

# Parents' Perception about the Effects of COVID-19 on Children with and without Disabilities based on Multiple Demographic Variables

Dr. Mariam Alnaim<sup>1</sup>, Dr. Yousef Busaad<sup>2</sup>

<sup>1</sup>Asst. Prof., Special education department, Imam Abdulrahman Bin Faisal University,  
Saudi Arabia, mfaalnaem@iau.edu.sa

<sup>2</sup>Asst. Prof., Special education department, Imam Abdulrahman Bin Faisal University,  
Saudi Arabia, yabusaad@iau.edu.sa

## Abstract

This study aimed to explore parents' perception about the effects of COVID-19 on children with and without Disabilities based on Multiple Demographic Variables. The study followed the mix method research, and the study sample comprised 310 Saudi parents of children with and without disabilities. Results of this study indicated that there were statistically significant differences in the effects of the Covid-19 epidemic on the academic aspect attributed to the sex variable. The study also found that there were more obvious serious psychological effects for the age group 12-14, while the social and academic effects were more severe for the age group less than 6 years old. In addition, qualitative data indicate that the most important positive effects of the Covid-19 pandemic from the point of view of parents are the increase in the duration of family discussion sessions and the flexibility of teaching times. The study recommends conducting more research related to knowing the extent of the effects of the Covid-19 epidemic on normal individuals and people with disabilities to reach successful solutions that mitigate these effects on children when similar crises occur.

**Keywords:** COVID-19, disabilities, Saudi Arabia, Special education, Academic, Psychology, Social effects.

## I. Introduction

This study is part of an in-depth study, in which the results of the impact of the COVID-19 pandemic on the psychological, social and psychological aspect of normal children compared with children with disabilities were reviewed in a previous study. Here we review the rest of the results that show the impact of the COVID-19 pandemic on the psychological, social and psychological aspect of normal and disabled children, based on a set of variables.

The implementation of some measures (e.g. school closure and social distancing) that was taken by most of countries around the world to manage the spread of the COVID-19 pandemic has affected millions of children with and without disabilities (Zhang et al., 2020), as the closure of schools, universities and institutes disrupted education for more than 1.5 billion students, which constitutes more than 90% of

the students in the world until May 2020 (Policy Brief: COVID-19, 2020)

It should be noted that the impact of the COVID-19 pandemic will have direct impacts on the learning of the most vulnerable students, such as students with disabilities, cannot obtain the specialized educational services they need (Policy Brief: COVID-19, 2020). Students with disabilities in light of such global crises receive few and insufficient services (Empowering Students with Disabilities, 2020), such as physiotherapy services, basic care, and education that requires assistive technologies that are often only available in schools (McClain-Nhlapo, Crouch, Verma, & Secretariat, 2020), in addition to losing social contact such as playing with friends due to the interruption of education in schools (Empowering Students with Disabilities, 2020), which may affect their mental health negatively (Zhang et al., 2020).

This does not mean that the matter is better for typical students, which calls for verifying the extent of the impact of this pandemic on typical individuals in general and individuals with disabilities in particular with regard to the academic, psychological and social aspect (Zhang et al., 2020). Therefore, we must review and study how we can provide equal opportunities for all individuals, regardless of their circumstances and intellectual levels, whether they are typical individuals or individuals with disabilities (McClain-Nhlapo et al., 2020).

Therefore, the importance of this comparative study, which focuses on knowing the effects of the COVID-19 pandemic on typical individuals and individuals with disabilities from points of view of their parents on multiple demographic variables; In order to try to reduce the negative effects resulting from this crisis, and to educate families and families so that they are able to consciously and responsibly manage similar crises, in addition to ensuring the minimum psychological stability for their children during times of similar global crises.

### 1.1. The study questions:

1. What are the perceptions of parents regarding the impact of the COVID-19 pandemic on their children, with and without disabilities based on multiple demographic variables such as (child's gender- age- the child's family income level- the type of housing the child lives in)?

2- What are the positive and negative effects of the COVID-19 epidemic on the psychological, social, and academic aspect of your child that were not previously mentioned in the questionnaire?

3. What are the methods that have been followed to mitigate the negative impact of the COVID-19 epidemic on the psychological, social, and academic aspect of your child?

### 1.2. Literature review

The world is witnessing significant and serious effects of the COVID-19 pandemic and its mutated strains on various aspects, such as the health, economic, political, and other aspects. In this section, the focus will be on some scientific studies that dealt with the effects of the COVID-19 pandemic on normal children and people with disabilities from an educational and psychological point of view. McCormack et al., (2020) aimed to examine associations between parental anxiety related to the spread of COVID-

19 and physical activity and inactivity among school-aged children (5-17 years) in Canada, where a random sample of 345 parents of at least one child of school age completed an online questionnaire. Nearly a third of parents (35.7%) reported being very concerned about the spread of COVID-19.

The aim of the study carried out by (Morgül et al., 2020) was to find out the psychological impact of the COVID-19 pandemic on primary school children and their families living in the United Kingdom. The study sample consisted of 927 caregivers of children aged 5 to 11 years by responding to an online survey. Caregivers reported changes in their children's emotional state and behavior during home quarantine, with boredom being the most frequently reported symptom in children (73.8%), followed by loneliness (64.5%) and frustration (61.4%). Insomnia, anger, anxiety, sadness, and the possibility of arguing with the rest of the family were reported by more than 30% of caregivers.

The study that conducted by Sepúlveda-Loyola et al (2020) aimed to conduct a narrative review to find out the effect of social isolation resulting from the spread of COVID-19 epidemic on the mental and physical health of the elderly, patients, caregivers and health practitioners. The 41 documents are included in this narrative review, with 20,069 respondents (58% women) from Asia, Europe, and America. The 31 articles and 10 recommended that the effect of distancing and social isolation on mental or physical health. The main outcomes reported were anxiety, depression, poor sleep and physical lethargy during the isolation period (Sepulveda-Loyola, Rodriguez-Sanchez, Pérez-Rodríguez, Ganz, Torralba, Oliveira, & Rodríguez-Mañas, 2020).

Moreover, among the many surveys conducted on average students around the world, a survey reported that 83% of young respondents supported that COVID-19 epidemic has affected their mental health, mainly due to school closures, loss of routine, and restricted social contacts (Minds, 2020).

Finally, a study conducted by Umucu and Lee (2020) aimed to describe the levels of stress resulting from the spread of the **COVID-19 epidemic** and the appropriate coping mechanisms, and whether careful adaptation to this epidemic is related to the ability to live in well-being in people suffering from chronic

diseases and self-reported disabilities. This study was carried out by means of a survey design; the total number of participants reached 269 persons suffering from disabilities and chronic diseases. The results of the study showed that active coping, the use of emotional support, humor, and the practice of religious rituals were positively associated with the ability to live in well-being after controlling demographic and psychological characteristics. It was also found that self-blame and denial were negatively related to degrees of ability to live in well-being.

By reviewing previous studies, it becomes clear the importance of conducting the current study to identify the effects of the Covid-19 pandemic on normal children and those with disabilities

according to some variables such as: disability, gender, age, grade, number of siblings, family economic level, type of housing) in the Kingdom of Saudi Arabia Saudi Arabia in order to prepare effective plans and strategies to better manage similar disease crises in the future.

## 2. Methodology

### 2.1. Sample of the study

The study population consisted of all parents of typical individuals and individuals with disabilities in the Kingdom of Saudi Arabia. The sample of the study was 206 parents of typical individuals and 104 parents of individuals with disabilities.

**Table (1) The demographic distribution of the study sample according to demographic variables**

Variable	Repetition	Percentage	Variable	Repetition	Percentage
		<b>Type</b>		<b>Gender</b>	
Typical	206	66.5	Male	209	67.4
With a disability	104	33.5	Female	101	32.6
Total	310	100.0	Total	310	100.0
			<b>Number of family members</b>		
<b>Age</b>			3-1 individuals	60	19.4
Under 6 years old - preschool	55	17.7	5-4 individuals	139	44.8
6-11 years old - primary school	115	37.1	7-6 individuals	87	28.1
12-14 years old - intermediate school	61	19.7	8- individuals or more	24	7.7
115-18 years old - High school	79	25.5	Total	310	100.0
Total	310	100.0			
			<b>The type of housing</b>		
<b>Household's monthly income</b>			House (villa)	160	51.6
Less than 5000 riyals	16	5.2	Owned apartment	150	48.4
From 5,000 to less than 10,000 riyals	72	23.2	Total	310	100.0
From 10,000 to 15,000 riyals	90	29.0			
More than 15,000 riyals	132	42.6			
Total	310	100.0			

## 2.2. Tool of the study

The study used a questionnaire to collect data from the sample, as the questionnaire consisted of 4 main parts. The first part focused on the primary data of the study sample according to the variable of the type of the child's disability, if any. While the second part focused on the effects of COVID-19 epidemic on the psychological aspect through 13 paragraphs, and in the third part the focus was on the effects of COVID-19 epidemic on the social aspect through 11 paragraphs, and in the fourth part the focus was on the effects of epidemic on the academic aspect through 11 paragraphs as well. Likert's pentagonal gradient was also used to answer the paragraphs (extremely high, high, medium, low, not applicable at all).

Ethical issues have also been considered in this type of research by assuring the participants in the study that all data will be kept completely confidential and will only be used for the purposes of scientific research.

## 2.3. Validity and reliability of the questionnaire

In order to ensure the apparent validity of the questionnaire, the researchers submitted it to a group of academic experts specialized in the field of education, psychology and in the field of special education for judgment in terms of clarity, suitability, and its suitability to the topic. Considering the feedback obtained from the arbitrators, some of its paragraphs have been amended and become composed of (37) paragraphs in its final form. The correlation

coefficient (Pearson) was also calculated to validate the internal consistency of the study tool. The reliability of the questionnaire was confirmed by calculating the Alpha Cronbach coefficient.

After preparing the initial form of the scale it was presented to 10 academic experts specializing in the fields of education, psychology, and special education from several different universities such as: King Saud University, King Faisal University, and Imam Abdul Rahman bin Faisal University, in order to express their views on the validity of the content and the relevance of the phrases to the scale and their suitability to measure what they were intended to measure, and their degree of clarity, and then the appropriate amendments were proposed, and (80%) standard was adopted to indicate the validity of the paragraph. Based on the opinions of the experts, some paragraphs were modified in terms of wording to increase their clarity, and other paragraphs were deleted due to their similarity and proximity to other paragraphs, or their lack of suitability to the dimension to which they belong. Finally, the scale consisted of (45) items, and after the amendment, the scale consisted of (35) items distributed in three main dimensions.

To calculate the reliability of the study tool, the researchers applied the scale on an exploratory sample of (41) individuals from out aspect the study sample, and they used Cronbach's alpha coefficient to calculate the reliability of the sub-dimensions and the total score, as in Table (2).

**Table (2) Reliability coefficients for the study tool items using the Cronbach's alpha test (n = 41)**

Variables	Paragraphs	Cronbach's alpha coefficient
psychological aspect	13	0.854
Social aspect	11	0.787
Academic aspect	11	0.747
The tool as a whole	35	0.836

The values of the Cronbach alpha coefficient ranged from (0.747 - 0.854), and with a total level of (0.836). The values of the coefficient of reliability are acceptable for the purposes of this study. The calculation of coefficients (Cronbach's Alpha) was used for the study sample (n = 310), and Table (3) shows the test results.

## 2.4. Ethical consideration

This research was carried out after obtaining approval from institutional Review Board from Imam Abdulrahman bin Faisal University. The responses were obtained after the sample agreed to participate, to maintain the confidentiality of the participants' information,

and to use the information for scientific research purposes only.

### 3. Data analysis and discussion

To identify the significance of the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspect according to different demographic variables, the Independent Sample T-test and One-Way

ANOVA were used, in addition to using the Scheffe test for dimensional comparisons, where the results were as follows:

#### 3.1. Gender

The Independent Sample T-test was used to identify the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspect attributed to the gender, and Table (3) shows this:

Source of variance	Gender	Number	Mean	S. D	Degrees of freedom	(t)	Sig
The impact of COVID-19 epidemic on the psychological aspect	Male	209	3.42	0.69	308	0.242	0.809
	Females	101	3.40	0.77			
The impact of COVID-19 epidemic on the social aspect	Male	209	2.95	0.65	308	-	1.594
	Females	101	3.07	0.62			
The impact of COVID-19 epidemic on the academic aspect	Male	209	3.37	0.70	308	-	2.084
	Females	101	3.55	0.70			
Total	Male	209	3.25	0.52	308	-	1.483
	Females	101	3.34	0.51			

\*: Statistically significant at the significance level (0.05) or less.

It is clear from the results shown in table (3) that there were statistically significant differences at the significance level (0.05) in the effects of the Covid-19 epidemic on the academic aspect, attributed to the gender variable, where the value of the statistic (t) was (-2.084), which is a significant value at the significance level (0.05) or less. It was found that the source of the differences in the impact of the Covid-19 epidemic on the academic aspect was in favor of females, with a mean higher than the mean of males.

The result of the presence of statistically significant differences in the impact of the Covid-19 epidemic on the academic aspect in favor of females can be explained by the fact that females were more committed to distance learning instructions, while dropout rates may be greater among males.

This is confirmed by a study carried out by (Al-Badri and Al-Kindi, 2019), which indicated that one of the most important reasons for the scientific superiority of females over males is that females were more disciplined in listening and adhering to instructions, and in contrast male dropout rates are significantly higher.

It was found from the results shown in Table (3) that there were no statistically significant differences at the significance level ( $0.05 \leq \alpha$ ) in the level of the effects of the Covid-19 epidemic on the psychological and social aspects, and the overall measurement was attributed to the gender variable, where the values of the statistic (t) reached (0.242), -, -1.594, 1.483), which are not significant at the significance level (0.05) or less. The differences between the arithmetic averages, if any, did not reach the level of statistical significance.

		Number	Mean	S.D
The impact of COVID-19 epidemic on the psychological aspect	Under 6 years old - pre-school	55	3.44	0.74
	6-11 years old - elementary school	115	3.25	0.66
	12-14 years old - intermediate school	61	3.57	0.69
	15-18 years - high school	79	3.53	0.76
	Total	310	3.42	0.72
The impact of COVID-19 epidemic on the social aspect	Under 6 years old - pre-school	55	3.23	0.71
	6-11 years old - elementary school	115	2.88	0.63
	12-14 years old - intermediate school	61	3.02	0.58
	15-18 years - high school	79	2.95	0.64
	Total	310	2.99	0.64
The impact of COVID-19 epidemic on the academic aspect	Under 6 years old - pre-school	55	3.72	0.79
	6-11 years old - elementary school	115	3.37	0.68
	12-14 years old - intermediate school	61	3.32	0.61
	15-18 years - high school	79	3.39	0.70
	Total	310	3.43	0.70
Total	Under 6 years old - pre-school	55	3.46	0.61
	6-11 years old - elementary school	115	3.17	0.49
	12-14 years old - intermediate school	61	3.30	0.47
	15-18 years - high school	79	3.29	0.51
	Total	310	3.28	0.52

### 3.2. Age (school stage)

Means and standard deviations were extracted, and the One-Way ANOVA test was used to identify the effects of the emerging Covid-19 epidemic on the psychological, social and academic aspect due to the age variable (school stage), and the table (4) shows that:

This result can be explained by the fact that the psychological and social effects of the Covid-19 epidemic, represented by anxiety, depression, lethargy, lack of sleep and poor social communication, were almost the same in children, regardless of the gender variable.

Table (4) means and standard deviations to identify the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspects attributed to the age variable (school stage).

It is clear from the table (4) that there are apparent differences between the means of the effects of Covid-19 epidemic on the psychological, social and academic aspect due to the variable of the boy's age (school stage). To detect the significance of the differences, one-way ANOVA was used, the results of which are shown in the following table (5):

Table (5) One Way ANOVA to identify the significance of the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspect due to the age variable (school stage).

Source		Total squares	Degrees freedom	of Average squares	(F)	Sig
The impact of COVID-19 epidemic on the psychological aspect	Between groups	5.579	3	1.860	3.715	*.012
	Within groups	153.202	306	.501		
	Total	158.782	309			
The impact of COVID-19 epidemic on the social aspect	Between groups	4.630	3	1.543	3.817	*.010
	Within groups	123.710	306	.404		
	Total	128.339	309			
The impact of COVID-19 epidemic on the academic aspect	Between groups	5.784	3	1.928	3.996	*.008
	Within groups	147.627	306	.482		
	Total	153.410	309			
Total	Between groups	3.278	3	1.093	4.153	*.007
	Within groups	80.516	306	.263		
	Total	83.794	309			

\*: Significant at the significance level (0.05).

The results of the table (5) showed that there were statistically significant differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspects, and the total scale attributed to the age variable (school stage), where the statistic values (F)

were (3.715, 3.817, 3.996, 4.153), which are statistically significant values at the significance level (0.05).

To identify the source of the differences, Scheffe test for dimensional comparisons was used, the results of which are shown in the following table (6):

**Table (6): Scheffe test for dimensional comparisons to identify the source of differences in the effects of the emerging epidemic of Covid-19 on the psychological, social and academic aspects, and the overall measurement is attributed to the variable of the age of the child (school stage).**

Dependent variables	age (I)	(J) age	Means differences (I-J)	Sig.
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The impact of COVID-19 epidemic on the psychological aspect	Under 6 years old - pre-school	6-11 years old - elementary school	.18279	.479
		12-14 years old intermediate school	-.13628	.784
		15-18 years - high school	-.09376	.903
	6-11 years old - elementary school	Under 6 years old - pre-school	-.18279	.479
		12-14 years old intermediate school	-.31907*	.046
		15-18 years - high school	-.27655	.069
	12-14 years old - intermediate school	Under 6 years old - pre-school	.13628	.784
		6-11 years old - elementary school	.31907*	.046
		15-18 years - high school	.04252	.989
	15-18 years - high school	Under 6 years old - pre-school	.09376	.903
		6-11 years old - elementary school	.27655	.069
		12-14 years old intermediate school	-.04252	.989
The impact of COVID-19 epidemic on the social aspect	Under 6 years old - pre-school	6-11 years old - elementary school	.34581*	.013
		12-14 years old intermediate school	-.20558	.390
		15-18 years - high school	.27593	.109
		Under 6 years old - pre-school	-.34581*	.013
		12-14 years old intermediate school	-.14023	.586
		15-18 years - high school	-.06989	.904
		Under 6 years old - pre-school	-.20558	.390
		6-11 years old - elementary school	.14023	.586
		15-18 years - high school	.07035	.936
		Under 6 years old - pre-school	-.27593	.109



		6-11 years old - elementary school	.06989	.904
		12-14 years old intermediate school	-.07035	.936
		6-11 years old - elementary school	.34811*	.026
	Under 6 years old - pre-school	12-14 years old intermediate school	-.39529*	.026
		15-18 years - high school	.32445	.072
	6-11 years old - elementary school	Under 6 years old - pre-school	-.34811*	.026
	12-14 years old - intermediate school	12-14 years old intermediate school	-.04717	.980
		15-18 years - high school	-.02367	.997
	6-11 years old - elementary school	Under 6 years old - pre-school	-.39529*	.026
	12-14 years old - intermediate school	6-11 years old - elementary school	-.04717	.980
		15-18 years - high school	-.07084	.949
		Under 6 years old - pre-school	-.32445	.072
	6-11 years old - elementary school	6-11 years old - elementary school	.02367	.997
		12-14 years old intermediate school	-.07084	.949
		6-11 years old - elementary school	.29224*	.008
Total	Under 6 years old - pre-school	12-14 years old intermediate school	-.15486	.452
		15-18 years - high school	.16887	.321
	6-11 years old - elementary school	Under 6 years old - pre-school	-.29224*	.008
		12-14 years old intermediate school	-.13738	.415
		15-18 years - high school	-.12337	.440
	12-14 years old - intermediate school	Under 6 years old - pre-school	-.15486	.452

	6-11 years old - elementary school	.13738	.415
	15-18 years - high school	.01401	.999
	Under 6 years old - pre-school	-.16887	.321
15-18 years - high school	6-11 years old - elementary school	.12337	.440
	12-14 years old - intermediate school	-.01401	.999

\*: Statistically significant at the significance level (0.05) or less.

The results of the Scheffe test for dimensional comparisons shown in Table (6), show that the source of differences in the effects of the Covid-19 epidemic on the psychological aspect was in favor of the age group (12-14 years - the middle stage), as it is the age group that was psychologically affected more than other age groups from study sample members.

This result can be explained by the fact that this age group is the most sensitive, given that children at this stage go through a lot of physical changes, and perhaps during the period of the Covid-19 pandemic, it got worse, as the precautionary measures taken by the country such as closures and social distancing had significant negative psychological effects on them.

This result agreed with the study (Zhang et al., 2020) whose results indicated that during the COVID-19 pandemic in China, the mental health of more than one-fifth of middle and high school students was negatively affected.

As for the source of the differences in the effects of the Covid-19 epidemic on the social and academic aspects and the overall measurement, the differences were in favor of the study sample

members of the age group (less than 6 years - preschool), this age group of individuals has been affected by the Covid - 19 epidemic The new socially and academically more than other age groups.

This result can be explained that preschool children need to embed social communication skills with others, but due to the conditions of the Covid-19 pandemic and the social distancing of people, the negative effects were more severe for this age group.

Also, distance education is not suitable for the nature of children in kindergarten, due to their inability to sit for a long time or pay attention to the teacher through a small screen for a long time, so the negative effects on the academic aspect were more evident for this age group.

### 3.3. The type of housing in which the child respects with his family

The Independent Sample T-test was used to identify the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspects attributed to the variable of the type of housing in which the child respects with his family, and the table (9) shows that:

**Table (9) An Independent Sample T-test to identify the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspects attributed to the variable of housing type.**

Source variance	of Housing type	Number	Mean	S. D	Degrees of freedom	(t)	Sig
The impact of COVID-19	House (villa)	160	3.51	0.70	308	2.332	*0.020

epidemic on the psychological aspect	Apartment	150	3.32	0.72			
The impact of COVID-19 epidemic on the social aspect	House (villa)	160	2.98	0.61	308	0.333-	0.739
	Apartment	150	3.00	0.68			
The impact of COVID-19 epidemic on the academic aspect	House (villa)	160	3.41	0.70	308	0.453	0.651
	Apartment	150	3.44	0.71			
Total	House (villa)	160	3.30	0.51	308	0.720	0.472
	Apartment	150	3.26	0.54			

\*: Statistically significant at the significance level (0.05) or less.

It is clear from the results shown in Table (9) that there are statistically significant differences at the significance level (0.05) in the effects of the Covid-19 epidemic on the psychological aspect attributed to the variable of the type of housing in which the child respects with his family, where the statistic value (t) reached (2.332), which is significant value at the significance level (0.05) or less. It was found that the Covid-19 epidemic affected the psychological aspect and for the benefit of the study sample who live in a house (villa) more than those who live in an apartment.

This (surprising and unexpected) result can be explained by the fact that the effects of the new epidemic of Covid-19 on the psychological aspect were more pronounced among children who live in large houses, perhaps due to physical distancing during the period of home quarantine.

The study (Rudolf & Potter, 2015) indicated that the feeling of happiness and psychological comfort is not directly related to the size of the house, as many believe, but the availability of basic and recreational requirements are more closely related to the feeling of happiness.

It was found from the results shown in Table (9) that there were no statistically significant

differences at the level of significance ( $\alpha \leq 0.05$ ) in the level of the effects of the Covid-19 epidemic on the social and academic aspects.

The overall measurement is attributed to the variable of housing type, where the statistic (t) values were (-0.333, 0.453, 0.720), respectively, and they are non-significant values at the significance level (0.05) or less. The differences between the means, if any, did not reach the level of statistical significance.

This result can be explained by the fact that the effects of the Covid-19 epidemic on the social and academic aspect, represented in boredom, lack of social contact and difficulty in following school remotely, are often the same for all children, regardless of the type of housing they live in, whether small (apartment) or large (villa).

### 3.4. Monthly family income

Means and standard deviations were extracted, and the One-Way ANOVA test was used to identify the effects of the Covid-19 epidemic on the psychological, social and academic aspects due to the monthly family income variable, and table (10) shows that:

Table (10) Means and standard deviations to identify the differences in the effects of the emerging Covid-19 epidemic on the psychological, social and academic aspects attributed to the variable monthly family income.

		Number	Mean	S.D
The impact of COVID-19 epidemic on the psychological aspect	Less than 5000 riyals	16	3.030.61	
	From 5000 - less than 10000 riyals	72	3.310.69	
	From 10,000 riyals - 15,000 riyals	90	3.380.72	
	More than 15,000 riyals	132	3.550.72	
	Total	310	3.420.72	
The impact of COVID-19 epidemic on the social aspect	Less than 5000 riyals	16	2.950.66	
	From 5000 - less than 10000 riyals	72	2.980.65	
	From 10,000 riyals - 15,000 riyals	90	3.050.66	
	More than 15,000 riyals	132	2.960.63	
	Total	310	2.990.64	
The impact of COVID-19 epidemic on the academic aspect	Less than 5000 riyals	16	3.460.76	
	From 5000 - less than 10000 riyals	72	3.510.70	
	From 10,000 riyals - 15,000 riyals	90	3.400.73	
	More than 15,000 riyals	132	3.400.69	
	Total	310	3.430.70	
Total	Less than 5000 riyals	16	3.150.52	
	From 5000 - less than 10000 riyals	72	3.260.50	
	From 10,000 riyals - 15,000 riyals	90	3.280.51	
	More than 15,000 riyals	132	3.300.54	
	Total	310	3.280.52	

It is clear from the table (10) that there are apparent differences between the arithmetic averages, the effects of the new Covid-19 epidemic on the psychological, social and academic aspects attributed to the variable monthly family income.

To detect the significance of the differences, One-Way ANOVA was used, the results of which are shown in the following Table (11):

Table (11) One Way ANOVA to identify the significance of the differences in the effects of the Covid-19 epidemic on the psychological, social and academic aspects attributed to the variable monthly family income.

Source	Total squares	Degrees freedom	of Average squares	(F)	Sig
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The impact of COVID-19 epidemic on the psychological aspect	Between groups	5.740	3	1.913	3.826*.010
	Within groups	153.041	306	.500	
	Total	158.782	309		
The impact of COVID-19 epidemic on the social aspect	Between groups	.464	3	.155	.370 .775
	Within groups	127.875	306	.418	
	Total	128.339	309		
The impact of COVID-19 epidemic on the academic aspect	Between groups	.664	3	.221	.443 .722
	Within groups	152.747	306	.499	
	Total	153.410	309		
Total	Between groups	.354	3	.118	.433 .730
	Within groups	83.440	306	.273	
	Total	83.794	309		

\*: Statistically significant at the significance level (0.05) or less.

The results of Table (11) showed that there were statistically significant differences in the effects of the Covid-19 epidemic on the psychological aspect attributed to the monthly family income variable, where the statistical value (F) reached (3.826), which is a statistically significant value at the significance level (0.05) >. In order to reveal the source of the variance, Scheffe's test was used for dimensional comparisons, which are shown in the following table ().

The results showed that there were no statistically significant differences in the effects of the Covid-19 epidemic on the social aspect, the academic side and the overall measurement attributed to the monthly family income variable, where the statistic values (F) reached (0.370, 0.443, 0.443), respectively, which are not statistically significant when Significance

level (0.05), > The differences between the means, if any, did not reach the level of statistical significance.

This result can be explained by the fact that the effects of the Covid-19 epidemic on the social aspect, represented in boredom and poor social communication skills, are often the same for all children, regardless of the level of family income.

The result of the absence of statistically significant differences in the effects of the Covid-19 epidemic on the academic side can be explained by the variable monthly family income, as the Kingdom of Saudi Arabia provides free and good education for all children, which reduces the material burdens of low-income families.

**Table (12)**

**Scheffe's post-comparison test to identify the source of differences in the effects of the Covid-19 epidemic on the psychological aspect attributed to to the variable monthly family income.**

Family income (I)	Family income (J)	Means differences (I-J)	Sig.
Less than 5000 riyals	From 5000 - less than 10000 riyals	-.27991	.153
	From 10,000 riyals - 15,000 riyals	-.35064	.069
	More than 15,000 riyals	-.52185*	.006
From 5000 - less than 10000 riyals	Less than 5000 riyals	.27991	.153
	From 10,000 riyals - 15,000 riyals	-.07073	.528
	More than 15,000 riyals	-.24194*	.020
From 10,000 riyals - 15,000 riyals	Less than 5000 riyals	.35064	.069
	From 5000 - less than 10000 riyals	.07073	.528
	More than 15,000 riyals	-.17121	.078
More than 15,000 riyals	Less than 5000 riyals	.52185*	.006
	From 5000 - less than 10000 riyals	.24194*	.020
	From 10,000 riyals - 15,000 riyals	.17121	.078

\*: Significant at the significance level (0.05).

It is clear from Table (12) that the source of the differences in the effects of the Covid-19 epidemic on the psychological aspect was in favor of the study sample members whose family income was more than (5000 riyals).

This result can be explained by the fact that the effects of the Covid-19 epidemic on the psychological aspect were clearer for families with low income due to their inability to provide adequate entertainment for their children during the period of home quarantine, which increased the psychological pressures on children,

#### 4. Results of qualitative analysis

A qualitative analysis form was sent with the main questionnaire, and parents of individuals with disabilities responded to it. Among the opinions were:

##### 2- What are the positive and negative effects of the COVID-19 epidemic on the psychological, social, and academic aspect of your child that were not previously mentioned in the questionnaire?

The responses of the study sample individuals varied regarding the positive and negative

effects of the new **COVID-19 epidemic** on the psychological, social and academic aspect of children, which were not previously mentioned in the questionnaire from the point of view of the parents of individuals with disabilities.

On the positive aspect, it was found that the quarantine period during the **COVID-19 epidemic** was beneficial in terms of increasing children's interaction with their parents, as group games and opening the door for discussion and family interaction in general have become a haven to cover time and take advantage of it. The opportunity to spend time with parents increased more than it had previously been. It is known that this command helps to identify more children's problems, which increases the positive feeling towards them. Parents also can push their children to independence, use some tools on their own, and make some decisions of their own in light of parents' follow-up to them and correct some errors in these decisions.

On the negative aspect, some members of the study sample expressed their children's feeling of fear, as their speech became less compared to the previous time. Also, some boys missed the fun of being out, having fun and communicating with friends during the holidays. In addition,

parents have noticed an increase in their children's requests for purchases in general, as this increases the parents' financial burdens, which became significant during the **COVID-19 epidemic**. It was also found through the responses of some members of the study sample that some diseases other than the **COVID-19 epidemic** have been spread, as a result of sitting for long periods inspect the house, which led to an increase in parents' sense of responsibility and sometimes feelings of guilt about what their children are exposed to as a result of sitting at home, and insufficient knowledge. How to deal with epidemics and quarantine conditions. Some parents also mentioned that one of the negative effects of the **COVID-19 epidemic** is the children's unwillingness to engage in any kind of sporting activities at home, which has led to weight gain.

As for the academic aspect, the most important negative positive effect was the flexibility of teaching times. On the other hand, the most important negative impact of the new **COVID-19 epidemic** on the academic aspect was the lack of children's desire to study, as dependence on parents in this aspect became greater. Also, many boys have had trouble forgetting what was previously learned.

**3. What are the methods that have been followed to mitigate the negative impact of**

**the COVID-19 epidemic on the psychological, social, and academic aspect of your child?**

The responses of the study sample individuals varied about the methods that were followed in order to mitigate the negative impact of the **COVID-19 epidemic** pandemic on the psychological, social and academic aspect of individuals with disabilities, and this was represented in purchasing various games and increasing the number of hours of playing with electronic devices, through which communication can take place. Between family and friends.

Social rapprochement sessions within the same family increased, discussion of some issues was opened, and work to raise the level of self-confidence and self-esteem. Some parents of individuals with disabilities mentioned that one of the most important methods used in order to mitigate the effects of the **COVID-19 epidemic** on their children was that they were compensated by spending more time with them, opening the door for dialogue, expressing concerns and anxieties, and practicing joint family activities of an entertainment and cultural nature, and the establishment of competitive encouraging competitions among children in order to maintain the academic level and continue in education.

**Coding table for questions in the qualitative aspect**

	Psychological aspect	Social aspect	Academic aspect	Other aspects
Positive effects	1. A sense of independence 2. Development of the ability to make decisions 3. Raise the level of self-confidence 4. Increase self-esteem	1. Increasing the duration of family discussion 2. Freeing parents of the social burdens	Flexible teaching times	
Negative effects	Parents' feeling of guilt towards their children	Lack of talk	1. Lack of motivation 2. Difficulty monitoring the child's progress	1. Weight gain 2. Economic burdens on parents 3. Infection with various diseases
The means used	Talk about fears and anxieties	1. Team games 2. Family activities	Cheerleading competitions among children	
Future concerns	Introversion / anxiety / fear	Impaired social communication skills	1. Educational setbacks	

## 2. Forgetfulness

## 5. Conclusion

The world has witnessed a great spread of the Covid-19 epidemic, which has created multiple challenges at different levels and fields, locally and globally. This study aimed to identify Parents' perception about the Effects of COVID-19 on children with and without Disabilities based on Multiple Demographic Variables. The results indicated that there were statistically significant differences in the effects of the COVID-19 epidemic on the psychological and social aspects attributed to the disability variable, as the effects of the COVID-19 epidemic on the psychological aspect were higher among normal people compared to individuals with disabilities. The result of this study differed with the study (Zhang et al., 2020), which indicated that psychological stress was higher among students with disabilities than their normal peers, while the results of this study indicated that there were statistically significant differences in the effects of the emerging Covid-19 epidemic on the academic side that are attributed to for the gender variable. The study also found that there were more obvious serious psychological effects for the age group 12-14, while the social and academic effects were more severe for the age group less than 6 years old.

The study recommends conducting more research related to identifying the extent of the effects of the Covid-19 epidemic on normal individuals and people with disabilities in order to reach the correct knowledge on the basis of which successful solutions can be proposed that mitigate those effects to effectively manage similar crises in the future.

## References

- [1] Al-Badri, S., & Al-Kindi, S. (2019). The reasons for the superiority of females over males from the point of view of those concerned in the educational field and parents of students. *Rawafed Magazine*. 3 (1).
- [2] Empowering Students with Disabilities During the COVID-19 Crisis. (2020). *UNESCO Bangkok*, Retrieved July 09, 2020, from <https://bangkok.unesco.org/content/empowering-students-disabilities-during-covid-19-crisis>
- [3] McClain-Nhlapo, C., Crouch, L., Verma, K., & Secretariat, G. (2020). An inclusive response to COVID-19: Education for children with disabilities. Retrieved July 09, 2020, from <https://www.globalpartnership.org/blog/inclusive-response-covid-19-education-children-disabilities>
- [4] McCormack, G., Doyle-Baker, P., Petesen, J., Ghoneim, D. (2020). Parent anxiety and perceptions of their child's physical activity and sedentary behaviour during the COVID-19 pandemic in Canada. *Preventive Medicine Reports*. doi.org/10.1016/j.pmedr.2020.101275
- [5] Minds, Y. (2020). Coronavirus: impact on young people with mental health needs.
- [6] Morgül, E., Kallitsoglou, A., Essau, C. (2020). Psychological effects of the COVID-19 lockdown on children and families in the UK. *Revista de Psicología Clínica con Niños y Adolescentes*. doi: 10.21134/rpcna.2020.mon.2049
- [7] Policy Brief: COVID-19 & Disruptions to Education (May 2020) - World. (2020). *World Vision*. Retrieved July 06, 2020, from <https://reliefweb.int/report/world/policy-brief-covid-19-disruptions-education-may-2020>
- [8] Rudolf, R., Potter, C. (2015). Housing and happiness: Subjective well-being and residential environment in Korea. *Journal of Korea Planning Association*. 50(7),55, DOI: 10.17208/jkpa.2015.11.50.7.5
- [9] Sepulveda-Loyola, W., Rodríguez-Sánchez, I., Perez-Rodriguez, P., Ganz, F., Torralba, R., Oliveira, D. V., & Rodríguez-Mañas, L. (2020). Impact of social isolation due to COVID-19 on health in older people: Mental and physical effects and recommendations. *The journal of nutrition, health & aging*, 1-10.
- [10] Umucu, E., & Lee, B. (2020, May 14). Examining the Impact of COVID-19 on



- Stress and Coping Strategies in Individuals with Disabilities and Chronic Conditions. *Rehabilitation Psychology*. Advance online publication. <http://dx.doi.org/10.1037/rep0000328>
- [11] Zhang, C., Ye, M., Fu, Y., Yang, M., Luo, F., Yuan, J., & Tao, Q. (2020). The Psychological Impact of the COVID-19 Pandemic on Teenagers in China. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 67(6), 747–755. <https://doi.org/10.1016/j.jadohealth.2020.08.026>
- [12] Zhang, H., Nurius, P., Sefidgar, Y., Morris, M., Balasubramanian, S., Brown, J., ... & Mankoff, J. (2020). How Does COVID-19 impact Students with Disabilities/Health Concerns?. *arXiv preprint arXiv:2005.05438*.