this item have been presented in the table-11 followed by output of Chi-square analysis in table-12.

Table11: Cross-tabulation (2X3 contingency table) of Gender X Difficulty in completing Assignment through ICT

		Yes	No	Somewhat	Total
Gender	Girls	7	19	17	43
	Boys	17	27	11	55
Total		24	46	28	98

Table12: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.456 ^a	2	.065
Likelihood Ratio	5.518	2	.063
Linear-by-Linear Association	5.271	1	.022
N of Valid Cases	98		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.53.

From the above table-12, the corrected value of Pearson Chi-Square is $\chi^2 (2) = 5.46$ and $p = .065$ which is not significant. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Gender with responses on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic*” is not rejected. It can be inferred that students’ Gender and Difficulty in completing Assignment through ICT are not associated with each other or alternatively both are independent to each other. Both types of Gender i.e. boys and girls have similar types of difficulty in completing Assignment through ICT.

b) Association of Students’ Academic engagement during prolonged closure of schools due to COVID-19 Pandemic with Residential Background

The concerned H0 was: *There will be no significant Association of Students’ Residential Background with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic.* To test this H0, responses on relevant items were analyzed with the help of Chi-square technique. The responses on ‘Engaging in Educational content through smart-phones’; ‘Assignments given by Schools’; ‘Help taken from parents to complete Assignment through ICT’; and Difficulty in completing Assignments through ICT were considered as the components of Academic engagement for finding its association with three types of Residential Backgrounds (i.e. Rural, Urban and Metro-City), if any. The item-wise, numbers of responses and output obtained have been presented and discussed below:

Item 1. The child has been engaged full time and navigated the smart-phones independently to view / listen educational stories / rhymes / cartoons etc. Responses to this item have been presented in the table-13 followed by output of Chi-square analysis in table-14.

Table13: Cross-tabulation (3X3 contingency table) of Residential Background X Engaging in Educational content through smart-phones

		Yes	No	Somewhat	Total
Residential Background	Rural	8	86	17	111
	Urban	8	11	18	37
	Metro-City	2	4	13	19
Total		18	101	48	167

Table14: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.793 ^a	4	.000
Likelihood Ratio	43.232	4	.000
Linear-by-Linear Association	11.852	1	.001
N of Valid Cases	167		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 2.05.

From the above table-14, the value of Pearson Chi-Square is $\chi^2(4) = 43.79$ and $p = .000$ which is significant at .01 level. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Residential Background with responses on Engaging in Educational content through smart-phones during prolonged closure of schools due to COVID-19 Pandemic*” is rejected. It can be inferred that Residential Background and response on Engaging in Educational content through smart-phones are associated with each other or both are not independent to each other. Three types of Residential Background have different types of responses on Engaging in Educational content through smart-phones. We can say that responses of ‘Yes’, ‘No’ or ‘Somewhat’ on Engaging in Educational content through smart-phones are related to specific residential background and this can be further verified from the Cross-tabulation Table-13 that majority of Rural School children (86) were not academically engaged whereas majority of Urban School children (18) were engaged academically through smart-phones.

Item 2. Assignment(s) has / have been given by school to the child for accomplishing the syllabus during this period. Responses to this item have been presented in the table-15 followed by output of Chi-square analysis in table-16.

Table15: Cross-tabulation (3X2 contingency table) of Residential Background X Assignment given by school

		Yes	No	Total
Residential Background	Rural	22	38	60
	Urban	28	9	37
	Metro-City	15	4	19
Total		65	51	116

Table16: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.979 ^a	2	.000
Likelihood Ratio	19.646	2	.000
Linear-by-Linear Association	15.918	1	.000
N of Valid Cases	116		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.35.

From the above table-16, the value of Pearson Chi-Square is $\chi^2(2) = 18.98$ and $p = .000$ which is significant at .01 level. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Residential Background with responses on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic*” is rejected. It can be inferred that Residential Background and response on Assignment given by Schools are associated with each other or both are not independent to each other. Three types of Residential Background have different types of responses on Assignment given by Schools. We can say that responses of ‘Yes’ or ‘No’ on Assignment given by Schools are related to specific residential background and this can be further clarified from the Cross-tabulation Table-15 that the assignments were not given to majority of Rural School children (38) whereas the assignments were given to majority of Urban School children (28) during the lock-down.

Item 3. The child has taken the help of ICT / Computer/ Smartphone to accomplish the assignments. Responses to this item have been presented in the table-17 followed by output of Chi-square analysis in table-18.

Table17: Cross-tabulation (3X3 contingency table) of Residential Background X Help taken from parents to complete Assignment through ICT

	Yes	No	Somewhat	Total
--	-----	----	----------	-------

Residential Background	Rural	12	21	8	41
	Urban	16	13	8	37
	Metro-City	7	3	9	19
Total		35	37	25	97

Table18: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.780 ^a	4	.044
Likelihood Ratio	9.704	4	.046
Linear-by-Linear Association	.412	1	.521
N of Valid Cases	97		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.90.

From the above table-18, the value of Pearson Chi-Square is $\chi^2(4) = 9.78$ and $p = .044$ which is significant at .05 level. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Residential Background with responses on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic*” is rejected. It can be inferred that Residential Background and response on Help taken from parents to complete Assignment through ICT are associated with each other or both are not independent to each other. Three types of Residential Background have different types of responses on Help taken from parents to complete Assignment through ICT during COVID-19 Pandemic. We can say that responses of ‘Yes’ or ‘No’ or ‘Somewhat’ on Help taken from parents to complete Assignment through ICT are related to specific residential background and this can be further clarified from the Cross-tabulation Table-17 that majority of Rural parents (21) couldn’t help their students to complete Assignment through ICT; the majority of Urban parents (16) were able to help; whereas majority of parents belonging to Metro-City (09) somewhat able to do so during the lock-down.

Item 4. The child finds difficulties to accomplish the assignments with the help of ICT / Computer/ Smartphone. Responses to this item have been presented in the table-19 followed by output of Chi-square analysis in table-20.

Table19: Cross-tabulation (3X3 contingency table) of Residential Background X Difficulty in completing Assignment through ICT

Residential Background		Yes	No	Somewhat	Total
	Rural		14	19	9
Urban		8	18	11	37
Metro-City		2	9	8	19
Total		24	46	28	98

Table20: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.013 ^a	4	.286
Likelihood Ratio	5.212	4	.266
Linear-by-Linear Association	4.797	1	.029
N of Valid Cases	98		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.65.

From the above table-20, the value of Pearson Chi-Square is $\chi^2(4) = 5.01$ and $p = .286$ which is not significant. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Residential Background with responses on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic*” is not rejected. It can be inferred that Residential Background and response on Difficulty in completing Assignment through ICT are not associated with each other or both are independent to each other. In other words, three types of Residential Background have similar types of responses on Difficulty in completing Assignment through ICT. We can say that responses of ‘Yes’ or ‘No’ or ‘Somewhat’ on Difficulty in completing Assignment through ICT during the lock-down are not related to any specific residential background. Children belonging to all types of residential backgrounds faced similar Difficulty in completing Assignment through ICT during the lock-down.

c) Association of Students’ Academic engagement during prolonged closure of schools due to COVID-19 Pandemic with Types of Educational Institutions

The concerned H0 was: *There will be no significant Association of Students’ Types of Educational Institutions with their Academic engagement during prolonged closure of schools due to COVID-19 Pandemic.* To test this H0, responses on relevant items were analyzed with the help of Chi-square technique. The responses on ‘Engaging in Educational content through smart-phones’; ‘Assignments given by Schools’; ‘Help taken from parents to complete Assignment through ICT’; and ‘Difficulty in completing Assignments through ICT’ were considered as the components of Academic engagement for finding its association with eight types of Educational Institutions (i.e. Govt. Aided Madarsa, Pvt. Management Madarsa, State Govt. School, Central Govt. School, Pvt. Aided School, Pvt. Unaided School, Convent School and Boarding School/ Madarsa), if any. The item-wise, numbers of responses and output obtained have been presented and discussed below:

Item 1. The child has been engaged full time and navigated the smart-phones independently to view / listen educational stories / rhymes / cartoons etc. Responses to this item have been presented in the table-21 followed by output of Chi-square analysis in table-22.

Table21: Cross-tabulation (8X3 contingency table) of types of Educational Institutions X Engaging in Educational content through smart-phones

		Yes	No	Somewhat	Total
Type of School	Govt. Aided Madarsa	1	0	0	1
	Private Management Madarsa	1	1	0	2
	State Govt. Schools	2	1	4	7
	Central Govt. Schools	0	0	3	3
	Pvt. Aided Schools	4	4	7	15
	Pvt. Unaided Schools	4	89	23	116
	Convent Schools	6	6	9	21
	Boarding Schools or Madrasas	0	0	2	2
Total		18	101	48	167

Table22: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	63.866 ^a	14	.000
Likelihood Ratio	59.646	14	.000

Linear-by-Linear Association	.655	1	.418
N of Valid Cases	167		

a. 18 cells (75.0%) have expected count less than 5. The minimum expected count is .11.

From the above table-22, the value of Pearson Chi-Square is $\chi^2 (14) = 63.87$ and $p = .000$ which is significant at .01 level. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ Types of Educational Institutions with responses on Engaging in Educational content through smart-phones during prolonged closure of schools due to COVID-19 Pandemic*” is rejected. It can be inferred that Types of Educational Institutions and response on Engaging in Educational content through smart-phones are associated with each other or both are not independent to each other. Different eight types of Educational Institutions have different types of responses on Engaging in Educational content through smart-phones. We can say that responses of ‘Yes’, ‘No’ or ‘Somewhat’ on Engaging in Educational content through smart-phones are related to specific type of school and this can be further clarified from the Cross-tabulation Table-21 that majority of Private Unaided Schools’ children (89) were not academically engaged while 15 (6+9) out of 21 Convent Schools’ children; and 11 (4+7) out of 15 Private Aided Schools’ children were engaged academically through smart-phones.

Item 2. Assignment(s) has / have been given by school to the child for accomplishing the syllabus during this period. Responses to this item have been presented in the table-23 followed by output of Chi-square analysis in table-24.

Table23: Cross-tabulation (8X2 contingency table) of types of Educational Institutions X Assignment given by school

		Yes	No	Total
Type of School	Govt. Aided Madarsa	1	0	1
	Private Management Madarsa	1	1	2
	State Govt. Schools	3	4	7
	Central Govt. Schools	3	0	3
	Pvt. Aided Schools	11	4	15
	Pvt. Unaided Schools	29	36	65
	Convent Schools	16	5	21
	Boarding Schools or Madrasas	1	1	2
Total	65	51	116	

Table24: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.416 ^a	7	.088
Likelihood Ratio	14.206	7	.048
Linear-by-Linear Association	.001	1	.977
N of Valid Cases	116		

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .44.

From the above table-24, the value of Pearson Chi-Square is $\chi^2 (7) = 12.42$ and $p = .088$ which is not significant. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ types of Educational Institutions with responses on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic*” is not

rejected. It can be inferred that types of Educational Institutions and response on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic are not associated with each other or both are independent to each other. In other words, eight types of Educational Institutions have similar types of responses on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic. We can say that responses of ‘Yes’, or ‘No’ on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic are not related to specific types of Educational Institutions.

Item 3. The child has taken the help of ICT / Computer/ Smartphone to accomplish the assignments. Responses to this item have been presented in the table-25 followed by output of Chi-square analysis in table-26.

Table25: Cross-tabulation (8X3 contingency table) of types of Educational Institutions X Help taken from parents to complete Assignment through ICT

		Yes	No	Somewhat	Total
Type of School	Govt. Aided Madarsa	0	1	0	1
	Private Management Madarsa	0	1	1	2
	State Govt. Schools	3	3	1	7
	Central Govt. Schools	2	1	0	3
	Pvt. Aided Schools	6	3	6	15
	Pvt. Unaided Schools	13	20	13	46
	Convent Schools	11	7	3	21
	Boarding Schools or Madrasas	0	1	1	2
Total		35	37	25	97

Table26: Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.699 ^a	14	.550
Likelihood Ratio	15.086	14	.372
Linear-by-Linear Association	.093	1	.760
N of Valid Cases	97		

a. 16 cells (66.7%) have expected count less than 5. The minimum expected count is .26.

From the above table-26, the value of Pearson Chi-Square is $\chi^2 (14) = 12.70$ and $p = .550$ which is not significant. Hence, the null Hypothesis (H0) that “*There will be no significant Association of Students’ types of Educational Institutions with responses on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic*” is not rejected. It can be inferred that types of Educational Institutions and response on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic are not associated with each other or both are independent to each other. In other words, eight types of Educational Institutions have similar types of responses on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic. We can say that responses of ‘Yes’, or ‘No’ or ‘Somewhat’ on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic are not related to specific types of Educational Institutions.

Item 4. The child finds difficulties to accomplish the assignments with the help of ICT / Computer/ Smartphone. Responses to this item have been presented in the table-27 followed by output of Chi-square analysis in table-28.

Table27: Cross-tabulation (8X3 contingency table) of types of Educational Institutions X Difficulty in completing Assignment through ICT

		Yes	No	Somewhat	Total
Type of School	Govt. Aided Madarsa	0	1	0	1
	Private Management Madarsa	0	2	0	2
	State Govt. Schools	1	4	2	7
	Central Govt. Schools	1	1	1	3
	Pvt. Aided Schools	6	3	6	15
	Pvt. Unaided Schools	9	24	14	47
	Convent Schools	6	10	5	21
	Boarding Schools or Madrasas	1	1	0	2
Total		24	46	28	98

Table28: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.721 ^a	14	.708
Likelihood Ratio	12.731	14	.548
Linear-by-Linear Association	.256	1	.613
N of Valid Cases	98		

a. 17 cells (70.8%) have expected count less than 5. The minimum expected count is .24.

From the above table-28, the value of Pearson Chi-Square is $\chi^2(14) = 10.72$ and $p = .708$ which is not significant. Hence, the null Hypothesis (H0) that “There will be no significant Association of Students’ types of Educational Institutions with responses on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic” is not rejected. It can be inferred that Residential Background and response on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic are not associated with each other or both are independent to each other. Eight types of Educational Institutions have similar types of responses on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic. We can say that responses of ‘Yes’, ‘No’ or ‘Somewhat’ on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic are not related to specific types of schools.

FINDINGS

The major findings of the study are as under:

1. Findings of the study indicate that almost one third of the parents thought that lockdown was an opportunity to spare the time with family members whereas some (2.4%) do not believe so.
2. Also, one third of the working parents of the Metro cities thought that lockdown was an opportunity to interact with the children with them because in normal routine, they had to leave the home for offices before waking up their children and returned back after children got sleep down whereas some of (5.1%) do not believe so.
3. Almost all (94.4%) of the parents have denied the statement that their children’s health deteriorated during the lockdown.
4. Majority of the parents (56.7%) responded in favour as compared to those in against (14.4%) that the lockdown affected the normal routing of the children adversely. But most of the parents (29.9%) responded in favour as compared to those in against (20.6%) that their children utilized the lock-down effectively and in a balanced way.

5. The numbers of the parents who found difficulty in adhering to the rescheduled time-table during the lockdown was (38.%) higher than (23.0%) those of having found no difficulty.
6. Majority of the parents (54.0%) thought that the lockdown was not joyful for their children and their children weren't able to spend it fruitfully.
7. Around three fourth (76.7%) of the parents admitted that their children didn't spend the time watching the television during the lockdown as compared to 7.9% of parents who affirmed it.
8. Almost (67%) more than two third of the parents admitted that their children didn't spend the time playing the household games during the lockdown as compared to 14.9% of parents who affirmed it.
9. Findings of the study reveal that (80%) four fifth of the parents admitted that their children didn't spend the time in navigating the smart-phones during the lockdown as compared to 4.2% of parents who affirmed it.
10. More than two third of the parents admitted that their children didn't get lazy or idle during the lockdown as compared to 6.1% of parents who affirmed it.
11. More than three fourth of the parents affirmed that their children didn't get irritated during the lockdown as compared to 8.4% of parents who affirmed it.
12. More than two third of the parents denied that their children disturbed or interrupted them in carrying out their official work from home during the lockdown as compared to 15.3% of parents who affirmed it.
13. As a whole, 9.1% engaged in Constructing and creating the Art of their interest; 10.2% engaged in helping parents in household activities; 14.8% engaged in Learning and practicing new skills; 17% engaged in Playing games with Toys; and as many as 37.5% engaged in Balanced combination of all the above activities.
14. Most of the parents (60.5%) denied that their children independently engaged in academic work through smart-phones during the lockdown as compared to 10.8% of parents who affirmed it.
15. Most of the parents (56.0%) accepted that assignments were given to their children in order to complete the syllabi during the lockdown as compared to 44.0% of parents who denied it.
16. Almost one third of the parents (36.1%) admitted that their children took the help of ICT in doing academic work through computer or smart-phones during the lockdown. The number of parents who denied this was (38.1%) slightly higher than those of admitted ones.
17. Almost one fourth of the parents (24.5%) admitted that their children found some difficulties in accomplishing assignments with the help of ICT during the lockdown. But the numbers of parents whose children found no difficulties in accomplishing assignments with the help of ICT during the lockdown was considerably higher (46.9%) than those of having difficulties.
18. Almost half of the parents (51.4%) claimed that their children didn't engage in smart-phones in their supervision for doing academic work through smart-phones during the lockdown as compared to 13.2% of parents who affirmed it.
19. Almost three fourth (74.0%) of the parents have rescheduled the time-table for their children to balance the routine activities during the lockdown as compared to 26.0% of parents who didn't do it.
20. Most of the parents (59.8%) install an educational app on their device for children whereas 40.2% of the parents are unable to do so.
21. Students' Gender was not significantly associated with their Academic engagement (responses on 'Engaging in Educational content through smart phones'; 'Help taken from parents to complete Assignment through ICT'; and with 'Difficulty in completing Assignment through ICT') during prolonged closure of schools due to COVID-19 Pandemic.
22. Students' Residential Background was significantly associated with responses on Engaging in Educational content through smart-phones during prolonged closure of schools due to COVID-19 Pandemic. Majority of Rural School children (86) were not academically engaged whereas the majority of Urban School children (18) were engaged academically through smart-phones.
23. Students' Residential Background was significantly associated with responses on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic. Assignments were not given to the majority of Rural School children (38) whereas the assignments were given to the majority of Urban School children (28) during the lock-down.
24. Students' Residential Background was significantly associated with responses on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic. Majority of Rural parents (21) couldn't help their students to complete Assignment through ICT; the majority of Urban parents (16) were able to help; whereas the majority of parents belonging to Metro-City (09) somewhat able to do so during the lock-down.
25. There was no significant Association of Students' Residential Background with responses on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic.
26. Students' Types of Educational Institutions was significantly associated with responses on Engaging in Educational content through smart-phones during prolonged closure of schools due to COVID-19 Pandemic.

Majority of Private Unaided Schools' children (89) were not academically engaged while 15 (6+9) out of 21 Convent Schools' children; and 11 (4+7) out of 15 Private Aided Schools' children were engaged academically through smart-phones.

27. Students' types of Educational Institutions were not significantly associated with responses on Assignment given by school during prolonged closure of schools due to COVID-19 Pandemic
28. Students' types of Educational Institutions were not significantly associated with responses on Help taken from parents to complete Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic.
29. Students' types of Educational Institutions were not significantly associated with responses on Difficulty in completing Assignment through ICT during prolonged closure of schools due to COVID-19 Pandemic.

CONCLUSION

This pandemic has also taught us that students must possess certain skills such as skills of problem-solving, critical thinking, ICT and e-learning skills and most importantly adaptability to survive the crisis. A lot of time and cost is involved in e-learning. It is not as easy as it seems, a considerable amount of investment is needed for getting the devices and equipment, maintaining the equipment, training the human resources, and developing the online content. Therefore, an effective and efficient educational system and institution needs to be developed to impart education via online mode. Our educational institutions must build resilience in their systems to ensure and prioritize the presence of these skills in their students (Dhawan, 2020). Lau *et al.* (2021) suggested that in designing online learning, consideration of children's ability and skill to complete the learning independently may help in enhancing parents' satisfaction.

There is an urgent need to take care of parents' changing roles and increased responsibilities (Garbe *et al.* 2020). Relationships between families and schools must be strengthened and the burden of parents and teachers should be reduced (OECD, 2020; Winthrop, 2020). Ribeiro *et al.* (2021) highlighted the need for a significant investment of time from parents and families of primary school children. Parents from diverse socio-cultural backgrounds may be involved more if proper guidance is provided (Van Voorhis *et al.*, 2013).

A teacher should take care of five basic points while online teaching, they are: Instruction, Content, Motivation, Relationships, and Mental Health (Martin, 2020). Teachers should use the multimedia approach in their online teaching. Efforts should be made to narrow down the gap of digital divide and an increase in digital access, literacy and infrastructural resources (Huang, *et al.*, 2020). Separate training programmes for students as well as teachers in the various aspects of e-learning should be provided by the administrators (Dhawan, 2020). There is a vital need for optimization of online learning in terms of student-teacher interaction and clarity of communication (Coman, 2020). Bhamani *et al.* (2020) suggested that "Measures should be adopted to provide essential learning skills to children at home. Centralized data dashboards and educational technology may be used to keep the students, parents, and schools updated".

ACKNOWLEDGEMENTS

The authors would like to acknowledge and appreciate the services, support, and facilities provided by the Department of Education & Training, and the Administration of Maulana Azad National Urdu University, Hyderabad. The authors are also indebted to the parents who contributed to the survey by responding to the Online Google Form.

REFERENCES

- [1]. Aboagye, E., Yawson, J.A. and Appiah, K.N. (2020). COVID-19 and E-Learning: the Challenges of Students in Tertiary Institutions. *Social Education Research*, [online] 2(1), pp.1–7. Available at: <http://ojs.wiserpub.com/index.php/SER/article/view/422>.
- [2]. Allo, M.D.G. (2020). Is the online learning good in the midst of Covid-19 Pandemic? The case of EFL learners. *JurnalSinestesia*, [online] 10(1), pp.1–10. Available at: <https://sinestesia.pustaka.my.id/journal/article/view/24>.
- [3]. Bhamani, S., Makhdoom, A.Z., Bharuchi, V., Ali, N., Kaleem, S. and Ahmed, D. (2020). Home Learning in Times of COVID: Experiences of Parents. *Journal of Education and Educational Development*, 7(1), p.9. [online] Available at: <https://files.eric.ed.gov/fulltext/EJ1259928.pdf>.

- [4]. Coman, C., Țiru, L.G., Meseșan-Schmitz, L., Stanciu, C. and Bularca, M.C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, [online] 12(24), pp.1–24. Available at: <https://ideas.repec.org/a/gam/jsusta/v12y2020i24p10367-d460544.html>.
- [5]. Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, [online] 49(1), pp.5–22. Available at: <https://journals.sagepub.com/doi/full/10.1177/0047239520934018>.
- [6]. Fischer, H., Heise, L., Heinz, M., Moebius, K. and Koehler, T. (2014). *E-LEARNING TRENDS AND HYPES IN ACADEMIC TEACHING. METHODOLOGY AND FINDINGS OF A TREND STUDY*. In Proceedings of the International Association for Development of the Information Society (IADIS) International Conference on Cognition and Exploratory Learning in the Digital Age (CELDA), Porto, Portugal, 25–27 October 2014; pp. 63–69. [online] Available at: <https://files.eric.ed.gov/fulltext/ED557279.pdf>.
- [7]. Frances L Van Voorhis, Maier, M.F., Epstein, J.L. and Lloyd, C.M. (2013). *The Impact of Family Involvement on the Education of Children Ages 3 to 8. A Focus on Literacy and Math Achievement Outcomes and Social-Emotional Skills*. [online] Available at: http://www.mdrc.org/sites/default/files/The_Impact_of_Family_Involvement_FR.pdf.
- [8]. Garbe, A., Ogurlu, U., Logan, N. and Cook, P. (2020). Parents' Experiences with Remote Education during COVID-19 School Closures. *American Journal of Qualitative Research*, 4(3).
- [10]. Gordon, M. and Burgess, M. (2020), *The Hidden Impact of COVID-19 on Children's Education and Learning*. London, Save the Children International. [online] Available at: https://resourcecentre.savethechildren.net/node/18174/pdf/the_hidden_impact_of_covid-19_on_child_education.pdf
- [11]. Huang, R. H., Liu D. J., Tlili A., Yang J. F., Wang H. H., Zhang, M., Lu, H., Gao, B., Cai, Z., Liu, M., Cheng, W., Cheng, Q., Yin, X., Zhuang, R., Berrada, K., Burgos, D., Chan, C., Chen, N. S., Cui, W., Hu, X. , et al.. (2020). *Handbook on Facilitating Flexible Learning During Educational Disruption: The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak*. [online] Available at: https://www.researchgate.net/publication/339939064_Handbook_on_Facilitating_Flexible_Learning_During_Educational_Disruption_The_Chinese_Experience_in_Maintaining_Undisrupted_Learning_in_COVID-19_Outbreak [Accessed 10 Dec. 2021].
- [12]. Kachari, S.R. (2021). Online Learning and Its Uses during the Period of Pandemic (COVID-19): An Interlink. *www.academia.edu*. [online] Available at: https://www.academia.edu/49045808/Online_Learning_and_Its_Uses_during_the_Period_of_Pandemic_COVID-19_An_Interlink [Accessed 10 Oct. 2021].
- [13]. Lase, D., Zaluchu, S.E., Daeli, D.O. and Ndraha, A. (2020). Parents' Perceptions of Distance Learning during Covid-19 Pandemic in Rural Indonesia.
- [14]. Lau, E.Y.H., Li, J.-B. and Lee, K. (2021). Online Learning and Parent Satisfaction during COVID-19: Child Competence in Independent Learning as a Moderator. *Early Education and Development*, 32(6), pp.830–842.
- [15]. Li, C. and Lalani, F. (2020). *The COVID-19 pandemic has changed education forever*. [online] World Economic Forum. Available at: <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>.
- [16]. Martin A. (2020). *How to Optimize Online Learning in the Age of Coronavirus (COVID-19): A 5-Point Guide for Educators*. [online] Available at: https://www.researchgate.net/publication/339944395_How_to_Optimize_Online_Learning_in_the_Age_of_Coronavirus_COVID-19_A_5-Point_Guide_for_Educators.
- [17]. OECD (2020). *Strengthening online learning when schools are closed: The role of families and teachers in supporting students during the COVID-19 crisis*. [online] OECD. Available at: <https://www.oecd.org/coronavirus/policy-responses/strengthening-online-learning-when-schools-are-closed-the-role-of-families-and-teachers-in-supporting-students-during-the-covid-19-crisis-c4ecba6c/>.
- [18]. Parkes, M., Stein, S. and Reading, C. (2015). Student preparedness for university e-learning environments. *The Internet and Higher Education*, [online] 25, pp.1–10. Available at: <https://www.sciencedirect.com/science/article/pii/S1096751614000724> [Accessed 17 Oct. 2021].
- [19]. Putri, R.S., Purwanto, A., Pramono, R., Asbari, M., Wijayanti, L.M. and Hyun, C.C. (2020). Impact of the COVID-19 Pandemic on Online Home Learning: An Explorative Study of Primary Schools in Indonesia. *International Journal of Advanced Science and Technology*, [online] 29(05), pp.4809–4818. Available at: <http://sersc.org/journals/index.php/IJAST/article/view/13867>.
- [20]. Ribeiro, L.M., Cunha, R.S., Silva, M.C.A. e, Carvalho, M. and Vital, M.L. (2021). Parental Involvement during Pandemic Times: Challenges and Opportunities. *Education Sciences*, 11(6), p.302.
- [21]. Song, L., Singleton, E.S., Hill, J.R. and Koh, M.H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), pp.59–70.



- [24]. Tham, C.M. and Werner, J.M. (2005). Designing and Evaluating E-Learning in Higher Education: A Review and Recommendations. *Journal of Leadership & Organizational Studies*, 11(2), pp.15–25.
- [25]. UNICEF (May 2021). Rapid Assessment of Learning During School Closures in the Context of COVID. [online] Available at:
- [26]. <https://www.unicef.org/india/media/6121/file/Report%20on%20rapid%20assessment%20of%20learning%20during%20school%20closures%20in%20context%20of%20COVID-19.pdf> [Accessed 11 Nov. 2021].
- [27]. Winthrop, R. (2020). *Can new forms of parent engagement be an education game changer post-COVID-19?* [online] Brookings. Available at: <https://www.brookings.edu/blog/education-plus-development/2020/10/21/can-new-forms-of-parent-engagement-be-an-education-game-changer-post-covid-19/>.