

Educational Vulnerability of Children to the COVID-19 Pandemic: A Study in Rajshahi City, Bangladesh

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DOI: <https://dx.doi.org/10.47772/IJRISS.2024.8080153>

Received: 10 July 2024; Revised: 29 July 2024; Accepted: 02 August 2024; Published: 07 September 2024

ABSTRACT

The school closures that had been announced around the world since the outbreak of the epidemic had caused massive educational damages to the primary school-going children. This study was designed to reveal the educational damages that creates long-term social impacts on the children. The data was collected by using mixed method. This mixed method research design was arranged through survey method and direct interview method to collect, analyze and mix data in both quantitative and qualitative methods. 150 respondents were interviewed to collect primary data. Houses of young children were identified with the help of a research field worker after severe lockdown was eased between April and July during the Corona period in 2022. Then the data was collected with the consent of parents by fixing the sample purposefully. Parents were divided into three groups based on their family's monthly income with their residential patterns, such as, flats, Semi-flat and Raw houses. Fifteen case studies and three FGDs of fathers were also included to enrich the primary data. Children's uses of phones and watching TV had increased at home confinement. They insisted on playing video games. Maximum little children did not follow the routine of sports and studies. They did not like to attend online classes at all. They preferred to go to school. But their schools remain closed in phases for two years of the pandemic. Children from Raw houses did not have the opportunity to study online because of their parents' inability to afford smart devices. They deprived of quality education as their families had mired in poverty because of reduced income. Their intellectual creativity had hampered. This study concludes that lockdown had more negative effects on children in school closures. Urban children spent long periods of their childhood in confined situation which hindered their proper socialization. These findings may help to formulate effective policies at take necessary steps for children during any subsequent epidemic.

Keywords: Educational Damages; Children's Bad Habit; Covid-19 Pandemic.

INTRODUCTION

Due to closures of schools in lockdown, although some facilities of online classes were available in city, it was not possible to teach children properly. The children were vulnerable to online learning difficulties as they were not acquainted with such learning method. Moreover, their parents were found incapable in assisting their children in this context and teachers were not expert in delivering convincing e-learning. For two years and half in a row, children have been deprived of hands-on learning which still holds sway. They used to get sleepy if they did online classes. They gained bad habits, such as, they would turn off the video and played games during the class. In this way, a generation had acquired the habit of failing in education. In fact, schooling from home found more difficult for children of low-income families due to their limited resources. Children from middle class and rich families had the opportunity to take online classes, but children from the low-income families had been deprived of the light of education. The shortage of necessities was the main cause for the case of the lower-class children. Although it was difficult for poor urban families to take responsibilities of their children during normal times, they had not been able to provide education materials to their children as all their sources of income had been cut off. Also, they had to extensively use smart electronic devices to attend

online education. Healthy environment within families, children's outdoor plays, and social learning in primary schools had been severely disrupted by the pandemic induced dysfunction. The specific objectives of this study are to find out what adversities children faced in learning and to draw the picture of the effects children have had in their education due to these adversities. This study highlighted the impact of daily activities on children's socialization and found the irregularity of children's participation in regular studies.

LITERATURE REVIEW

The World Health Organization had announced the COVID-19 as a global pandemic on 11 March, 2020. The new restrictions were imposed which reduced the community-based services. These undermined the social support systems that were necessary for learning and development. This had affected the daily lives of children around the world (Segre, 2021; UNICEF, 2021; Whitley, 2021). This epidemic was harmful to children due to the lack of healthy social behaviours, prolonged school closures and extended periods of child detention, which produced inattention to children, changes learning patterns, changes in their normal studies which were not usually seen in any other epidemic disasters. Children were in a more vulnerable position educationally (Cusinato, 2020; González-Calvo, G., 2022; Mallik, 2021; Pfefferbaum, 2021; Zengin, 2021). School closures impeded the normal learning and growth. Children's participation in recreation, outdoor sports and extra-curricular activities had decreased. This stage was much disrupted by restricting daily social interactions and reducing outdoor plays (Rodman, *et al.*, 2021). A significant number of children spent excess time only watching television and playing video games. Their indoor activities were limited within increased tendency to spend excess screen time (Androutsos, 2021; Ranjbar, 2021). Because of school closures children were not able to get out of their family circle that gradually hindered their social development (Singh *et al.*, 2020; Tapadar, 2021). They had witnessed the chronic presence of isolation because of the school closures. Their educational achievement had decreased and their creative development declined (Whitley *et al.*, 2021).

The primary school going urban children of Bangladesh were the still victims of the epidemic (Parveen, 2020). Urban children were not allowed to go outside. They were deprived of the opportunity to experience socializing with their peers through outdoor plays and could not participate in creative activities because of movement restrictions (González-Calvo, G., 2022; Oliveira *et al.*, 2022). This had been an adverse reaction on children's lessons of truthfulness, dutifulness, compassion and hindered various social values which was being taught from schools at their developmental age. This ultimately caused disruption in the normal socialization process in many ways (Rahman, 2021). Their non-educational screen time had increased excessively. Though playgrounds were open sometimes, but those were not very clean and most of urban families did not allow their children to use these spaces because of the situation. A large number of urban children had spent their time to browse mobile phones (Androutsos, 2021; Goudeau, S., *et al.*, 2021; Larsen, 2021; Maximova *et al.*, 2022; Neshteruk, 2021; Zhang *et al.*, 2021).

Children were also deprived of learning, guiding, cooperation, caring, and mentoring interactions from their teacher within the stimulating the school environment. Lockdown created disruptions of daily activities of young children in Bangladesh (Singh *et al.*, 2020; Save the Children, 2021). These unhealthy bad habits of children created and un-regulatory lifestyle taught children carelessness, laziness in them and destroyed continuity of their studies (Islam *et al.*, 2021; Yeasmin *et al.*, 2020; Ali, 2021). Their studying, playing music, knowing about special national days, study tour, everything was stopped because of school closures that prevented their normal mental development process (Ali, 2021; Hussain, 2020).

METHOD

This research was using a mixed method combining quantitative and qualitative data through field surveys and interviews. Both quantitative and qualitative data was collected from the parents (mothers and FGDs of fathers) of young children. Case study methods and FGDs were also used to get in depth information from the participants. This study is primarily based on the data gathered through direct interviewing with the purposively chosen 25 parents. This study conducted three FGDs to collect qualitative research data. Stratified sampling procedure was followed in this study to collect the quantitative data. 150 respondents were sampled in this survey method to take a representative part as a sample from the large population. Certain mathematical formulas were used to draw samples from an unknown large population in the city during

the COVID-19 period. Cochran’s equation was used to select sample and identify households with small children. Sampling is done purposively. As a sample of this research, parents of children (Aged 5-14 years) from three types of households of Rajshahi City Corporation area had been selected. The total of the participant’s number was distributed evenly according to their households’ patterns, such as, flats, Semi-flat and Raw houses. Here 150 mothers of young children as respondents had taken as sample. 50 mothers from each house (flats, Semi-flat and Raw) are the participants of this study. Open and closed ended questionnaires for survey of mothers and some relevant questions to take FGDs of fathers were well designed based on the selective issues, such as, social, and economic problems, the effects on education including moral education of children during the lockdown. By going persons to persons of the city dwellers (parents and children), data was collected when people’s movements became easier after lifting out the restrictions and the Corona virus vaccine became effective. 14 Case study was conducted so that it could help to generate new in-depth ideas about the issues, through unstructured interviews that generate qualitative data using open-ended questions. In this study, the data was statistically analyzed manually in the tabulation process. It took 20 to 30 minutes to collect information from each respondent. They were not coerced against their will to provide any information and no rights were violated. Data has been collected in full ethical compliance.

FINDINGS

Socio-economic and demographic backgrounds of mothers (Age, educational qualification of mothers, and their professions):

The following list the age and educational qualifications of the mothers of the young children. The mother’s education, income, age, moral behaviour has a lot of influence on proper child rearing, family education, sense of responsibility etc. which are important for healthy socialization of children.

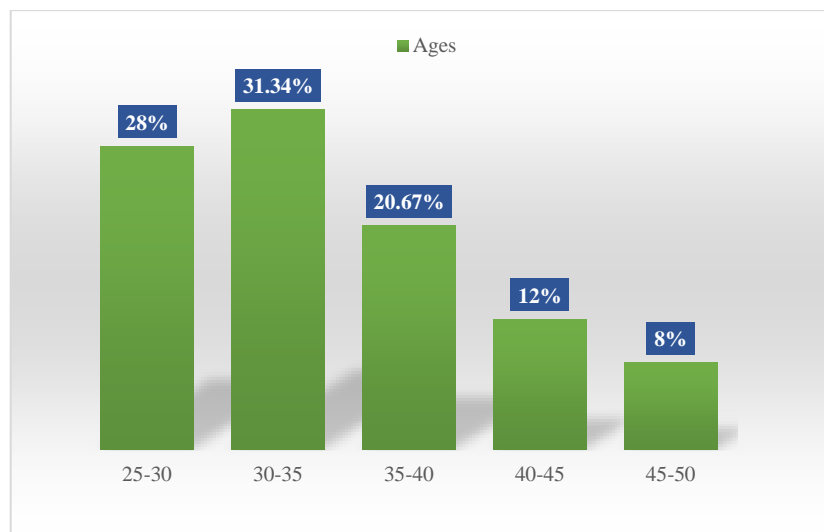


Figure-1: Ages of mothers of young children.

Figure-1 shows the mother’s age which was related to nurturing young children. 28 percent of mothers (N=42/150) were aged 25-30 years. A total of 31.34% mothers (n=47/150) were in the age group of 30-35. A total of 20.67% (n=31/150) mothers were between 35-40 years of age. The ages of 12% (n=18/150) mothers were 40-45 years and of the mothers of 8% (n=12/150) young children was between 45-50 years. (Source: Fieldwork.)

Table-1: Educational qualification of mothers.

Level of Mother’s Education	N (%)
Masters	14 (9.34)
Honours	33 (22.00)

HSC	52 (34.67)
SSC	40 (26.67)
Below SSC	8 (5.34)
Illiterate	3 (2.00)
Total	N=150 (100)

A total of 9.34% mothers (N=14/150) studied Masters and 22% mothers completed honours (N=33/150). A total of 34.67% mothers (N=52/150) passed HSC and 26.67% mothers (N=40/150) did not study further after taking the SSC level examination. Others (5.34%) mothers (N=8/150) could not finish school. Their education level was below SSC and 2% illiterate mothers (N=3/150) were from the Raw houses. They described themselves as illiterate because they did not receive any formal education. They have come from villages to the city in search of livelihood and were living scattered in rented houses for low rent. (Source: Fieldwork - survey)

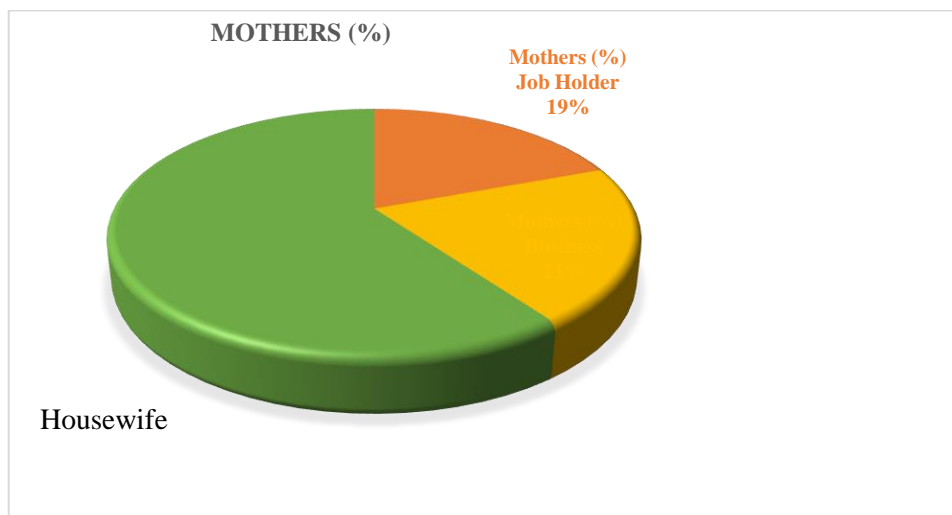


Figure-2: Professions of respondents.

Nineteen percent of mothers in orange colour (N=29/150) had employment. In yellow colour, 21% mothers (N=31/150) had businesses and remaining 60% mothers in green (N=90/150) were housewives. (Source: Fieldwork).

Children’s education was affected by the adversities faced in the epidemic:

The findings present that there was deterioration in the children’s education. For example: children had no contact with the teachers during the prolonged period of school closures. Even they got less coaching or private lessons opportunity. Informality regarding household patterns of children with opportunities is given below.

Table-2: Impact of lockdown on children’s education.

Mediums of contact with teachers	Numbers of the respondent			
	Flats	Semi-flat	Raw	Total
	n (%)	n (%)	n (%)	N (%)
Via Online	9 (18)	8 (16)	2 (4)	19 (12.67)
Directly/Offline	17 (34)	13 (26)	6 (12)	36 (24.00)

No communication	24 (48)	29 (58)	42 (84)	95 (63.34)
Total	n=50	n=50	n=50	N=150 (100)

Source: Fieldwork- survey

Table-2 shows that 12.67% of the total children (N=19/150) got opportunities to contact with their school teachers in lockdown. Total 24% children (N=36/150) had direct contact with their teachers. And maximum of the total 63.34% of mothers said that their children (N=95/150) had no contact with their teachers at that time and 84% of them (n=42/50) were from poor family.

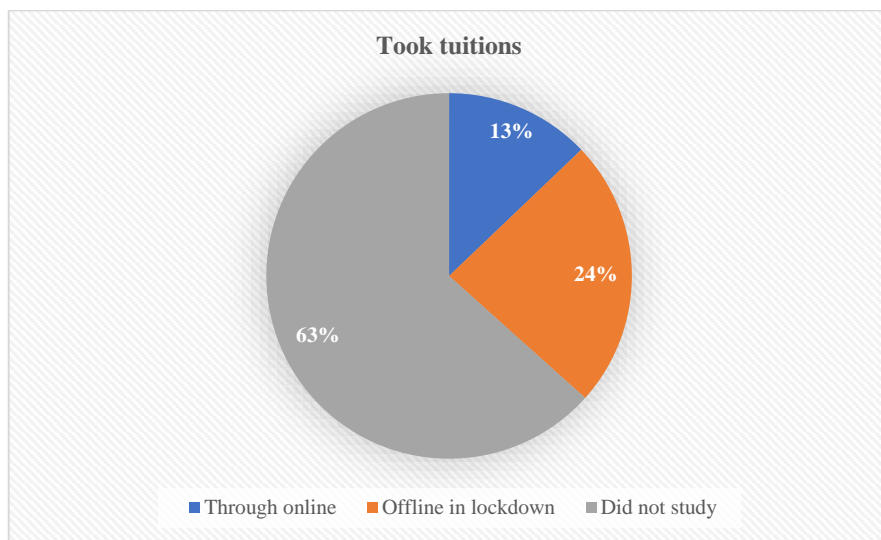


Figure-3: Took private lessons or coaching.

Total 13 percent of children in blue (N=19/150) were studying in coaching via online. 24% children in orange (N=36/150) were directly (offline) studying in coaching. And maximum 63% of children in the grey colour (N=95/150) did not study in private centres at that time. (Source: Fieldwork- survey)

Table-3: Young Children’s education in lockdown via online.

Online classes of schools in lockdown	Numbers of the respondent mothers			
	Flats	Semi-flat	Raw	Total
	n (%)	n (%)	n (%)	N (%)
Got opportunity to take online class	34 (68)	20 (40)	2 (4)	56 (37.34)
Did not attend online classes	16 (32)	30 (60)	48 (96)	94 (62.67)
Total	n=50	n=50	n=50	N=150 (100)

Source: Fieldwork- survey

Table-3 shows that 68% children in flats (n=34/50) had access to the school classes via online. 40% children (n=20/50) were from Semi-flat houses who took school classes via online. And 4% children (n=2/50) in Raw houses had access to online school classes. Total 37.34% children (N=56/150) were able to take school classes via online.

Children of 32% (n=16/50) from flats did not have access to online school classes. 60% children (n=30/50) from Semi-flat houses could not attend school classes via online. And maximum 96% children (n=48/50) from the Raw houses did not have access to online school classes in lockdown. That means, out of the 150 mothers, a total of 62.67% mothers’ children (N=94/150) could not take online school classes during that time.

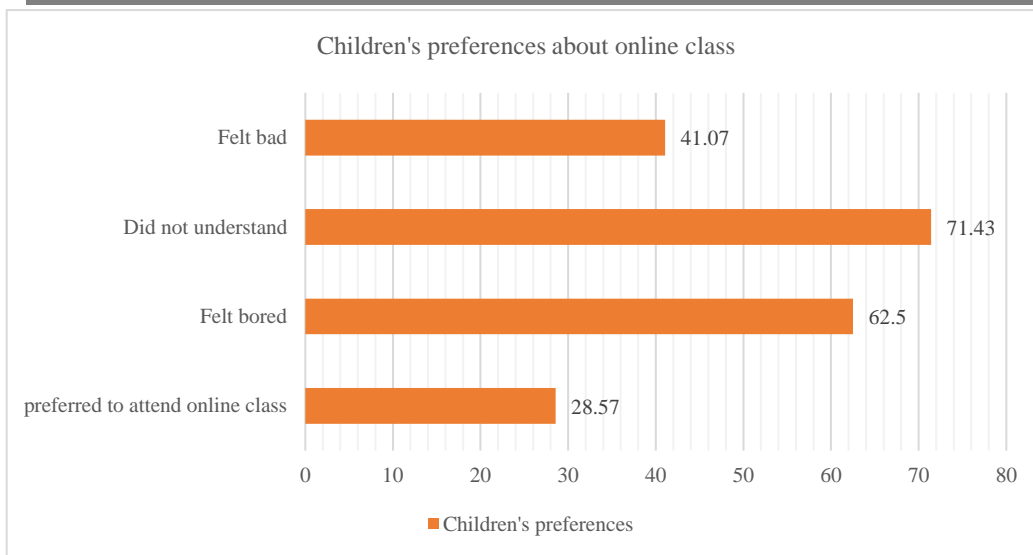


Figure-4: Children’s preferences about online classes.

As we have seen from table-3 that total 56 children were taking classes online, the following information was collected to understand whether they could understand the teachers reading online or not. Figure-4 shows that 28.57% children (n=16/56) among 56 children preferred online classes. 62.5% children (n=35/56) were bored in online class. Maximum 71.43% of children (n=40/56) did not understand online school classes and 41.07% children (n= 23/56) felt bad about online classes. They did not learn well via online. (Source: Fieldwork-survey)

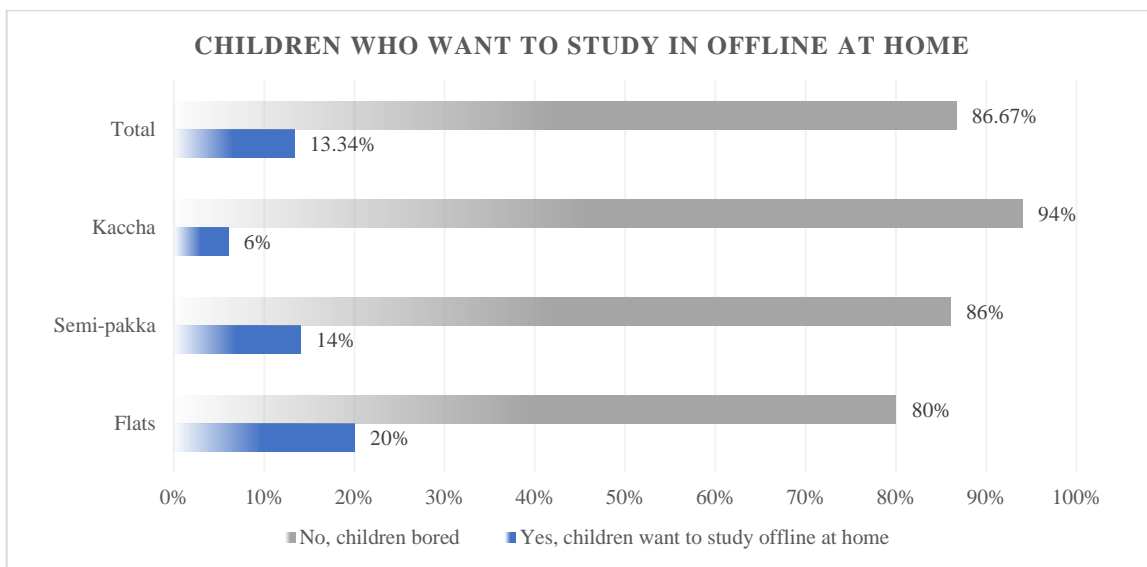


Figure-5: Offline Class or study at home of young children during lockdown.

In figure-5, according to a total of 13.34% mothers (N=20/150), their children were studying offline (blue part) at the lockdown. But most of the total 86.67% children (N=130/150) did not want to read then, they were bored (grey part of the above).

Among them, 20% mothers (n=10/50) said that their children used to sit and read in the lockdown (blue part). And the mother of the remaining 80% flat houses (n=40/50) told that their children did not want to read offline (grey part) at that time because they were bored. 14% Mothers of seven children from Semi-flat houses (n=7/50) said that their children wanted to study in lockdown (blue part) in school closures. And according to the remaining 86% mothers from Semi-flat (n=43/50) houses, their children felt bored when it came to study (grey). The children of the 6% mothers (n=3/50) of the Raw houses wanted to study at home (blue part). And the remaining 94% of mothers from Raw houses (n=47/50) said that their children felt bored (grey part) when asked to study. (Source: Fieldwork)

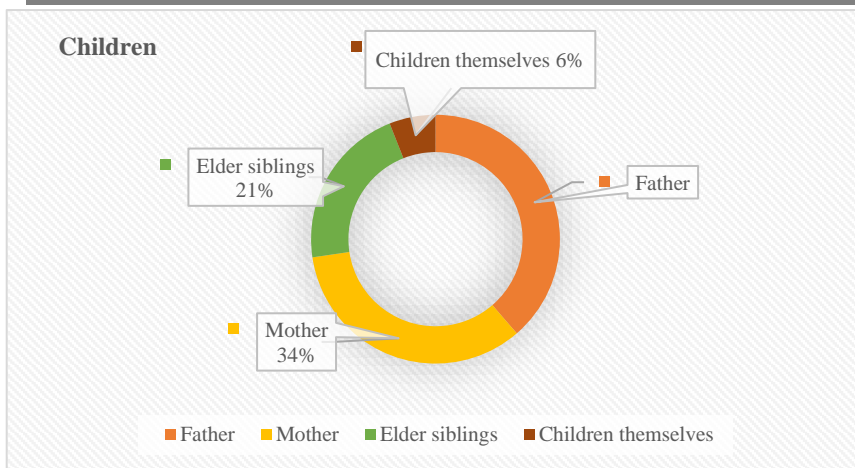


Figure-6: By whom children learned offline from.

A total of 38.67% young children (N=58/150) were taught offline by their fathers in the lockdown. 34% mothers (N=51/150) said that they used to teach their children offline themselves. A total of 21.34% children (N=32/150) said that their younger children read offline to their elder siblings. Only 6% mothers (N=9/150) said that their children studied on their own (From figure-6). (Source: Fieldwork- survey)

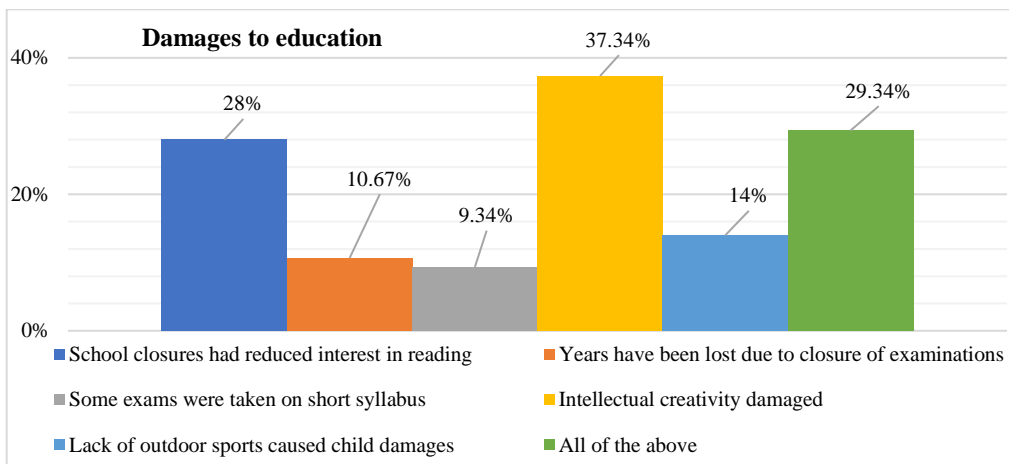


Figure-7: Mother’s idea of damage of children’s education.

Figure-7 shows that 28% of the mothers (N=42/150) in blue said that children’s interest in learning had decreased. Orange colour shows that 10.67% of mothers (N=16/150) informed that the academic year was the biggest loss in children’s education. According to 9.34% mothers in grey colour (N=14/150), the exam syllabus was cut too short which harmed the children’s academic performance. 37.34% of the mothers (N=56/150) in the highest number of yellow colours said that children’s intelligence or creativity was damaged due to the closure of schools. Sky blue colour presents that 14% of mothers (N=21/150) told that children were harmed due to lack of outdoor sports and school closures. And finally on the right side in green colour, 29.34% mothers (N=44/150) guessed that the lockdown had damaged children’s education in all the above ways. (Source: Fieldwork.)

Table-4: “The lockdown created a boundary for socialization of young children,” Mother’s views on the impact of lockdown on children’s education.

Mothers were	Numbers of respondent mothers			
	Flats	Semi-flat	Raw	Total
	n (%)	n (%)	n (%)	N (%)
Strongly Agreed	36 (72)	20 (40)	5 (10)	61 (40.67)

Agreed	33 (66)	28 (56)	11 (22)	72 (48)
Neutral	2 (4)	3 (6)	10 (20)	15 (10)
Disagreed	1 (2)	0	1 (2)	2 (1.34)
Total	n=50	n=50	n=50	N=150 (100)

Source: Fieldwork.

From table-4, a total of 40.67% mothers (N=61/150) strongly agreed with the statement that the lockdown created a barrier or boundary in children’s socialization. A total of 48% mothers (N=72/150) agreed with that. And total 10% mothers were neutral (N=15/150), but only 1.34% mother (N=2/150) of 2% flat house and Raw house parents (n=1/50) disagreed with this.

The development of moral education of children at home confinement which related to children’s well socialization:

The impact of religious education on children’s proper socialization is immense. Table-5 below shows the percentage of children who were interested to learn or not in home confinement.

Table-5: Religious activities and moral functions in lockdown.

Children’s religious education	Numbers of the respondent mothers			
	Flats	Semi-flat	Raw	Total
	n (%)	n (%)	n (%)	N (%)
Taught to maintain rules	15 (30)	17 (34)	17 (34)	49 (32.67)
Did not want to practice religion as that time was monotonous	45 (90)	33 (66)	23 (46)	101 (67.34)
Total	n=50	n=50	n=50	N=150 (100)

Source: Fieldwork.

Table-5 shows that a total of 32.67% mothers (N=49/150) taught their children to follow religious practices at that time. And 67.34% of the mothers (N=101/150) did not teach their children to observe religious practices, including 90% mothers in flat houses (n=45/50) because children felt monotonous to practice religion at home confinement which had prevented their moral education.

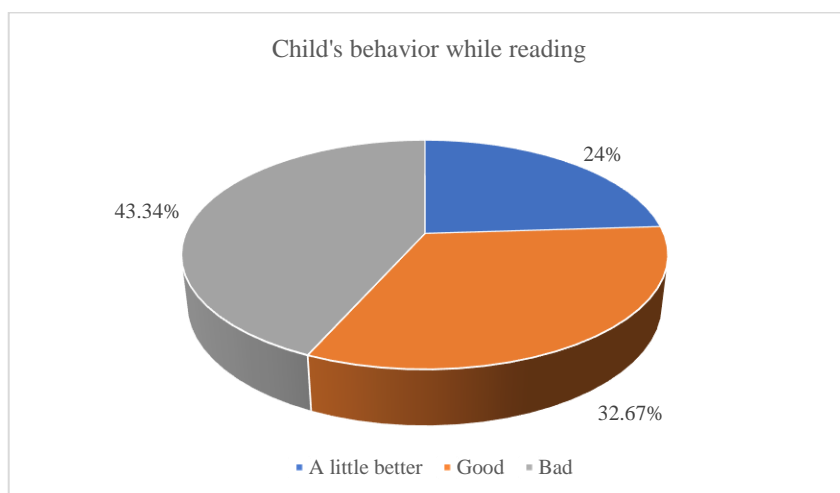


Figure-8: Children’s behaviour when told to read.

The figure-8 shows that spending too much time under home confinement had negative effects on children's behaviour. Their proper socialization status was observed through the changes in the behaviours during school closures in lockdown. The grey colour indicates that most of the children (around 43.34%) learned to misbehave. Only 24% of the children in the blue section above were able to maintain good manner and the orange section of the pie chart shows that 32.67% children were well behaved while reading despite feeling bored. (Source: Fieldwork.)

DISCUSSION

Children's educational levels were severely affected by the lockdown. Programs like school closures had greatly hampered their socialization process. Due to the COVID-19 virus epidemic, children's educational institutions in Bangladesh were closed in phases for almost two years since March 17, 2020 said by guardians. As schools were closed, children in cities were confined within the four walls at home. Maximova *et al.*, (2022) showed that during the home confinement, reduced activity and late waking up at morning had become a daily habit of children. It had more negative effects on children in the long run. Since the schools were closed, limitations of families in different areas make barriers to play an ideal role for a child's development. Children became addicted to mobile phones while confined at home. Mothers believed that obstacles to children's socialization were created due to the deterioration of the socio-economic status of their family. Fathers whose offices were open, faced great problems in commuting due to the closure of buses and had trouble going to work. *Many people came from far away with children and were stuck in their relatives' houses for a long time (case-4) due to the lockdown.* The children of the city could not go to other houses, particularly to their grandparent's house for almost two years. They spent time at home confinement. Therefore, keeping the public transport closed is effective in preventing the spread of the virus, but it caused social problems.

Children's education had disrupted: School closures in the lockdown made children less dependent on teachers for studying and more dependent on family's digital tools and resources to take online classes. This in turn accelerated the effects of social inequalities based on economic ability to children's educational achievement. Upper/middle class families were more familiar with academic knowledge, skills, and financially more viable to ensure the continuity of children's education than the working-lower-class families (Goudeau, 2021). *The institutional education is one of the main foundations of modern civilization which hampered in COVID-19 period because of long time of school closures (FGDs).* Total 73.34 percent of children could not learn properly at that situation. Parents thought that due to the non-opening of educational institutions, the proper socialization of children failed in the long period of lockdown. *Young children were supposed to learn social skills at an early age (FGDs). But the trauma caused by staying at home for one and half long year and becoming addicted to the internet created much more serious problems in children (case study-2, 4).* Total 53.34 percent of mothers informed that their children's interest in studies had decreased. Among them, 45% mothers were from flats who had informed that their children's interest in education decreased due to the school closures and decreasing the pressure of studying.

Less engagement in online classes: Although efforts were made to compensate some of the loss of educational life of children through distance education programs, most children did not participate in online learning programs because of not having the smart devices of most children. *All parents did not have smartphones. Even if some of them had, they did not have the ability to afford internet (FGD-2).* That is why, children from marginal families were further deprived of educational facilities due to lack of technological devices in that situation. According to (Goudeau, 2021) also, distance learning programs widened the gap among the social classes when schools were closed. Total 62.67% of mothers said that their children did not take any online classes. Total 71.67% of the mothers presented that their children were far behind in studies. Maximum of them (96%) were from Raw houses. So, it appears that parents could not afford smartphone devices due to their lowest socio-economic condition. Children who participated in distance learning, most of them did not like online classes. *Most children did not attend online classes. They also did not want to study in offline (Case-14).* Children did not like to attend online classes. Total 37.34% children had the opportunity to take online classes but 71.43 % of children did not understand readings properly via online. Total 62.5% of children felt bored to attend online classes. Also, mothers expressed their opinion that children felt annoyed about online classes. And many teachers were also not used to it. Total 38.34% teachers could not teach well online

due to inexperience. As a result, children were forgetting all the previous readings. Also, not all children (total 62.67%) had access to online classes. *And children receiving online class were also inattentive in classes (FGDs). So, parents felt that online classes were not appropriate as an alternative method for proper socialization of young children. There was lack of things to entertain little children in online classes which discouraged young children to attend online class (Case-7, FGD-1).* Even though 68% children of flats and 40% children of Semi-flat houses had the opportunity to participate in online classes, 41.07% children felt bad about online classes. A total of 62.5% of children felt bored. *Teachers could not hold children's attention well in online classes. During the online classes, children slept (FGDs).* Due to the economic problems of the family, the children were suffering from various adversities even on their education. Maximum of 96% children from Raw houses did not have access to online classes. Maximum of the poor children did not have their parents' smartphones to attend the online classes. Although some poor parents had phones, they could not afford to buy internet. As a result, most children from the Raw houses were deprived of the opportunity to take online education in the school closures.

Offline or direct study during lockdown: Around 86.67% children did not like to study offline in lockdown. Parents taught their children offline themselves but their children easily got bored. Other than writing some assignments, the school did not create pressure on children. That is why, 28% of mothers presented that school closures had reduced interest in studies. They did not study properly. And 10.67% of children lost a lot of academic time in studying in the lockdown. Total 65% of children reported that their schools, coaching, and private classes were remained closed for a long time. Total 63% of mothers said that their children did not attend any coaching classes as well. Also, *they did not study offline during the lockdown (FGDs).* Children said that they liked to go to school. But due to gradual closure of schools for a long time, the education of the most children from the Raw houses were uncertain as the scarcity of their family increased in the lockdown. *The children could not sit in classroom and they lost their focus in their studies, they played excess video games at that time (FGDs).* Not all children had direct contact with their teachers at that time. That is why, 63% of children were lagging in education. Total 63.34% children had no communications with their teachers in any medium. So, according to 37.34% mothers, children's intellectual creativity was reduced. Total 86.67% children did not want to study at home, even offline at home, they felt bored. They were more focused on video games. That is why, total 48% of mothers agreed that 'lockdown created a boundary for the socialization of young children.' Total 40.67% of mothers were strongly agreed.

Children used to do non-academic works more while staying at home: A total of 62.67% of children spent whole day watching excess cartoons on TV during the lockdown. Most of them (around 76%) were from flats. Total 32% of children used to play video games all day while confined at home to avoid going out. Total 44% of children said that they were playing video games because they had nothing to do at home confinement. Three-fourth of them (76%) were from flats and 64% were from Semi-flat houses. So, Children were far behind in studies, their interest in studies had decreased. Poor children did not have the device to attend online class, they had no coaching, they lost a lot of academic time, lost focus on studies, did not contact directly with teachers, they forgot all previous readings. Children were inattentive in online class, they slept while online class continued, did not want to study even offline properly, Intellectual creativity spoiled, felt annoyed at study time, could not learn properly, Teachers could not teach well via online, felt bored while learning, did not understand well through online classes.

CONCLUSIONS

Urban children could not go to school and play outside. So, they did not get the opportunity to be socialized. Maximum of the children researched were deprived from normal education. Lockdown created a boundary of their proper socialization. The young children were vulnerable to online learning difficulties as they were not acquainted with that. Their teachers were not expert in delivering convincing e-learning. Children from the low-income families had been deprived of the light of education. They were often victims of neglect and deprivation. The intellectual creativity of the young children was also hampered because they were too busy to spend excess time in screen through playing video games and watching TV which induced cultural impaired socialization. They had to extensively use smart phones and other electronic gadgets to attend online education at that time. As the study children were vulnerable in their socio-economic, educational support standing, they had to face detrimental effects of the epidemic on their proper socialization. The results of this study will help

to understand in advance the vulnerability and changes in the education of children during any such crisis moments in the future, such as during lockdown, and to take appropriate measures to minimize the barriers to their socialization.

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