

## **Effect Of 2<sup>nd</sup> Wave Of Covid -19 On The Learning Of Cognitive And Social Skills Of Children With Intellectual Disabilities: From The Lens Of Special Educationist Working In Special Schools Of Lahore City**

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### **Abstract**

The extensive spread of COVID -19 has impacted the school going children around the globe specially the children who are with special needs and it is very difficult for them to adjust their learning on online alternative mode of learning. This research paper targeted to find the effect of 2<sup>nd</sup> wave of COVID-19 on the learning of cognitive and social skills among children with intellectual disabilities who were not attending the schools so far. The population of the study was the special education teachers of children with IDD who were not attending the schools situated in Lahore city. By applying random sampling technique, the researchers have picked up a sample of 100 special educationists from public and private schools. A self-made close ended questionnaire (reliable at 0.83) was used for data collection. The data was analyzed and found that cognitive skills are the badly affected skill during 2<sup>nd</sup> wave of Covid-19 (mean 4.22). Conceptual skills (mean 3.97), Self-help skills (mean 3.88), and social skills (mean 3.32) are other highly affected abilities as reported by respondents. It is recommended that remedial classes with customized lessons for each child with IDD should be arranged in schools for covering the gaps in the learning of cognitive and social skills.

**Keywords:** Children with intellectual disabilities, cognitive skills, social skills, 2<sup>nd</sup> wave of COVID-19

## **Introduction**

Schools not only help children acquire social skills, but it also lays the groundwork for their education, and they also foster the development of the child's gifts and equip him with vital life skills (Burgess & Sievertsen, 2020). If children miss even one day of school, they will have a great deal to make up for to stay current with their classmates. At this point, it is not a question of missing a few days but of losing months of face-to-face learning because of the Coronavirus outbreak's educational repercussions. Globally, the COVID-19 pandemic has compelled governments to close schools to restrict the disease's spread. As a consequence of the worldwide closure of educational institutions, classroom teaching, examinations, and other assessments have been discontinued or substituted by online versions (Nasir & Hameed, 2021). According to the most current data from UNESCO's global monitoring of school closures, about 900 million children worldwide have been touched by school closures connected to COVID-19, including 46,803,407 Pakistani students in pre-primary through secondary and higher education (Education: From disruption to recovery, 2020).

COVID-19's extensive spread has impacted students of all ages. When you've been gone for months and are now adjusting to an online learning environment, acclimating might be challenging. Students with impairments are more sensitive to changes in their learning environment under these conditions (KhawlaH.Al-Mamari, SuhailAl-Zoubi, BakkarS.Bakkar, & AbedalbasitM.Al-Shorman, 2020). Their educational and health dangers are heightened by the inaccessibility of their course materials and the absence of a classroom environment, which puts them at greater risk.

## **Literature Review**

Pandemics such as the COVID-19 virus may motivate us to adopt new and better communication and e-learning technologies (Dhawan, 2020). COVID-19 emphasized the significance of digital connection for enterprises, governments, and society at large in a statement. It has instilled a fresh feeling of candor in the framework for digital inclusion. Many people were able to participate in the disaster through the internet; nonetheless, it deepened the digital gap, leaving 47% of the world's population without internet access. COVID will need more connection, cost savings, and digital capabilities (World Economic Forum, 2020). Pakistan, as a nation that is now trying to make ends meet, has to be more inventive and adaptable in its approach to natural catastrophes and the challenges they create. As a result, instructors are hesitant to make the transition from conventional classroom instruction to online education. Due to this pandemic, teaching has been forced to adapt to online education and learning. Technology will ultimately benefit education since it has the potential to bring forth some revolutionary innovations. Additionally, students who reside in places with limited internet access may struggle or be unable to take advantage of online learning possibilities. As a consequence, they are unable to complete the majority of their academic

responsibilities due to their family's poor or near-poverty income. The world's population was caught off guard by the pandemic's unexpected emergence. In Pakistan, it took between one and two months for the disease to reach its full intensity. Even though educational institutions were among the first to close, the transition to online education was delayed by their lack of readiness. This was a critical lesson for Pakistan's educational system: in the case of unforeseeable disasters, a contingency plan should always be in place.

Pakistan's educational system is being compelled to use online distance learning tools like Zoom, Google Class, and even Microsoft Teams. In the classroom, children with physical and mental disabilities are at a disadvantage. A lack of internet resources and the inability of parents to properly raise their children have left them feeling alone and hopeless. Worried about the potential damage to their already disadvantaged children, parents are taking action. Regardless of whether they have a handicap, all special needs children need the same level of attention and support from the state. Due to COVID-19, instructors have started to emphasize the need of building life skills such as resiliency and problem resolution with pupils. Teachers should teach students how to be resilient to recognize and reward their efforts when they are shown. It's also becoming more common to give instructional information through webinars and virtual conferences. It's common to utilize Zoom or Microsoft Teams for both corporate and educational purposes. To close the wealth gap, international cooperation based on people's ability to grasp technology is required. A rapidly changing world necessitates that Pakistan is well-equipped to cope with it. When teaching online, an educator must keep the following things in mind: content, connection, motivation, and mental wellness (Martin, 2020). The content of online distant education and learning must be entertaining and instructional to keep students engaged. Teachers need assistance in this from their educational institution as well as the government. Our professors' resemblances have been uncovered via online distance learning. To avoid this, thorough quality control must be implemented. Before using any e-learning platform, management should extensively examine its benefits and drawbacks. It's critical to have a clear idea of what you want to accomplish and how you'll get there. If appropriate study and inspection are done, no student should be left behind because of their connections, socioeconomic rank, ethnic origin, or geographic region.

### **Research objectives**

The main objectives were to:

1. Find out the effect of not attending schools on the adaptive skills of children with IDD during 2<sup>nd</sup> wave of COVID-19 in Punjab.
2. Examine the perceptions of special educationists about the effect of 2<sup>nd</sup> wave of COVID-19 on the learning of CIDD in cognitive and social skills.
3. Figure out the most effected adaptive skill of CIDD perceived by their teachers.
4. Study the significant differences in effected adaptive skills of CIDD based on gender and type of schools of their teachers.

### **Research questions**

Following were the research questions of the study.

1. What was the effect of not attending schools on the adaptive skills of children with IDD during 2<sup>nd</sup> wave of COVID-19 in Punjab?
2. What were the perceptions of special educationists about the effect of 2<sup>nd</sup> wave of COVID-19 on the learning of CIDD in cognitive and social skills?
3. What were the most effected adaptive skills of CIDD perceived by their teachers?
4. Were there any significant differences in adaptive skills of CIDD based on gender and type of schools of their teachers?

### **Research Methodology**

The survey method was used to carry out the investigation, which was descriptive in nature.

### **Population and sample**

The participants in the study consisted of teachers of children with Intellectual and developmental disabilities who were employed in the city of Lahore. The researchers utilized a random sampling approach to select the sample, which consisted of 100 instructors of students with intellectual and developmental disabilities who worked in private and governmental special education schools in the city of Lahore. Out of 100, 56 teachers were female, and 44 were male with an age range of 20 to 45 years, where majority (67%) falls in 20-to-30-year age bracket. Out of 100 Participants, 72 were from public special education institutes and 28 from private special education institutes. Further details of the 72 teachers of public sector, 46 were junior special education teachers, and 26 were senior special education teachers.

Qualification of the teachers varied from M.A Special education to PhD, with 34% had M. Phil.in special education, and only 1% had PhD in special education. 86% had teaching experience from 1to 10 years, 14% had more than 11 years' experience.

### **Research instrument**

Self-made close ended questionnaire with five-point Likert scale was constructed by researchers which were validated by the five senior special educationists. Researchers incorporated their suggestions in the tool and then pilot tested it. The reliability of the questionnaire was .83 at Cronbach Alpha.

### **Data collection and analysis**

Researchers have collected the data by applying many ways and tools such as personal visits, electronic mails, Google survey and WhatsApp. The return rate was 100%. The data was gathered and analyzed using both explanatory and inferential statistics, which were performed using SPSS.

### **Results and findings**

**Table No.1** Educational domain

Following skills related to cognition of child with IDD has been affected due to Covid-19 lockdown	S.D.A.	D.A.	N.	A.	S.A.	$\bar{x}$
Memory	1%	5%	5%	43%	46%	4.28
perceptive abilities	00	2%	7%	54%	37%	4.26
reasoning abilities	00	3%	9%	52%	36%	4.21
comprehension skill	1%	4%	9%	53%	33%	4.13
<b>Average Mean</b>						4.22

Table 1 shows that different skills related to cognition of child with IDD have been affected due to Covid-19 lockdown. 88% of the participants reported that memory of children has been affected during 2<sup>nd</sup> wave of Covid-19. Perceptive abilities (mean 4.26), and reasoning abilities (mean 4.21) are other affected abilities as reported by respondents.

**Table No.2** Self-help skills

Following self-help skills of child with IDD has been affected due to Covid-19 lockdown	S.D.A.	D.A.	N.	A.	S.A.	$\bar{x}$
Eating behavior		11%	22%	36%	31%	3.87
Toilet training	20%	29%	14%	46%		3.66
Dressing and undressing	1%	18%	11%	49%	21%	3.71
Sitting manners	1%	5%	5%	43%	46%	4.28
<b>Average Mean</b>						3.88

Table 2 shows that self-help skills of child with IDD have been affected due to Covid-19 lockdown. 89% of the participants reported that sitting manners of children has been affected during 2<sup>nd</sup> wave of Covid-19. Eating behavior (mean 3.87), dressing and undressing (mean 3.71) are other affected abilities as reported by respondents.

**Table No. 3** Conceptual skills

Following conceptual skills of child with IDD has been affected due to Covid-19 lockdown	S.D.A.	D.A.	N.	A.	S.A.	$\bar{x}$
Ability to follow instructions for writing		2%	7%	54%	37%	4.26
Reading abilities		3%	9%	52%	36%	4.21
Money concept	1%	4%	9%	53%	33%	4.13
Understand the direction when pointed		11%	22%	36%	31%	3.87
Following directions		20%	14%	46%	20%	3.66
Concept of downward & upward	1%	18%	11%	49%	21%	3.71

Concept of time & space	9%	16%	60%	15%	3.81
<b>Average Mean</b>					<b>3.97</b>

Table 3 shows that conceptual skills of child with IDD have been affected due to Covid-19 lockdown. 91% of the participants reported that ability to follow instructions for writing is the badly affected skill during 2<sup>nd</sup> wave of Covid-19. Reading abilities (mean 4.21), Money concept (mean 4.13) are other highly affected abilities as reported by respondents.

**Table No. 4** Performance in Social perspective

Following social skills of child with IDD has been affected due to Covid-19 lockdown	S.D.A.	D.A.	N.	A.	S.A.	$\bar{x}$
Socialization	16%	10%	20%	31%	23%	3.35
Ability to exchange information with others	8%	18%	29%	32%	13%	3.24
Ability to express emotions	9%	16%	22%	39%	14%	3.33
Ability to show nonverbal expression	12%	19%	25%	29%	15%	3.16
Ability to show verbal expression	12%	24%	21%	30%	13%	3.08
Using body language appropriately	11%	17%	20%	37%	15%	3.28
Play imagination	8%	13%	27%	39%	13%	3.36
Ability to develop friendship	10%	10%	14%	52%	14%	3.50
Reciprocal communication	9%	12%	9%	57%	13%	3.56
<b>Average Mean</b>					<b>3.32</b>	

Table 4 shows that social skills of child with IDD have been affected due to Covid-19 lockdown. 70% of the participants reported that reciprocal communication is the badly affected skill during 2<sup>nd</sup> wave of Covid-19. Ability to develop friendship (mean 3.50), ability to express emotions (mean 3.33) and ability to use body language appropriately (mean 3.28) are other highly affected abilities as reported by respondents.

**Table No. 5** Intrapersonal skills

Following interpersonal skills of child with IDD has been affected due to Covid-19 lockdown	S.D.A.	D.A.	N.	A.	S.A.	$\bar{x}$
Showing self-expression in daily routine	6%	22%	25%	36%	11%	3.24
Controlling emotions	8%	18%	29%	32%	13%	3.24
Self-discipline	9%	13%	35%	33%	10%	3.22
Behaving patiently	9%	18%	39%	20%	14%	3.12
Self-confidence	11%	24%	31%	21%	13%	3.01

overcome boredom	10%	17%	33%	26%	14%	3.17
<b>Average Mean</b>						<b>3.17</b>

Table 5 shows that interpersonal skills of child with IDD have been affected due to Covid-19 lockdown. 47% of the participants reported that showing self-expression in daily routine is the badly affected skill during 2<sup>nd</sup> wave of Covid-19. Controlling emotions (mean 3.24), self-discipline (mean 3.22), overcome boredom (mean 3.17) and behaving patiently (mean 3.12) are other highly affected abilities as reported by respondents.

**Table No. 6** Overall means of all domains

<b>Domains</b>	$\bar{x}$
<b>Educational domain</b>	
Cognitive skills	4.22
Self-help skills	3.88
Conceptual skills	3.97
<b>Average Mean</b>	<b>4.02</b>
<b>Social domain</b>	
Social skills	3.32
Intrapersonal skills	3.17
<b>Average Mean</b>	<b>3.25</b>

Table 6 shows a comprehensive picture of the skills of child with IDD affected due to Covid-19 lockdown. Participants reported that cognitive skills are the badly affected skill during 2<sup>nd</sup> wave of Covid-19 (mean 4.22). Conceptual skills (mean 3.97), Self-help skills (mean 3.88), and Social skills (mean 3.32) are other highly affected abilities as reported by respondents.

**Table No. 7** Independent samples t -test based on gender

<b>Gender of the teachers</b>	$\bar{x}$	<b>t</b>	<b>Df</b>	<b>Sig</b>	<b>MD</b>	<b>Std. Error Difference</b>
Female	50.41	1.296	98	.069	2.456	1.895
Male	47.95	1.244	74.167		2.456	1.975

Table 7 displays that the p-value is .069 which is greater than 0.05 at 95% confidence interval. It indicates that there is no significance difference in opinion of male and female teachers of students with IDD regarding effect of COVID-19 lockdown on social and educational performance of students with IDD.

## **Discussion**

The present study intended to identify the effect of COVID-19 2<sup>nd</sup> wave on the cognitive and social skills of children with IDD. The result of the present study showed that educational performance regarding cognition such as comprehension skills, perceptive and reasoning abilities of children with IDD have been affected due to Covid-19 lockdown. A similar result is reported by Constantino et al. (2020). They stated that the pandemic compels efforts to replace classroom learning with a more digital platform, but the emotional and physical health of millions of out-of-school youngsters is jeopardized. This alludes to the possibility that extended confinement of youngsters at home may have mitigated the negative impacts (Constantino, Sahin, Piven, Rodgers, & Tschida, 2020). School absenteeism has been associated with a reduction in physical activity, an increase in the use of digital devices, which results in more screen time, irregular sleep patterns, and an increased proclivity to overeat, which results in weight gain (Wang, et al., 2020).

It is also found in the present research that most of the child with IDD who had previously learned certain self-help skills before lockdown, seemed to have forgot the skills or lost competence on it. This includes their eating behavior, dressing or undressing, toilet training, sitting manners etc. George (2020) concludes that when combined with a social lockdown in which children are not able to go outdoors or contact other children their age, the repercussions are severe. In Pakistan, where a significant section of the population lives in poverty and substandard housing, the impacts are amplified (George, 2020). Over half of the nation's children, particularly those living in rural regions, lack access to digital playtime. It spreads more rapidly in metropolitan areas with a high proportion of school-aged children (Courtenay & Perera, 2020).

This study also indicated the consequences of lockdown on social skills of children with IDD. It was found that after 2<sup>nd</sup> wave children with IDD tend to exchange information rarely with others, become less social, has limited reciprocal communication and face difficulty in emotional or verbal expression. According to Constantino, et al. (2020) while these pupils will be unable to learn, they will also experience significant psychological consequences. For children, stressors such as being cooped up for extended periods, fear of contracting a virus, frustration or anxiety at school or home as a result, or isolation from friends or teachers due to financial difficulties can have even more detrimental and long-lasting effects on their development (UN, 2020). Children with intellectual disabilities or other mental disabilities are more vulnerable to COVID-19's psychosocial impacts than their peers who are not impaired. Being isolated from the rest of the world and forced to learn only using technology may be very difficult for children with physical limitations. The same might be argued in the case of IDD children whose social development has been harmed by COVID-19 (UNICEF, 2020).

## **Conclusion**

This study concluded that due to not attending school because of 2<sup>nd</sup> wave of COVID -19 the cognitive, self-help skills conceptual and social skills of children with intellectual disabilities were badly affected and there was no significant difference regarding deficits in these skills perceived by both male and female teachers.



## Recommendations

Based on conclusion following recommendations were made:

- As a result of COVID-19 pandemic schools specially for IDD children should give training to parents and children about the use of electronic gadgets like android cell phones, laptop, and personal computers so the children with IDD continue their learning.
- Teachers should control the pace of lecture according to the attention span, focus attention and motivational factors of children with IDD.
- Remedial classes with customized lessons for each child with IDD should be arranged in schools for covering the gapes in the learning of cognitive and social skills.

## References

- Bank, W. (2021). Learners with Disabilities and COVID-19 School Closures : Findings from a Global Survey Conducted by the World Bank's Inclusive Education Initiative. Retrieved from <https://openknowledge.worldbank.org/handle/10986/36326>
- Constantino, J., Sahin, M., Piven, J., Rodgers, R., & Tschida, J. (2020). The impact of COVID-19 on individuals with intellectual and developmental disabilities: clinical and scientific priorities. *Am J Psychiatry*, 177(11), 1091-1093. doi:10.1176/appi.ajp.2020.20060780
- Courtenay, K., & Perera, B. (2020). COVID-19 and people with intellectual disability: impacts of a pandemic. *Ir J Psychol Med*, 37(3), 231-236.
- Dhawan, S. (2020). Online Learning:A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology*, 1-18.
- George, S. (2020). In the world's fifth most-populous country, distance learning is a single television. Retrieved from [https://www.washingtonpost.com/world/asia\\_pacific/pakistan-coronavirus-educationteleschool/2020/05/18/9ee159a8-8](https://www.washingtonpost.com/world/asia_pacific/pakistan-coronavirus-educationteleschool/2020/05/18/9ee159a8-8)
- GWang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet*, 395, 945-947. doi:10.1016/s0140-6736(20)30547-x
- KhawlaH.Al-Mamari, SuhailAl-Zoubi, BakkarS.Bakkar, & AbedalbasitM.Al-Shorman. (2020). The impact of e-Learning during COVID-19 on teaching daily living skills for children with disabilities. *Journal of e-learning and knowledge society* , 17(3), 135-145.
- Nasir, S., & Hameed, M. (2021). Impact of COVID-19 on the Learning Processes of Typically Developing and Special Needs Students in Pakistan . *Asian Journal of University Education (AJUE)*, 17(3).
- S Burgess, & Sievertsen, H. (2020). Schools, skills, and learning: The impact of COVID-19 on education. *VOX*. Retrieved from <https://voxeu.org/article/impact-covid-19-education>
- UN. (2020). Policy Brief: A Disability-Inclusive . United Nations .
- UNESCO. (2020). Education: From disruption to recovery. UNESCO. Retrieved from <https://en.unesco.org/covid19/educationresponse>

UNICEF. (2020). COVID-19 response: Considerations for Children and Adults with Disabilities.  
Retrieved from [www.unicef.org/disabilities/files/COVID-19\\_response\\_considerations\\_for\\_people\\_with\\_disabilities\\_190320.pdf](http://www.unicef.org/disabilities/files/COVID-19_response_considerations_for_people_with_disabilities_190320.pdf)