

Parent Child Relationship During COVID-19 in Saudi Arabia

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Abstract

Background: Coronavirus disease in 2019, also known as COVID-19, is a respiratory disease that is caused by Severe Acute Respiratory Coronavirus 2. In March 2020, the World Health Organization Declared the disease as a pandemic. Social Distancing is to prevent the transmission of the virus from the asymptomatic persons, who are not yet isolated.

Aim: To measure the parent-child relationship during the COVID-19 Social Distancing in Saudi Arabia.

Method: A cross sectional survey study, done from 2020 April to July and shortly after the quarantine was stopped. Questionnaire used was the short version of a validated survey created by Robert Pianta to assess the parents-child relationship during and before the quarantine period in the western part of Saudi Arabia, mainly Jeddah and adjacent cities.

Result: Total participants were 377, and the mean age of the parents is 37 years. On average, parents have from 1-3 children. The mean average number of hours parent stayed with their children before the Social Distancing was 8 hours and this increased to 12 hours after Social Distancing. Women tend to have average number of hours stayed with children higher than men. Comparing the closeness score and conflict score between before the Quarantine and after it showed a statistically significant more conflict before the Quarantine than after it. It was higher among female parents compared to male parents. For closeness there was no statistical significance as both scores were close to 31.

Conclusion: There is a statistical significance improve in the closeness between parents and their children after the COVID-19 social distancing and more time spent with them. However, the conflict between mothers and their children were less comparing before and during the quarantine.

Introduction

Coronavirus disease in 2019, also known as COVID-19, is a respiratory disease that is caused by Severe Acute Respiratory Coronavirus 2 (SARS-CoV-2). The disease was first discovered in Wuhan wet market (Hubei, China) and then spread all-over the world.^{1,2} In March, 2020 the World Health Organization Declared the disease as a pandemic.^{1,2} During the pandemic, countries started to isolate the ill, quarantine the exposed to the ill and apply community containment measures that include social distancing.³ Social Distancing is reducing the interactions among the community to prevent the transmission of the virus from the asymptomatic persons, who are not yet isolated.³

The psychological effects of the quarantine on 15,000 during SARS outbreak in Toronto showed increase risk of developing major depression and post-traumatic stress disorder (PTSD).⁴ Another study found that people at risk of developing PTSD were more to be healthcare provider or those who are immediately affected by the disease.⁵

Like many other countries, Saudi Arabia was affected by COVID-19 in many aspects; economically, health care related, educational and psychological aspects. The relationship between parents and their children is well studied in previous research and has a dedicated scale to measure it such as Parent-Child Relationship Scale.⁶ However, our literature search found that there is no study that explore the parent-child relationship in Saudi Arabia. Therefore, in this study, we decide to measure the parent-child relationship during the Social Distancing in Saudi Arabia by using the Parent-Child Relationship Scale (CPRS) by Robert Pianta and comparing with the same scale before the Social Distancing.⁶

Methods

This is a cross sectional survey study that was done at during the quarantine of COVID-19 (from 2020 April to July) and shortly after the quarantine was stopped. We used the short version of a validated survey created by Robert Pianta⁶ to assess the parents-child relationship during and before the quarantine period in the western part of Saudi Arabia, mainly Jeddah and adjacent cities. The survey was translated from English to Arabic using the World Health Organization (WHO) front-to-back translation by a committee. The survey was piloted on 14 subjects and Cronbach's score was more than 0.7. Institutional Review Board was obtained from King Fahad Armed Forces Hospital in Jeddah and informed consents were obtained from subject before the data collection. The survey consists of 15 question items that has a fiver Likert scale answer (strongly disagree, disagree, neutral, agree & strongly disagree). The survey was sent online, filled through telephone interviews or filled through face to face interview with participants. Participants were recruited conveniently from King Fahad hospitals psychiatry outpatients' clinics/the telephone services for patients during quarantine, through people in Jeddah malls or through snowball sampling by getting telephone number from participants we already sampled.

Sample size was calculated to be 377 subjects for 95% confidence interval and 5% margin of errors. The data were entered through Google Form, cleaned and analyzed using IBM SPSS Statistics version 26.

Results

Descriptive Statistics:

The mean age of the parents is 37 years with minimum of 19 years old, maximum of 64 years old, and standard deviation of 7.7 years, see Fig. 1. On average, parents have from 1–3 children with some parent have only one child and other have more than 3 reaching to 9 kids per family, see Fig. 2.

The mean average number of hours parent stayed with their children before the Social Distancing was 8 hours and this increased to 12 hours after Social Distancing. Women tend to have average number of hours stayed with children higher than men (8.4 vs. 6 hours) while after Social Distancing it was increased for both (13.7. hours for women vs. 9.17 for men), see Figs. 4 & 5. More than 90% of the participants were married, 7% are divorced, and only 1.4% are widowed. Around 50% of the children whom their parent participated were boys and 42% were girls, see Table 1.

Table 1
Gender of the Children

Gender of the Child				
		Value	Count	Percent
Valid Values	0	Male	181	50.1%
	1	Female	151	41.8%
Missing Values	-99		29	8.0%

Score for the eight items that test conflicts (questions number 2,4,8,10,11,12,13, and 14) were combined into one score that has a minimum of 8 and maximum of 40. The same things were done for the closeness items (questions number 1,3,5,6,7,9 and 15). Closeness items range from 7 to 35. See Table 2 for detail descriptive statistics of the score.

Table 2
Descriptive Statistics of the Conflict & Closeness Score Before & After

Descriptive Statistics							
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation
Conflict_Score_Bf Conflict Items Score Combined	352	28.00	12.00	40.00	8656.00	24.5909	6.46425
Conf_Af Conflict Score After	351	20.00	10.00	30.00	7086.00	20.1880	4.98500
Close_Before Closeness Before COVD	351	21.00	14.00	35.00	10928.00	31.1339	3.60028
Close_Af Closeness Score After	349	21.00	14.00	35.00	10918.00	31.2837	3.91612
Valid N (listwise)	335						

Before the Social Distancing the conflict score mean was 24 and after the Quarantine it became 20 while for the conflict score it was almost the same before and after at 31.

Inferential Statistics:

When the number of hours spent with children are compared between men and women before the pandemic, women tend to stay longer than men (8.3 vs. 6.0, P-value 0.05), see Fig. 3. After the pandemic, the rate increased for both gender (9.17 vs. 13.91 hours p-value is < 0.001), see Fig. 4.

Comparing the closeness score and conflict score between before the Quarantine and after it showed the following. Paired t test was statistically significant (p-value < 0.001) between conflict before the

quarantine and during it. There was more conflict before the Quarantine than after it.

For closeness, paired t test didn't show any statistical significance as both scores were close to 31 (p-value 0.266). When conflict score during the Quarantine was tested against the parent gender, conflict was higher among female parents compared to male parents (20 vs. 18). Independent t test was done and showed statistical significance (p-value < 0.001)

Discussion

The quarantine and Social Distancing had a tremendous effect on families. Many countries applied the wide lock down on many cities to control the spread of COVID-19. As a result, many people were laid off, foreclosed or have their business shot down. This led to significant psychological stress on people and families due to restriction in movement and staying homes for long time.

Figure 2 shows the majority of the parents have from 1–3 children with the mean age of the parent is 37 years old. Because more than 50% of our sample was obtained through the Social Media, this might justify the quite younger population of the sample. The average number of children in the family indicates the average size of the Saudi family (1–3) for such age group. The Western region of Saudi Arabia, Makkah AlMukarramah region, where our study took place has one of the highest population in the country. A study found that fourth of the Saudi households are present in the Western region while other fourth is in Riyadh region.⁷ Another report showed that in Saudi around 3/5 of the population live in major cities.⁸

Calculating the conflict and closeness score depends on the total population of the sample and increased number of hours the parent stayed with their children. As expected from the Saudi Arabia culture, women were more likely to stay with their children and during the quarantine this was even more obvious.

Conflict score was higher before the Quarantine than during it for both group (statistically significant) but it was more obvious for females than males. Although females stayed longer hours with their children during the lock down and the conflict score was expected to be higher due to stress but our result showed the opposite. This might indicate parents need enough time with their children to have a better relationship. Closeness score was the same before and after the quarantine for both genders.

Group Statistics					
	Gender What is the parent gender?	N	Mean	Std. Deviation	Std. Error Mean
Conf_Bf Conflict Score Before COVID	Male	75	23.0667	6.81083	.78645
	Female	276	24.9855	6.32109	.38048
Conf_Af Conflict Score After COVID	Male	77	18.4026	5.00594	.57048
	Female	273	20.6777	4.87628	.29513

Conclusion

The community quarantine (lock down) is part of the Social Distancing measures to control epidemics. Community quarantine during COVID-19 might be the largest measure that have been taking to control pandemic and it also might have a drastic mental consequence. We measure such affect by surveying parents and exploring their relationship with their children during COVID-19 lock down in Saudi Arabia. We found significant time were spent with children especially from the mother parent. However, the conflict between mothers and their children were less comparing before and during the quarantine.

Declarations

Ethical Approval has taken from the research committee at the King Fahad Armed Forces Hospital, Jeddah, Saudi Arabia

Consent for publication: not applicable

Availability and data materials: all datasets generated and analyzed during the current study are available with the corresponding author if reasonably requested

The authors declare that they have no competing interests

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Author's contribution: NA idea, questionnaire, data collection, and piloting. KQ data collection, statistical analysis, piloting, and writing. SA questionnaire, piloting, data analysis, and writing. RM data collection and questionnaire. DA data collection

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Figures

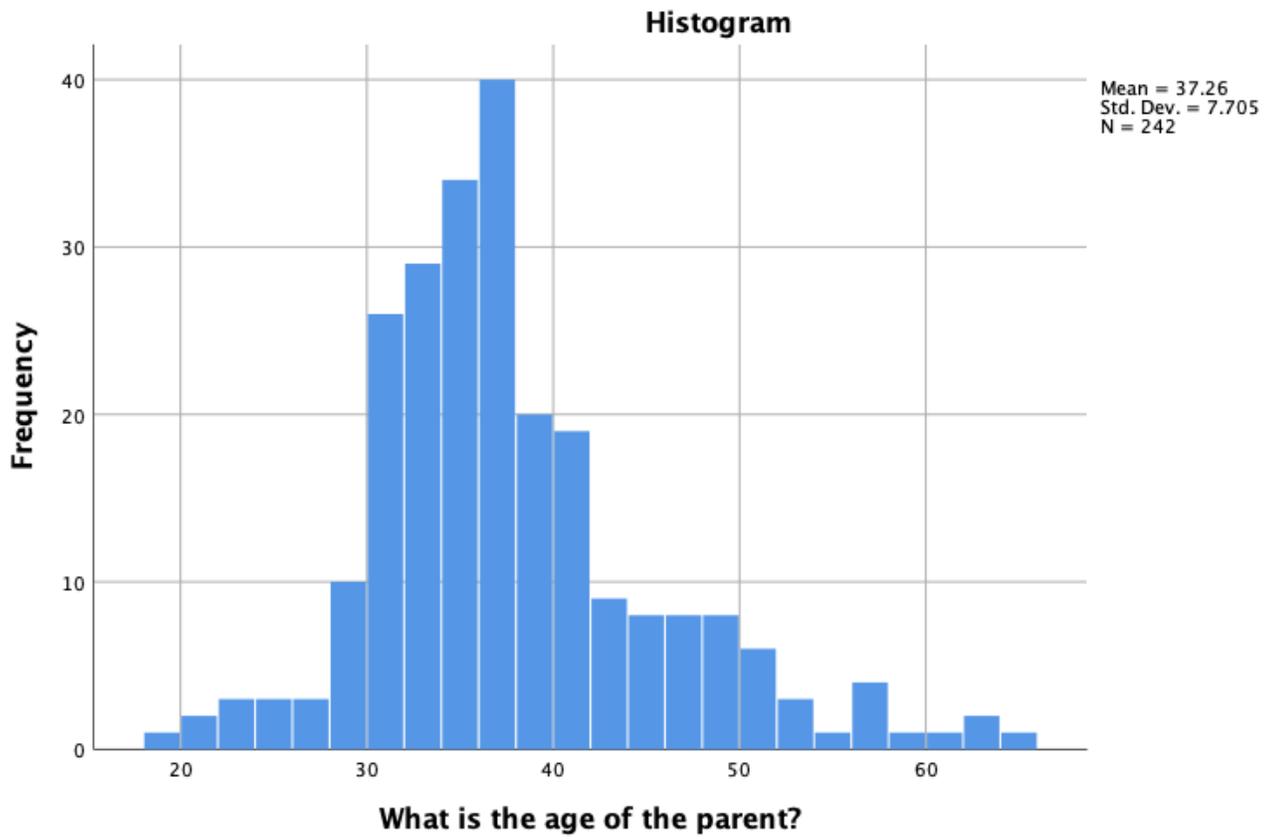


Figure 1

Age of the Parents

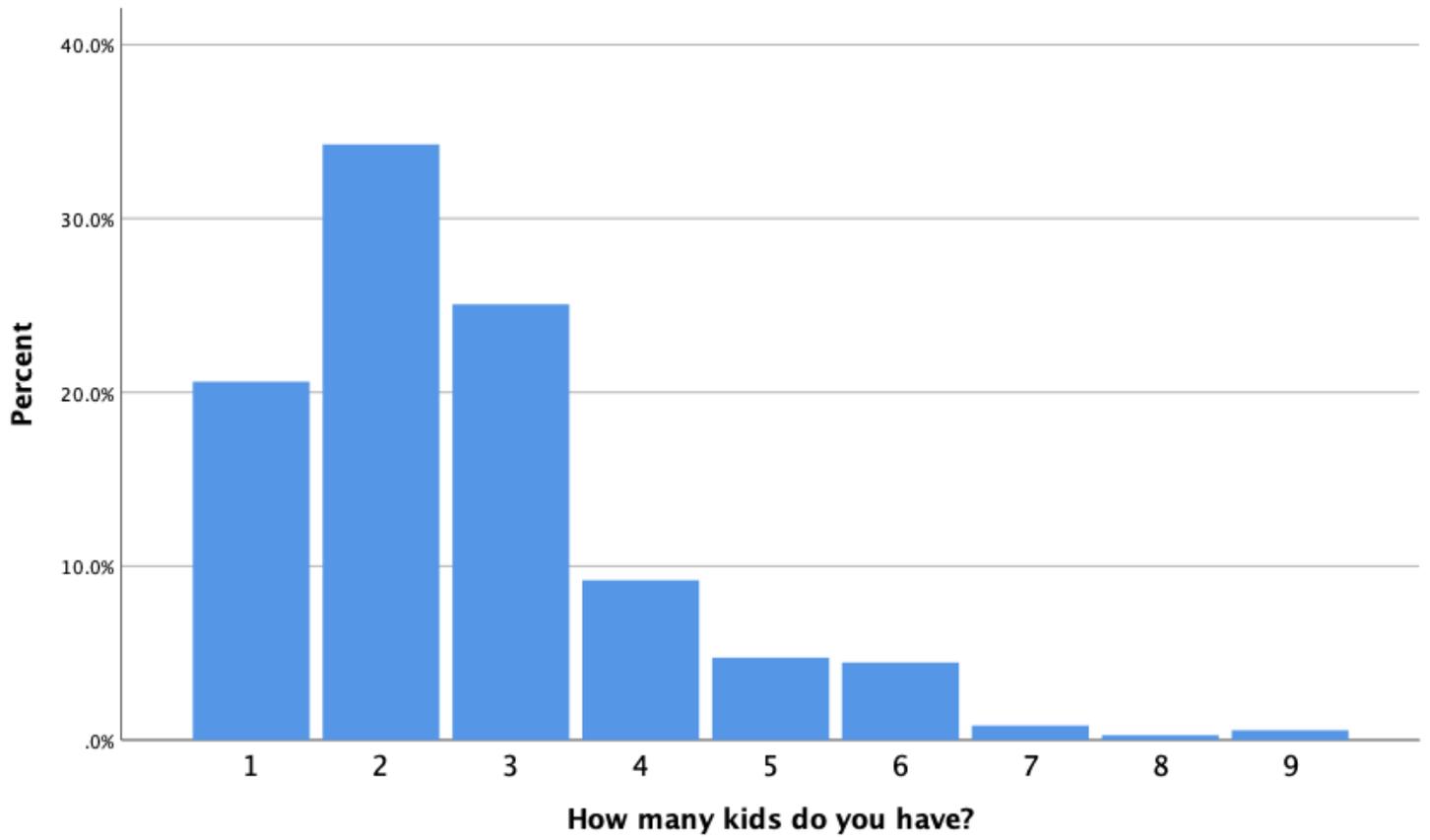


Figure 2

Average Number of Kids for Each Parent

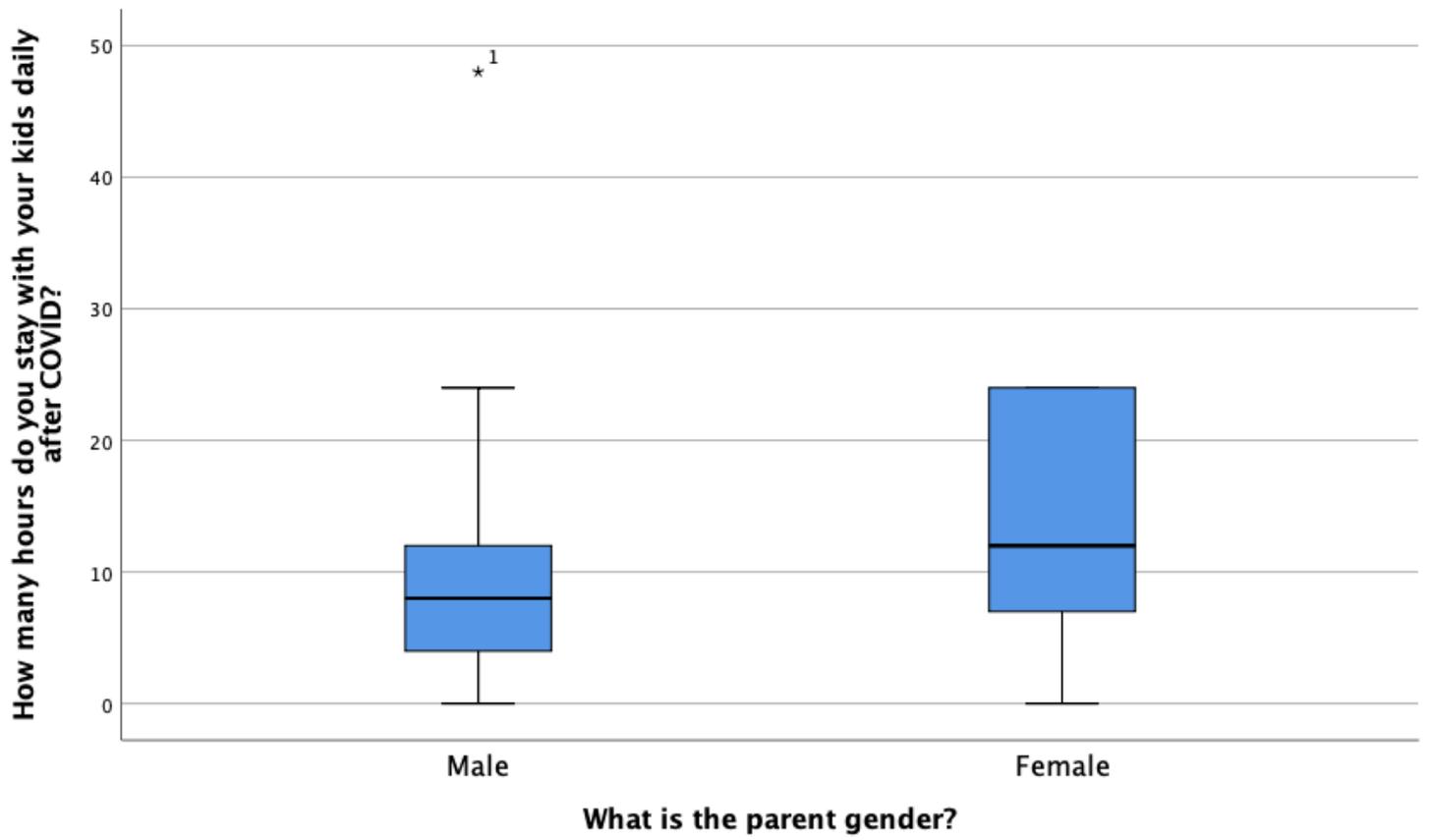


Figure 3

Gender of the Parents

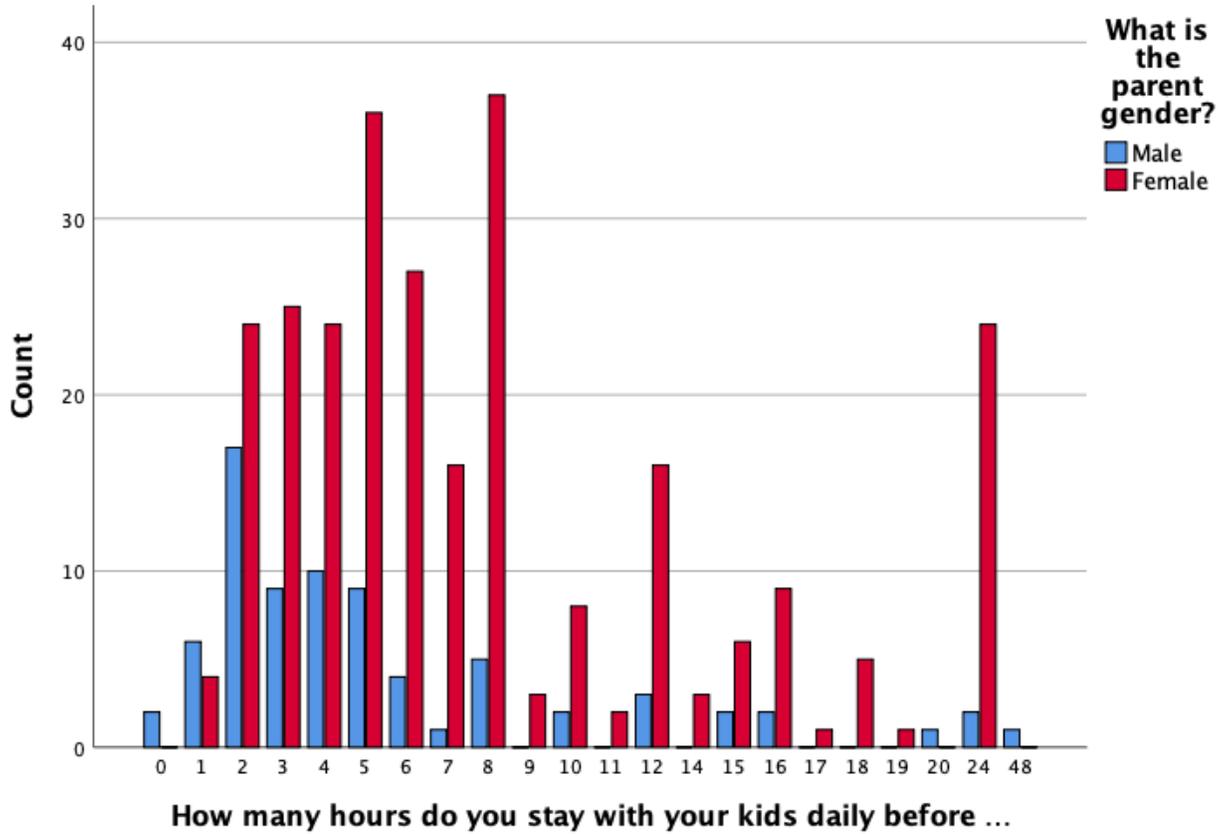


Figure 4

Comparing Number of Hours Stayed with Children between Men & Women