# Psychosocial Effects of COVID-19 on School- Going Children in Khyber Pakhtunkhwa Pakistan

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**ABSTRACT.** Children are more vulnerable to natural and man-made disasters. The current study investigates the psycho-socio effects of COVID-19 on school-going children. The respondents of this study were selected through purposive sampling techniques. The data were collected from 384COVID-19 those affected families who has school-going children. Structured questionnaire uses as a tool for data collection. The data was analyzed through Chi-Square test. It is investigated that COVID-19 has significantly affected school-going children. School closure confined children to home and fear of the pandemic socially and psychologically affected them. School's closure confined them to family and their curriculum and co-curricular activities are affected. It is revealed that domestic violence has significantly increased which also affected children mental health. This study recommends that government and non-government organizations should provide psychological support to the children during the pandemic situations.

**KEYWORDS:** COVID-19; natural disaster; children psychological well-Being; children education; stress; horror

## INTRODUCTION

History has testified various epidemic diseases that reported numerous deaths and brought drastic changes in the lives of people. Coronavirus COVID-19 is a type of pandemic started from Wuhan city, Hubei Province, China, in December 2019 and gradually spread in all over the world. According to World Health Organization (WHO) "Coronavirus disease COVID-19 is an infectious disease caused by a new virus. Furthermore, it has been declared as a pandemic by the (WHO) on March 12, 2020". Worldwide, there are millions of people who have become the victims of COVID-19. It has affected every segment of society. The COVID 19 has different repercussions for the women, elders and children. Culture and economy of the different countries have significant influence on the responses of the people. It halted trade, production, tourism, and transportations at the national and global level (Zeren & Hizarci, 2020).

Coronavirus pandemic continues its march from Asia to across the world like a wildfire and create socio-economic disruptions globally (Bénassy, et al 2020). For the controlling of novel coronavirus, lockdown and strict traveling restrictions make a negative effect on stock markets beyond borders (Ayittey, et al 2020). Economically, every segment of society includes women and children (Isaksen, 2002). Moreover, due to lockdown social gathering and education activities of children are also suspended (Zhang, et al 2020). The virus has limited the social and physical contacts which badly affected the recreational activities of children (Brooks, et al 2020). The incidents of domestic violence have been increased and children also face aggression, feeling fear and stress during the pandemic inside family (Ho & Chee, 2020). Furthermore, schools were closed which highly affected children's social behavior specifically of poor family children. In addition, domestic violence and divorce cases increase due to lockdown and social isolation (Van Bavel, et al 2020).

During the pandemic, loss of attention, feelings of fear, and poor sleep have created mental health problems among children (Russoniello, et al 2002). Just like adults, children also psychologically react to disaster in the shape of anxiety, depression, and fear for longer periods of time. Children were found the most vulnerable group. Due to lockdown and schools being closed, the educational and physical activities of children are limited (Jiao et al., 2020). It creates a huge impact on children psychological well-being in the shape of depression, anxiety and difficulties in sleeping (Yeasmin, et al 2020).

Children face psychological problems such as feeling nervous and they also lose interest in daily activities. The impacts of natural disasters on children are noted in different ways. Because of the pandemic, the deaths of family members have created huge impact on children mental, physical and social well-being (Van Bavel, et al 2020). They face problems in sleeping habits for a long time after disaster.

Furthermore, a report based on 1036 Chines children indicates that between 6 years to 15 years of children falling in depression and anxiety during quarantine at home. After 34 days of COVID-19, a study dig-out that 23% of Chinese school-age children found depressive and 19% in anxiety symptoms (Orgiles, et al 2020). Likewise, it is also noted that in India majority of children suffered in worry, fear and helplessness condition as compared to non- quarantined children (Figueiredo et al 2021). Children are mentally not in a position to bear fear and uncertainty created by COVID-19. Similarly, a study shows in Italy that COVID-19 highly effected children behavioral and emotional well-being, as well it also makes difficulties for parents to understand their children's behavioral problems (Spinelli, et al 2020).

The same problems of social, economic and psychological also been documented in US (Kontoangelos, et al 2020). The US department of labor indicates that people lost around 26 million jobs only within five weeks of the pandemic. The effect of this severe economic condition is mostly seen on poor families and their children in the shape of food insecurity. In the same condition, more than 11 million children experienced food insecurity and lack of access to quality food which highly effects children's physical and mental wellbeing (Fry-Bowers, 2020). Moreover, in Pakistan, different surveys evaluate that because of lockdown and school closer majority of the young population was found more vulnerable to mental health issues (Aqeel, et al 2020). During the lockdown, children feel disappointed cause of missing their birthday parties, school game competitions and other recreational activities. Parents also noticed that their children started more regressive behaviors like feeling worried about pandemic situation, start fighting on small things, rude behavior, sleeping habit change and lack of self-control (Imran, et al 2020). (COVID- 19) pushed millions of people into low economic conditions i.e., Oxfam indicated that half a billion people could be pushed into poverty.

In addition, World Bank declared that 40 to 60 billion people could be pushed into extreme poverty (Akseer, et al 2020). In terms of any disaster and pandemic circumstances, those families and children are more affected and were already living with societal harms associated with poverty, homelessness, food insecurity, lack of basic resources and violence. These families have no resources to deal with any new disaster i.e. COVID-19. Therefore, they face more depression and anxiety (Masten & Frosso, 2020). Similarly, marginalized societies of children i.e. migrants, prisoners and the homeless are documented as more affected by the pandemic crises. The large number of children living in migrant camps, orphanage shelters and refugee centers overcrowded shelters are noticed highly effect because they don't have any pandemic prevention strategies like social distancing, hand wash facilities, pure drinking water, food and proper medical facilities. It is also observed that before COVID-19 pandemic, around 152 million of children engaged in child labor activities, while COVID-19 increase several million more children to this figure. With this process, the majority of children drop out of educational institutions and face many other consequences like child trafficking, sexual exploitation and deaths because of family poor economic conditions. After all, because of these effects, many families arrange their children's marriages against lump sum dowry which increase the rate of child marriages, exploitation of basic human rights and domestic violence (Ghosh, et al 2020).

However, quarantine is one of the major reasons to increase the possibility of psychological implications (Xiao, 2020). It is also observed that during pandemic people engage in risky behavior and virus spreads because of misinformation creates by social media (Pennycook, et al 2020). To reduce infection, the strategy of quarantine is followed, in which people are at social distance from one another and they are limited to specific place, but it may create gigantic psychological, social, financial and emotional effects (Nicola, 2020). Moreover, it is documented that in quarantine patents feel anger, fear, loneness, guilt and thinking that they would be stigmatized by contact with the people. In addition, heath workers are also reported more psychologically depressed and can be found feeling fear during their duties in pandemic situation because they have greater possibility of being infected. Likewise,

with the spreading of coronavirus in Japan, majority of population became psychologically affected, for instance, people's social behavior turned negative, use of alcohol and tobacco increased, anger and fear of illness are also investigated (Shigemura, et al 2020). It is also reported in Wuhan city, China that with first death of coronavirus and with social media continuously reporting the community, anxiety level increased (Lima, et al 2020). The epidemic has its impact on agriculture, food supply chain and jobs market which make stressful situation (Isaksen., Songstad., & Spissøy 2002). Likewise, the negative impact of widespread pandemic is also seen on social development and global security (Greenaway & Gushulak, 2017). The overall scope of this document brought into focus that the pandemic creates huge social and psychological impacts that would include feeling fear, loss in concentration, fear of social contact and nightmares (Pfefferbaum, & North, 2020). Those studies are carried out in the pandemic effected region and investigated the different psychological impact on the children.

Children during pandemic are facing more pressing issues in developing countries as compared to developed countries. In Pakistan approximately 50 percent of population live under poverty line. Majority people live in joint family and due to the large family number children often are not getting proper attention. Therefore, children's problem is more severe in Pakistani society because the state institutions have failed to support family and especially poor people to ensure the wellbeing of their children.

#### **METHOD**

#### **Relevant Theories**

Boeree (1997) described "Personality Theory" of Sigmund Freud. The author evaluates three types of anxieties in this theory. First one is Realistic anxiety which stands in the sphere of real fear. For example, any person who experienced fair in traumatic events is called as real fair. Second type of anxiety is Moral anxiety which based on self-threats i.e., someone do wrong act than that person internally feels shame, guilt and fear of punishment. Third type is called Neurotic anxiety which begins in nervous conditions because of losing self-control or rationality. Basically, anxiety begins with any threat which makes effects for long time. Same in the scenario of COVID-19 which greatly makes anxiety and stress circumstances in human life.

Ojose (2008) noted Jean Piaget theory of Child Development. In this theory, Piaget elaborates that children faced many problems in any disaster situation as compared to adults because children come in the most vulnerable group. Piaget evaluates that children behave differently in handling different conditions. Children learn everything from experiences and observations. In this theory, Jean Piagedocumentsnt that child cognitive development based on four stages. These are: the sensorimotor stage (from birth to 2 year). Under this stage child trying to develop interaction with the environment, making new idea that how society works. Second stage Pre-operationalonal stage (from 2 to 7 years) under this stage, child thinks and struggles to make connections with society people their third stage is the concrete operational stage (from 7 to 12 years). Under this stage a child starts to think logically about any situation and also start asking reason about any event. The last stage is Formal operational stage which starts from 12 years and onwards. In this stage a child start thinks more systematically about the society and the world. In the light of this theory, we can assume that children react defiantly in different situations. Further, it is also concluded that children behavior changes according to environment and people. The researcher noted same situation in this COVID-19 study.

Abela (2002) documented Becks Theory of Depression. In this theory, the author pointed out that depression, anxiety and stress occur to any person because of negative thoughts. Psychological disturbance begins in a common man because of society, thoughts and accidents. Once a person is affected by depression and anxiety affects people for a long period of time in the shape of fear. Back's theory illustrated that depressed people has three types of negative thinking for instance, firstly a person thinking about himself, than make thinking about and in last thinking about the future. When a person starts negative about himself so it effects on his mental, physical and moral wellbeing and also pushes him into future expressions.

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## **Research Method**

The present study investigates psycho-social implications of COVID-19 on school-going children in Pakistan. The quantitative paradigms were adopted for the completion of this study. Furthermore, the data was collected from COVID-19-affected' families to inquire about children's social and mental health. Respondents were selected through purposive sampling and a structured questionnaire was developed to collect information from the affected children's parents. Moreover, SPSS software used for the data analysis and based on this analysis, the result was drawn in the form of frequencies and percentages. Furthermore, the data was analyzed by Bi-Variate Chi-Square test and the association between independent and dependent variables was drawn to clearly investigate the impact of pandemic on school-going children.

## Significance of the Study

This article investigates the psycho-social impact COVID-19 on school-going children, especially in developing countries. The COVID-19 cause's serious social and health issues for the people and the national and global media have been highlighting their problems. During the COVID-19, psycho-social issues of the school-going children were mostly ignored especially in developing countries. It is revealed in this study that COVID-19 highly affected the psycho-social well-being of children. Closing schools, lockdowns confine children to home and make them afraid. It is investigated that because of coronavirus, the behavior, sleeping habits and study routine of the children were disrupted and they also feel fear in sleeping. It is also found that recreational centers have been closed and they become socially isolated as a result of the current pandemic situation. This study will give insights to parents, community and school and government administration to protect children mental health and make them engaged in safe environment in different recreational activities. It will also help us to reduce the impact of COVID-19 on children psyche and mental health.

## RESULT AND DISCUSSION

Table-1 shows the age of selected respondents, in which 24.3% are having the age between 31-40 years, 37% are having age between 41-50 years, 36.1% comes in the age of 51-60 years and the remaining 2.6% respondents are 60 years of age. Furthermore, this table indicates the number of schools going male children in selected families, where the majority of 73.2% families had 1 to 2 school-going male children, 18.0% had 3 to 4 children, 8.9% had 5 to 6 and neither family had above 6 school-going male children. In addition, the data in above table, also shows school-going female children. The obtained data revealed that large number of 45.8% families had 1-2 school-going female children, while, 15.9% had 3 to 4 female children, 12.0% of families had 5-6 children. Moreover, the above table revealed information regarding profession of the respondents. Majority of the respondents 57.2% were doing agriculture farming, 13.5% were businessmen, 8.5% were government servants and the remaining 20.8% respondents were unemployed. Having rural area background, large number of people of this area gave preference to farming activities. The data further documented about monthly income of respondents, therefore, 31.3% had monthly family income in the range of 15000-20000(Rps), followed by 36% that had 20001-25000 family income, 26.5% had above 25000 and only 6.2% had less than 15000 monthly family income. The table also pointed out that a greater number of 74.0% respondents' families were greatly affected coronavirus, where 25.0% families was medium affected and only 1.0% of respondent's families were slightly affected.

Table 1: Frequency and Percentage of Respondents Demographic Distribution

Respondent Age Group	31-40	41-50	51-60	Above 60
Frequency/%	94/24.3	141/37	139/36.1	10/2.6
School-Going Male Children	1-2	3-4	5-6	Above 6
Frequency/%	281/73.2	69/18.0	34/8.9	0/0
School-Going Female Children	Not Going	1-2	3-4	5-6

176/45.8 61/15.9 Frequency/% 101/26.4 46/12.0 **Profession of the Respondent** Unemployed Govt. servant **Business** Farming Frequency/% 80/20.8 32/8.5 52/13.5 220/57.2 Family Income Per Month (Pak. Rupees) Less 15000 15000-20000 20001-Above 25000 25000 138/36 Frequency/% 24/6.2 120/31.3 102/26.5 **Effect on Family** Highly Medium Slightly Frequency/% 284/74.0 96/25.0 4/1.0

This study investigates the perception of parents' respondents regarding Psycho-Social impact of COVID-19 on school-going children is limited to few statements as giving in table-2. Majority of the respondents (86.7%) agreed that COVID-19 effects on children education, while 30.2% respondents disagreed and 4.7% do not know about this. Similarly, a greater number of respondents 50.3% confirmed that during pandemic, children remain sad and gloomy, hence, only 45.3% disagreed and 4.4% undecided regarding this statement. Likewise, a big chunk of 48.7% respondents viewed that the children behavior become harsh with family members after school closing, 34.4% denied this view, and 16.9% were uncertain. Furthermore, majority of the respondents (56.2%) agreed that children academic performance is lower after COVID-19, 31.5% were against the view, whereas 12.2% do not have any idea. In addition, majority of the respondent (46.1%) were contradicted with the idea that children taking no interest in routine work or recreational activities, 32.0% were in the favor with this idea and the remaining 21.9% don't know about this. Majority of the respondents (64.1%) affirmed that children remain fearful about coronavirus disease, while 28.4% declined this statement and 7.6% respondents have no idea. Likewise, greater number of the respondents (47.4.0%) approved that because of COVID-19 children sleeping habit changed or feeling fear during sleeping, 38.0% denied the statement and the remaining 14.6% respondents were unclear about this idea. Moreover, a huge number of 81.2% respondents agreed with the statement that children are taking no interest in study or home work after school closing because of COVID-19, while 14.6% not agreed and only 4.2% were undecided about this.

Table 2: Parents Perception about Psycho- Social effects of COVID-19 on School-going Children

Statement	Agree	Disagree	Don't know
COVID-19 effects on children education	250 (86.7%)	116 (30.2%)	18 (4.7%)
Children remain sad and gloomy because of pandemic condition.	193 (50.3%)	174 (45.3%)	17 (4.4%)
Harsh behavior of children with family			
members after school closing	187 (48.7%)	132 (34.4%)	65 (16.9%)
Children academic performance is lower after COVID-19	216 (56.2%)	121 (31.5%)	47 (12.2%)
Taking no interest in routine work or recreational activities	123 (32.0%)	177 (46.1%)	84 (21.9%)
Children remain fearful about coronavirus disease.	246 (64.1%)	109 (28.4%)	29 (7.6%)
Children sleeping habits changed or feeling fear during sleeping.	182(47.4%)	146(38.0%)	56(14.6%)
Children taking no interest in study or home work	312 (81.2%)	56 (14.6%)	16 (4.2%)

Table-3 shows parents' responses which explained, association of independent variable; COVID-19 with dependent variable; COVID-19 effects on children education was highly significant (P=0.001). The association between children remain sad and gloomy because of pandemic situation observe non-significant (P=0.510) with COVID-19. Furthermore, COVID-19 has significant association (P=0.001) with dependent variable harsh behavior of children with family members after school closing. Likewise, the result indicates a highly significant association (P=0.000) between independent variable COVID-

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19 and dependent variable; children academic performance is lower after COVID-19. In addition, the association between COVID-19 and children taking no interest in routine work or recreational activities was noted non-significant (P=0.200). Further, the above data documented a significant association (P=0.000) of COVID-19 with children remain fearful about corona virus disease. Similarly, an association of independent variable COVID-19 and dependent variable; children sleeping habit changed or feeling fear during sleeping, found significant (P=0.000). The above data also revealed a highly significant association (P=0.000) between COVID-19 and children taking no interest in study or homework.

Table 3: Parents Perception about Psycho-Social effects of COVID-19 on School-going Children

Statement	Perception -	COVID-19		Total	Chi- Square
		Agree	Disagree	- Total	(P=Value)
COVID-19 effects on	Agree	235 (61.2)	15 (3.9)	250(65.1)	(P=0.001)
children education	Disagree	95 (24.7)	21 (5.5)	166 (30.2)	_
	Undecided	16 (4.2)	2 (0.5)	18 (4.7)	$(\chi^{2=} 13.049)$
Children remain sad	Agree	181 (47.1)	12 (3.1)	193 (50.3)	_ (p=0.510)
and gloomy because of	Disagree	150 (39.1)	24 (6.2)	174 (45.3)	_
pandemic condition.	Undecided	15 (3.9)	2 (0.5)	17 (4.4)	$(\chi^{2=} 5.959)$
Harsh behavior of	Agree	171 (44.5)	16 (4.2)	187 (48.7)	(p=0.001)
children with family	Disagree	110 (28.6)	22 (5.7)	132 (34.4)	
members after school	Undecided	65 (16.9)	0 (0.0)	65 (16.9)	$(\chi^{2=} 14.302)$
closing					
Children academic	Agree	200 (52.2)	16 (4.2)	216 (56.2)	_ (p=0.000)
performance is lower	Disagree	99 (25.8)	22 (5.7)	121 (31.5)	
after COVID-19	Undecided	47 (12.2)	0 (0.0)	47 (12.2)	$(\chi^{2=} 15.979)$
Taking no interest in	Agree	117 (30.5)	6 (1.6)	123 (32.0)	_ (p=0.200)
routine work or	Disagree	159 (41.4)	18 (4.7)	177 (46.1)	_
recreational activities	Undecided	70 (18.2)	14 (3.6)	84 (21.9)	$(\chi^{2=} 7.807)$
Children remain fearful	Agree	230 (59.9)	16 (4.2)	246 (64.1)	(p=0.000)
about corona virus	Disagree	103 (26.8)	6 (1.6)	109 (28.4)	
disease	Undecided	31 (3.4)	16 (4.2)	29 (7.6)	$(\chi^{2=} 72.204)$
Children sleeping habit	Agree	153 (39.8)	29 (7.6)	182 (47.4)	(p=0.000)
changed or feeling fear	Disagree	137 (35.7)	9 (2.3)	146 (38.0)	_
during sleeping	Undecided	56 (14.6)	0 (0.0)	56 (14.6)	$(\chi^{2=} 15.872)$
Children taking no	Agree	288 (75.0)	24 (6.8)	312 (81.2)	(p=0.000)
interest in study or	Disagree	50 (13.0)	6 (1.6)	56 (14.6)	_
home work	Undecided	8 (2.1)	8 (2.1)	16 (4.2)	$(\chi^{2=} 30.601)$

## **CONCLUSION**

The purpose of this study is to analyze the Psycho-social Effects of COVID-19 on School-going Children in Khyber Pakhtunkhwa, Pakistan. In this study, the data was collected from affected children's parents and were statistically analyzed. Furthermore, the research contains two types of statistical analysis (Uni-Variate and Bi-Variate) to explore the socio-psychological consequences of COVID-19 on children. After collecting data, it is concluded that the impacts of COVID-19 on school-going children were highly observed. Children remain sad and gloomy. Similarly, the behavior of children becomes harsh with family members after school closing. Moreover, Children remain fearful about coronavirus and taking no interest in study or home work. The statistical results also show that majority of children academic performance is lower after COVID-19 and feeling fearful. The study recommends that government and non-government organizations should provide clinical psychiatrics during the pandemic, especially for school-going children. Moreover, government and non-government organization should also provide a sociologist during the pandemic situations to create friendly environment and socially guide them and to involve them in educational and social activities.

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