

# COVID-19 PANDEMIC AND CHILD-PARENT RELATIONSHIP: A SERIAL MEDIATION MODEL BASED ON PARENTAL STRESS AND HARSH PARENTING

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**Abstract:** The purpose of this study is to relate the outbreak of COVID-19 to the child-parent relationship. Although the study uses a serial mediation model of parental stress and harsh parenting that makes this study innovative as compared to the other studies conducted in this area. Moreover, this study is also supplemented with the moderating role of the joint family system which is another unique element in the study. Hence the significance of this study has many folds as this study is not only for the increase of more research work on this burning issue but also aids in policy making avoid any further harm. In line with gaps highlighted by prior studies, this study collects data from parents from Pakistan in order to assess the impact of COVID-19 on child-parent relationships. Analysis has been made by applying SME through SMART-PLS which is effective to increase rigor and testability of the research. Findings indicated that COVID-19 resulted in a significant increase in parental stress that may also harm the child-parent relationship.

**Keywords:** COVID-19, pandemic, parental stress, harsh parenting, child-parent relationship, joint family system

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## Introduction

### *Research Background*

Studies claim that unusual events have the tendency to affect bio-psychological characteristics as well as the well-being of any individual, family, or group. Therefore, the statement must be perceived true for the COVID-19 pandemic that creates disastrous condition for millions of households across the world (Uzun et al., 2021).

World Health Organization (WHO) declared SARS-CoV-II as a public health emergency on 30th January 2020 and it was declared as a pandemic on 11th March 2020 (Calvano et al., 2021). However, the impact of the COVID-19 pandemic is not limited to physical health but also created severe negative impact on the mental health, well-being as well as economic and financial conditions of millions across the globe (Zafar et al., 2021) In fact, the pandemic also created significant stress over

parents which disturbed the child-parent relationship (Uzun et al., 2021). Previous studies also indicated that stressors and conditions like COVID-19 affected children in a drastic way and also the child-parent relationship. The postulate is valid as children need a stable family environment. This is especially important for children of school age but parents with psychological distress may find it difficult to fulfill the needs of their children due to the lack of resources (Gulde et al., 2022).

Parents are responsible for the holistic development and growth of their children and therefore they are not only supposed to fulfill the needs of the child's feeding, dressing, and cleaning needs but are also held responsible for the education that the child receives directly or indirectly. Especially important are the first five years in which a child becomes familiar with the basic family and therefore communication & interaction are very important for a child's grooming, development of personality, and understanding. Otherwise, a child may become aggressive, short-tempered, and insecure due to the lack of attention and support from the parents (Uzun et al., 2021).

Moreover, theoretical models highlighted that parental health is correlated with the health of children and vice versa (Joshi et al., 2023). Although negative strategies used by the parents may cause significant harm to children and cause issues severe psychological and behavioral issues (Zafar et al., 2021). These models need to be considered more extensively for events like COVID-19 that affected the physical & psychological well-being of people across the globe (Joshi et al., 2023).

In fact, the pandemic is a form of stressor that does not originate from the family system but creates severe issues in parenting as well as the health of parents and children (Brown et al., 2020). In fact, the pandemic is still not over yet. Therefore, there is a need to monitor the physical and mental health of children and adolescents is still an issue of concern (Zafar et al., 2021).

#### *Statement of Problem*

The child-parent relationship amid COVID-19 looks much more important as the pandemic creates severe strain on parents and management of this social change is a serious issue (Tarsuslu et al., 2021 & Uzun et al., 2021). However, the pandemic did not affect all the parents and their relationships with their children in the same way and hence outcomes are also believed to be different (Uzun et al., 2021).

Previous studies e.g., Griffith (2020) indicated that there was no research work that may elaborate on the child-parent relationship during the pandemic. This point is especially important for younger children who are studying at preschool and cannot sense the pandemic but spend more time with their families due to the lockdown (Uzun et al., 2021). Research also noticed that there is a significant impact of COVID-19 on parents & still need to examine the impact of parental stress or burnout as

well as on the families. Especially important is the impact of parental burnout on children's health and well-being. Thus, these areas are especially important for research (Griffith, 2022). Hence more studies that may use more rigorous and thorough research processes to understand the impact of the pandemic on child-parent relationships are deemed mandatory (Uzun et al., 2021). Similar was the indication of the studies conducted in Pakistan which were insistent on collecting relevant data with a larger sample size for all the relevant variables (Bilal et al., 2021).

### *Theoretical Underpinning*

Mikolajczak and Roskam (2018) indicated that the use of balances between risks and resources theory is suited best for parental stress and burnout during COVID-19.

The theory indicated that parental burnout is actually due to the mismatch between demands and resources. In fact, parents always try to fulfill the needs, demands, and expectations of their children as well as the expectations that they have towards themselves for the betterment and growth of their children.

### *Literature Review*

Measures opted for by countries like social distancing and lockdowns for controlling the spread of COVID-19 may limit the spread of the virus. However, these measures also produced a negative impact on family life. The postulate is obvious as due to the lockdown parents were forced to work from home and with the pressure of remote working, they were also forced to manage the demands of online and home-based schooling for their children. These conditions were more stressful for those parents who are also responsible for taking care of older members of the family or children with special needs or disabilities etc. Hence parents were looking after their children under stiff conditions that are supplemented with high uncertainties, stress, and lack of resources (Chung et al., 2020). Adding further lockdowns and social distancing became a severe problem for parents with children of school age and the condition supplemented with higher anxiety and home-based schooling created severe difficulties and issues for the families (Calvano et al., 2021).

Especially rise in the difficulties was found to be significant amid COVID-19 as parents were not only burdened by threats of unemployment and financial insecurity but also by a lack of social support from family and friends, especially in the category of child care. In fact, due to social distancing and lockdowns parents have to manage all the needs of their children on their own and they cannot take the help of other family members (Griffith, 2022). Therefore, legitimate to believe that unemployment, low social support, financial insecurity, etc. are a few of the major elements that cause parental burnout amid COVID-19 (Griffith, 2022).

However, the decrease in social activities and social support resulted in a significant increase in parental roles and activities as parents had to take care of their children who were supposed to continue home-based or online education during the pandemic (Griffith, 2022). Hence parents were dealing with ambiguous situations accompanied by high expectations, multiple responsibilities, and different roles. On the other sides' studies highlighted that parents are the parents who contribute significantly to the child's development and growth. Therefore, parental research is also perceived as one of the important elements of parenting research. Actually, parental stress is the outcome of a mismatch between the demands and available resources (Chung et al., 2020). Moreover, the stress associated with the pandemic was also found to cause a decline in caregiving. Thus, a severe rise of concern was found towards child care. Adding to these studies also indicated that parents who lost their jobs or were financially insecure were at high risk of harsh parenting. Actually, it was the outcome of parental anxiety and depressive symptoms that are the outcome of the financial insecurity of parents (Sari et al., 2022). Moreover, parental anxiety and burnout may also result in child abuse. Child abuse may lead to physical as well as psychological problems in children. Thus, legitimate to declare that parental stress may result in child abuse or harsh parenting that is harmful to children's growth (Griffith, 2022)

However, lack of focus from parents is negative for children and has the tendency to cause severe problems for children. Therefore, during unusual events, parents were required to pay the desired focus on their children in order to diminish negative impact and internalizing behavior problems (Gulde et al., 2022). However, it is also been indicated that during stressful times there is a need for support from members living within the home may form substantial support and elevate stress from parents and children (Brown et al., 2020). Similar has also been indicated that support from family members is a dominant factor that may assist children in fighting against stress. Similar has been indicated for the stress related to the outbreak of COVID-19 (Prime et al., 2020). The postulate is true as lockdowns and restrictions force families to spend more time with each other enhanced bonding and support family rituals and practices etc (Brock & Laifer, 2020).

In fact, positive relationship between family members creates a positive impact on the social relationship but conflicts may disturb not only social relationships but also mental health (Tarsuslu et al., 2021). Hence thorough model has been developed by considering the theoretical framework and literature review of this study.

#### *Major Research Questions*

Q. 1: What is Harsh Parenting?

Q. 2: What are the causes of Harsh Parenting?

Q. 3: How Joint Family System found useful for parents and children during COVID-19?

*Research Hypotheses*

H1A: There is a relationship between the outbreak of COVID-19 are stress of parents

H2A: There is a relationship between the stress of parents and harsh parenting

H3A: There is a relationship between harsh parenting and disturbance of the child-parent relationship

H4A: Joint Family System moderates the relationship between harsh parenting and disturbance of child-parent relationship.

H5A: Stress of parents mediates between outbreak of COVID-19 and harsh parenting

H6A: Harsh parenting mediates between stress on parents and disturbance of the child-parent relationship.

H7A: There is a serial mediation of stress on parents and harsh parenting between the outbreak of COVID-19 and the disturbance of the child-parent relationship.

*Empirical Evidences*

a) A study conducted in Netherlands indicated that parents were found to be harsher with their children amid COVID-19. In fact, there is a high difference in parental behavior in comparison to post-pandemic behavior. These characteristics are found to be on the higher side for parents having children up to three years of age. Studies further highlighted that the change in parental behavior is residing upon physical and emotional maltreatment that leads to long-term negative consequences for the child and diminishes the well-being of children in the long run (Sari et al., 2022).

b) A study from Canada also indicated that the outbreak of COVID-19 caused severe stress on parents and caregivers. In fact, due to the environmental, social, and financial crises, parents were unable to fulfill the required needs of their children (Joshi et al., 2023).

c) A study from Pakistan also indicated the negative impact of COVID-19 and highlighted that there is a significant surge in the level of parents. In fact, parents who were not directly affected by the virus also felt severely stressed due to lockdowns, restrictions, and financial insecurity etc (Bilal et al., 2021).

### *Significance of the Study*

This study is one of the premiers in the field, especially with reference to Asian countries. Other than this point the other novelty of the study is the model of the study that is impaired with serial mediation and moderation. Thus, comprehensive analysis will not only make researchers and academicians inclined towards the work but also attract the attention of policymakers which may foster better understanding and policy formulation regarding the management of parental stress due to disastrous events like epidemics and pandemics.

### **Research Methodology**

Research Methodology is the part of research that describes about various techniques used in the study. However, the research methodology is not associated with defining and describing the elements used in the process. It is also used to provide a reason for the selection of every element in order to substantiate the research process and increase authenticity (Kothari, 2004). Sekaran and Bougie (2016) described that research design is divided into multiple parts among these research design and sampling design are the most common and important.

#### *Research Design:*

This study is built upon several research gaps e.g., Bilal et al. (2021) and Griffith (2022). Moreover, also uses variables that were not investigated empirically e.g., harsh parenting (Uzun et al., 2021) and joint family system (Brock & Laifer, 2020 & Prime et al., 2020). Hence the purpose is to build knowledge that coincides with Saunders et al (2007) which highlighted the philosophy as the philosophy of knowledge. However, the model of research onion presented by Saunders et al (2015) uses philosophical stances to connect research philosophies with research approach and research strategy. Therefore, this study also uses post-positivism as shown by Saunders et al (2015), and is one of the leading research paradigms for complex quantitative analysis (Adam & Adam, 2014). Other than these elements the research approach is deductive reasoning, the strategy is a survey and the time horizon is cross-sectional (Saunders et al., 2015)

#### *Sampling Design:*

The data for this study has been collected from parents who have at least one child of three years in the wake of the pandemic i.e., COVID-19. This is in accordance with the postulate of Sari et al (2002) that toddlerhood is the age where disciplinary strategies are required to be effective. Therefore, for being specific the data was collected only from those parents that have child or children up to three years of age. However, the aforementioned study mostly has the mother as the respondent, and inclusion of the father is one of the limitations and recommendations of the study. However, in

countries like Pakistan fathers are perceived as pillar that fulfills the financial needs of the family (Kramer & Pak, 2018). Therefore, this study collected data from fathers who took care of their children at the wake of the pandemic.

*Research Instrument:*

The research Instrument used for this study is a closed-ended questionnaire that is a closed-ended questionnaire that is based upon five points Likert scale adapted from multiple studies e.g., Brown et al (2020); Tarsuslu et al (2021) and Zafar et al. (2021)

*Statistical Techniques:*

Brown et al (2020) use a second-order regression model to assess the impact of parental stress over child abuse. Tarsuslu et al (2021) use SPSS to apply correlation to assess the relationship among variables. However, structural Equation Modeling (SEM) is the most preferred tool by researchers for making research work more authentic and detailed in comparison to the use of regression (Gunzler et al., 2013). The use of SEM became more effective by incorporating the tool with SMART-PLS (Wong, 2013).

**Results**

SMART-PLS is the software that applies descriptive as well as inferential statistical techniques (Ogwiji & Lasisi, 2022) by incorporating outer and inner models. The use of the outer model is to demonstrate the relationship of latent variables with respective indicators and the inner model is used to reflect the relationship between major variables of interest (Wong, 2013). Hence legitimate to indicate that SMART-PLS is one more edge over the other forms of PLS, i.e., it aids us in observing and understanding valid paths and interrelated effects (Vijayabanu & Arunkumar, 2018).

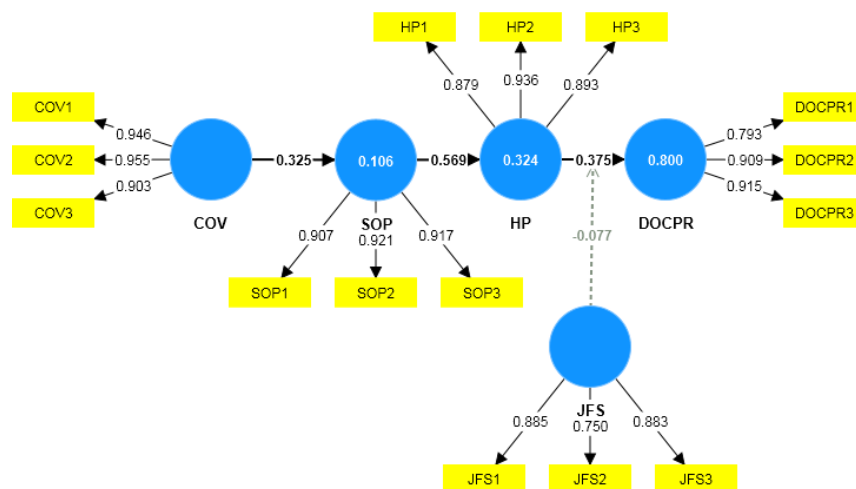


Figure 1: Outer Loading and CFA

The use of Figure 1 is to make users understand the purpose and significance of outer loading in applying SEM through SMART-PLS. The concept is identical to factor loading (Afthanorhan, 2013) & the benchmark value for the outer loading is 0.70 which enhances with the progression towards 0.1. However, if it is necessary to include elements with lower outer loading then the researcher must focus on the point that the inclusion of any element must not disturb overall convergent criteria. Moreover, the element that is included due to emergency or necessity must not fall below 0.60 in outer loading (Sander & Teh, 2014).

Table 1: Construct Reliability & Convergent Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
COV	0.928	0.933	0.954	0.875
DOCP R	0.843	0.847	0.906	0.764
HP	0.887	0.890	0.930	0.816
JFS	0.791	0.792	0.879	0.709
SOP	0.903	0.906	0.939	0.837

Table 1 is prepositioned to highlight construct reliability and convergent validity. However, like all the other tools, there is also a need for some measures and benchmarks in order to ensure construct reliability and convergent validity. In relevance with the table construct reliability is based upon Cronabch's Alpha, Goldstein rho, and Composite Reliability while to express convergent validity table 1 encompasses Composite Reliability and AVE. However, According to Yaccob et al (2021), AVE may also satisfy the presence of convergent validity if the value of AVE is found to be equal to or higher than 0.5. However, to satisfy the need for construct reliability there is a need to ensure at least



the value of 0.40 for Cronbach's Alpha and 0.60 for Composite Reliability (Vijayabanu & Arunkumar, 2018)

*Table 2: Construct Reliability & Convergent Validity*

	COV	DOCPR	HP	JFS	SOP	JFS x HP
COV						
DOCPR	0.257					
HP	0.111	0.809				
JFS	0.294	0.570	0.841			
SOP	0.358	0.812	0.630	0.835		
JFS x HP	0.165	0.163	0.140	0.213	0.228	

Table 2 is indicating discriminant validity through capitalizing on the values of Heterotrait-Monotrait ratio. This criterion is perceived as the best for assessing discriminant validity. However, in order to assure discriminant validity, the values must fall under the cutoff values highlighted by Hair et al (2019) as for Heterotrait-Monotrait ratio the value must be lesser than or equal to 0.85. Hence in line with this indication the table is assuring the presence of discriminant validity as there is no value that is greater than 0.85. In fact, the highest value in the table is 0.841 that is lesser than the cutoff value indicated by Hair et al (2019).

*Table 3: Predictive Accuracy Quality Criteria*

	R-square	R-square adjusted
DOCPR	0.800	0.800
HP	0.724	0.713
SOP	0.656	0.635

Table 3 indicates the coefficient of determination which is also known as predictive accuracy. The table is part of the inferential statistical part of SMART-PLS (Silaparaasetti et al., 2017). The symbol used to reflect the coefficient of determination is R-Square and according to Wong (2013), 0.25 is the least value to assure the presence of predictive accuracy while 0.50 and 0.75 are termed as moderate and substantial impact.

Table 4 and Figure 2 indicate the relationship of variables. The tool is also known as path-coefficient and due to its role in statistical testing, the table is a part of inferential statistics that is linked with the measurement model (Silaparaasetti et al., 2017).

However, to assure the path coefficient there is a need to follow two criteria i.e., p-values and t-values. The criteria for assuring the first one is value must be lesser than or equal to 0.05 and for the later one the value must be greater than or equal to 1.97 (Hair et al., 2017). Hence table 4 and Figure

2 highlight that all the relationships evaluated through this research are valid and there is a significant relationship between the variables.

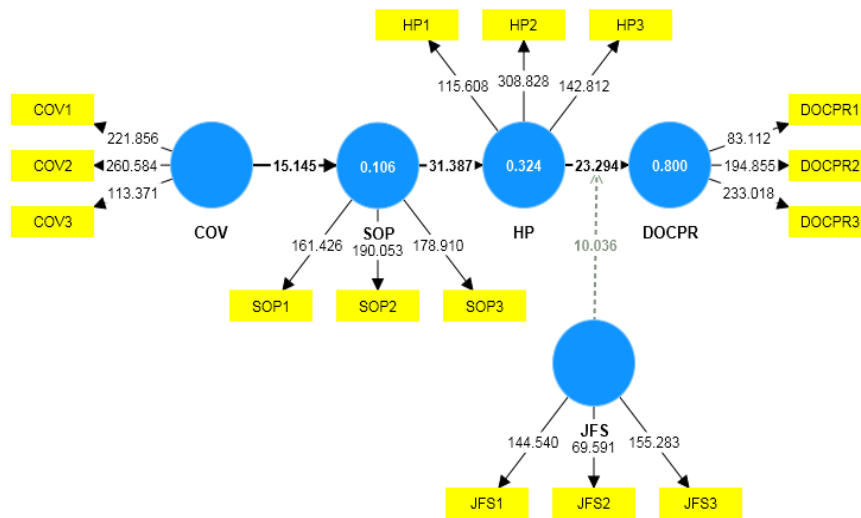


Figure 2: Path Coefficient

Table 4: Path Coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	
COV -> SOP	0.325	0.325	0.021	15.145	0.000
HP -> DOCPR	0.375	0.375	0.016	23.294	0.000
JFS -> DOCPR	-0.583	0.582	0.015	39.603	0.000
SOP -> HP	0.569	0.569	0.018	31.387	0.000
JFS x HP -> DOCPR	-0.077	-0.077	0.008	10.036	0.000

Table 5: Specific Indirect Effect (Mediation Analysis)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
SOP -> HP -> DOCPR	0.214	0.214	0.012	17.917	0.000
COV -> SOP -> HP	0.185	0.185	0.013	13.995	0.000
COV -> SOP -> HP -> DOCPR	0.069	0.069	0.006	11.913	0.000

Table 5 is known as the specific indirect effect and is used to gauge mediation analysis. The criteria for assessing the impact of specific indirect effects are the same used in the path coefficient (Hair et al., 2019). Hence in the light of the parameters the criteria for t-value is greater than or equal to 1.97 and

lesser than or equal to 0.05 for p-values (Hair et al., 2017). Therefore, similar to Table 4 table 5 also assures the presence of all the mediating and serial relationships.

## **Conclusion and Discussion**

Initially, the findings of the study seem to be consistent with Tarsuslu et al. (2021) and Uzun et al (2021). However, there was a lack of studies that may uncover parental stress over children's well-being as indicated by Griffith (2022) and induced by Bilal et al. (2021) for further empirical investigation. Hence conduction of this study is in line with research gaps and relevant literature. Moreover, the findings of the study also indicated that pressure and stress kept on mounting (Calvano et al., 2021) and ultimately resulted in harsh parenting, child abuse & child growth. Hence the findings of this study are also aligned with Griffith (2022) with respect to the impact of harsh parenting. In fact, the findings of the study further revealed that harsh parenting may also lead to disturbance of the child-parent relationship which is consistent with Gulde et al., (2022). Other than that, the use of a joint family system is also negatively correlated with disturbance of the child-parent relationship and its moderation is causing positive moderation to harsh parenting and disturbance of the child-parent relationship. Similar sort of indications was reflected by Brock and Laifer (2020) and Tarsuslu et al. (2021), which highlights the importance of family association and the impact of positive family associations and relationship during COVID-19 on stress & social relationships.

## **Need of Future Research**

This research is used to understand the impact of stress during COVID-19 on parents on child parents relationships. In fact, the study is supplemented with harsh parenting to check the impact of stress on parents on child-parent relationships. Hence the study is one of the few of its kind as it is conducted in an Asian scenario and the model is unique as compared to the others. However, further research may be conducted by adding some other moderators. Similarly, further research may be conducted through testing this model in different countries, especially for cross-country analysis.

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