

Parents are Stressed! Factors that Influence Parenting During COVID-19

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Abstract

Objective: The Coronavirus Disease 2019 (COVID-19) pandemic has caused numerous unexpected challenges for many families, and these long-lasting demands have likely contributed to higher amounts of stress for most parents. The aim of this study was to describe changes in parent stress from before to during COVID-19, and examine if work related-factors (e.g., family job layoff / furlough) were associated with changes in parent stress. Factors that parents felt influenced their parenting and strategies to effectively manage parenting difficulties during COVID-19 were also examined.

Methods: Parents (N=584; 95% female) in the US with ≥ 1 child aged 5-18 years completed a single online survey in April-May 2020, ~2 months after COVID-19 was declared a pandemic. Survey measures included the 10-item Perceived Stress Scale, where parents reported on their stress prior to COVID-19 (via retrospective-report) and again during COVID-19 (thinking about their current situation). Parents also reported on their parenting-specific stress, factors that influenced parenting, and strategies implemented to manage parenting difficulties during COVID-19. Paired sample t-tests examined changes in parent stress from before to during COVID-19.

Results: Parents' perceived stress increased from before to during COVID-19 (16.2 ± 5.6 vs. 22.0 ± 6.3 ; $p < 0.01$), with an even greater increase for parents with a family job loss / furlough or a decrease in family income ($p < 0.01$). Only ~4% of all parents reported high stress before COVID-19, whereas 22% reported high stress during COVID-19. Most parents (72.8%) reported an increase parenting-specific stress from before to during COVID-19, and 34.6% reported that it was very difficult to continue parenting in the same way as they did prior to COVID-19. Common factors influencing parenting were a change in children's daily structure/routines, worry about COVID-19, and demands of online schooling. Strategies used to manage parenting difficulties were doing family activities together, keeping in touch with family/friends virtually, and keeping children on a daily routine.

Conclusions: Parent stress increased substantially during COVID-19, suggesting a need for enhanced access to mental health resources and emotional supports. Public health interventions should address parenting-specific stressors and effective strategies for managing parenting difficulties to mitigate their deleterious impact.

Background

The Coronavirus Disease 2019 (COVID-19) has swept the globe causing new and unexpected challenges, including severe financial losses, concerns around contracting COVID-19, and mandatory stay-at-home orders disrupting families' daily routines. These challenges have contributed to a heightened awareness among clinicians,¹ researchers^{2,3} and public health organizations^{4,5} on the potential for substantial increases in families' stress. Many families initially experienced acute stress related to COVID-19, yet with the persistence of this pandemic, families are likely experiencing more chronic stress, due to the long-lasting and repeated demands that are not likely to be resolved quickly. This is concerning, given that high

amounts of stress can have physiological and emotional consequences,⁶ including increased risk of cardiovascular disease,⁷ obesity,⁸ altered respiratory patterns,⁹ and depression,¹⁰ among others. During previous infections outbreaks, profound psychosocial impacts were observed,^{11,12} and a recent study in China found that > 50% of respondents reported moderate-to-severe psychological impact due to COVID-19.¹³ Examining stress levels among parents in the United States during COVID-19 will enhance our understanding of how this pandemic is currently affecting families and inform public health efforts to mitigate its impacts.

An increase in parents' stress during COVID-19 is likely multifactorial. For example, changes in work structure, including a family job loss, a decrease in income, or the inability to work from home, might cause substantial distress.^{14,15} Under non-pandemic circumstances, unemployment can cause considerable negative mental health impacts¹⁶ these effects are likely exacerbated during a pandemic, and an April 2020 study found that financial concerns were the greatest stressor for adults during COVID-19.¹⁷ In addition, a recent nationwide poll found that US parents, in particular, are experiencing higher levels of stress during COVID-19 compared to adults without children.¹⁸ Parents have the added challenges of managing children's at-home schooling, halts to children's extracurricular activities and time spent with friends, as well as navigating children's emotions around the uncertainty and change.¹⁸ Quantifying parents' perceived stress and factors that influence parenting during this pandemic can help to better understand the psychological impact of COVID-19 on parents' mental health, in order to develop and implement targeted strategies for prevention and stress management, address parents' emotional well-being, and inform initiatives to provide support.

Effective stress management during COVID-19 is essential to reduce its deleterious impact. To manage COVID-19-related stress, professional organizations such as the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) recommend strategies such as setting a routine, taking time to unwind, connecting with others, and staying informed while limiting the amount of news that causes distress.^{4,5} The specific strategies that parents are using and deem effective for managing their parenting difficulties during COVID-19 remains unknown. Obtaining parents' perspectives on their use and effectiveness of coping strategies would be particularly useful to informing initiatives to improve families' health and well-being during this time.

The aim of this paper is to describe parents' perceptions of changes in general stress and parenting-specific stress, from before to during COVID-19. We hypothesize an increase in general stress and parenting-specific stress from before to during COVID-19. Next, we examine if work-related factors (family job layoff / furlough, income change, working from home) are associated with changes in parents' general stress and parenting-specific stress. We hypothesize that families with a job layoff / furlough, a decrease in income, and not working from home will report greater increases in general stress and parenting-specific stress. Last, we describe the stressors that parents report as impacting their parenting during COVID-19 and strategies that parents find effective at managing their parenting difficulties.

Methods

Study Design and Participant Sample

A cross-sectional, observational study was implemented to conduct a single nationwide survey that examined parents' perceptions of their general and parenting-specific stress, before COVID-19 (retrospective report) and during COVID-19 (at the time of survey completion). Parents also reported on stressors that influenced their parenting during the pandemic and strategies they found effective at managing parenting difficulties.

Procedures

This online survey was administered between April 30, 2020 and May 23, 2020, approximately four months after the start of the COVID-19 pandemic in the US¹⁹ and a few weeks after most states had closed schools.²⁰ Participants were recruited through: 1) Facebook advertisements targeting parents with lower educational attainment and living in lower-income ZIP codes; and 2) a snowballing technique using emails sent to colleagues across different sectors (e.g., academic, community partners, schools, nonprofit organizations) and postings on social media platforms (e.g., Twitter, parenting forums and children's hospital and university pages on Facebook). Interested participants were directed to the survey site using Qualtrics, where an informational letter was provided with details of the study. Passive permission was used to receive informed consent given the minimal risks of the study. Screening questions assessed eligibility, including if participants lived in the US, were ≥ 18 years of age, and had ≥ 1 child that was 5–18 years of age. The eligibility criteria around child age was chosen in order to recruit parents of school-aged children affected by school closures. Parents who responded affirmatively to these questions were eligible and prompted to complete the full survey ($n = 58$ parents were not eligible). To ensure that all complete responses were valid (e.g., not bots), the study used Completely Automated Public Turing test to tell Computers and Humans Apart (CAPTCHA) features and the research staff continuously monitored all survey responses. Upon survey completion, each respondent was contacted to provide compensation and ensure the responses were from humans. A total of $N = 603$ parents completed the full survey; $n = 19$ were excluded due to invalid survey responses. Thus, a final sample of $N = 584$ parents was included in these analyses. This study and the passive consent procedures were approved by the Institutional Review Board at Virginia Commonwealth University.

Instruments

Perceived stress.

The 10-item Perceived Stress Scale (PSS) was used to measure general stress. Parents completed the PSS twice; the first time reflecting back on their feelings before COVID-19, and then again when considering their current feelings during COVID-19. This reliable and valid scale is the most widely used psychological instrument to evaluate perceived stress.^{21,22} Items were rated on a 5-point Likert scale ranging from *Never* (0) to *Very Often* (4), and then summed. Total scores ranged from 0 to 40, and higher

scores indicate greater perceived stress. Scores were then categorized to describe parents who experienced low stress (scores of 0–13), moderate stress (scores of 14–26), and high stress (scores of 27–40) based on previously established cutoff values.^{23–26} Parenting-specific stress was assessed using a single item asking if parenting-specific stress had *increased, decreased, or remained the same* since the COVID-19 outbreak.

Parenting difficulty.

Parenting difficulty was assessed using a single-item asking, “How difficult have the past few weeks been for you to continue parenting in the same as you did prior to COVID-19?” Response options included *not difficult at all, somewhat difficult, very difficult, or extremely difficult*.

Factors influencing parenting.

Parents were provided with a list of 9 possible stressors and asked to select which of these impacted their parenting during COVID-19, in a check all that apply manner. Stressors included a lack of money, lack of food, lack of time due to increased work tasks, lack of time due to increased household tasks, change in daily routines and structure, parents’ worry/anxiety around COVID-19, child’s worry/anxiety around COVID-19, child’s online schooling at home demands, and child’s desire to be with friends. There was also a response option for “other,” where parents were prompted to provide a short answer response. The list of stressors was developed by experts on the research team, given the lack of existing evidence on COVID-19-specific stressors for parents.

Strategies to manage parenting difficulties.

Parents were provided with a list of nine possible strategies and asked to select which of these strategies they found effective at manage parenting difficulties during COVID-19 in a check all that apply manner. Strategies included using extended family for resources, using community resources, keeping in touch with family / friends virtually, keeping child on a daily routine, doing family activities together, finding ways to effectively manage anxiety, controlling the information I seek on COVID-19, focusing on the big priorities and letting the small tasks go, and taking time for myself. Parents could also choose “other” and provide a short answer response. This list of strategies was developed by experts on the research team, given the purpose of examining COVID-19-specific strategies, and the lack of COVID-19-specific measures in the literature.

Demographics and COVID-19-specific questions.

Respondents answered demographic questions including parent age, sex, race, ethnicity, education, marital status, family income, insurance status, and the total number of children and adults in the home.

Additional questions were asked about family's COVID-19 social distancing practices, family member COVID-19 diagnoses, working from home, job layoffs / furloughs, income changes, and whether the parents had filed for unemployment.

Statistical analysis

Means and standard deviations were calculated for all continuous demographic and COVID-19-related variables. Frequencies and percentages were calculated for all categorical variables. For Aim 1, a paired samples t-test examined if there were changes in parents' perceived stress, from before to during COVID-19. A chi square test of independence was used to examine if the distribution of parents who experienced high, moderate, or low stress differed before versus during COVID-19. For Aim 2, univariate regression models evaluated if work-related factors (e.g., job loss / furlough) were associated with parents' perceived stress (continuous variable); chi square test of independence examined if work-related factors were associated with parenting-specific stress (categorical variable). For Aim 3, percentages were calculated for each response option pertaining to factors causing parenting difficulties and strategies that parents felt were effective for managing parenting difficulties. Thematic analyses were applied to the "other" responses provided, and categories were created. Two researchers (ELA and DS) created categories and independently rated each parent response into one or more categories. Ratings were compared between researchers, and any discrepancies were discussed and resolved, using a third person (MKB) when needed. Data were analyzed using SAS statistical software, version 9.4 (SAS Institute Inc., Cary, NC, USA), and significance was set at $p < 0.05$.

Results

Demographics.

On average, parents were 40.4 ± 7.2 years of age. Most were female (94.5%), White (82.7%), not Hispanic or Latino (85.3%), and married or living with a domestic partner (78.1%). About 37% of parents had some college attainment or less, while 36.3% had an associates or bachelor's degree, and 26.4% had graduate training. Almost half (46.8%) of families made $\leq \$50,000$ /year, while the remaining 53.2% made $> \$50,000$ /year. Insurance status included 35.3% of families with Medicaid, 58.9% with private insurance, and 5.8% with no insurance. Families had an average of 2.1 ± 0.8 total children and 2.2 ± 1.2 total adults living in their home.

COVID-19 related factors.

Most (98.3%) parents reported they were social distancing, and 11% reported a COVID-19 diagnosis in their family. Half (49.7%) of parents were not working from home, while 33.7% were, and 16.6% did not work even before COVID-19. Many (60.1%) parents reported a decrease in family income during COVID-19, while 40.9% reported a family job loss / furlough, and 34.6% filed for unemployment benefits.

Perceived general stress and parenting-specific stress

Average scores on the PSS were 16.2 ± 5.6 before COVID-19 and 22.0 ± 6.3 during COVID-19; thus, parents' general stress increased by 5.7 ± 6.2 units ($p < 0.01$). Few parents (3.6%) experienced high stress before COVID-19, while 21.9% experienced high stress during COVID-19. About two-thirds of parents experienced moderate stress, both before COVID-19 and during COVID-19 (64.9% and 69.4%, respectively), while the percentage of parents who experienced low stress decreased from before to during COVID-19 (31.5% vs. 8.7%, respectively; $p < 0.01$). Almost three-fourths of parents (72.8%) also reported an increase in parenting-specific stress during COVID-19.

Work-related factors associated with greater overall stress and parenting-specific stress

Parents with a family job loss / furlough reported a greater increase in general stress during COVID-19, compared to parents without a family job loss / furlough (mean increase [during COVID-19 minus before COVID-19]: 7.0 ± 6.8 vs. 4.9 ± 5.6 units, respectively; $p < 0.01$). There was no association between family job losses / furloughs and changes in parenting-specific stress ($p = 0.07$). Parents with a decrease in family income reported greater increases in general stress, compared to parents with no change or an increase in family income (mean increase: 6.5 ± 6.4 vs. 4.7 ± 5.6 vs. 3.9 ± 6.2 units, respectively; $p < 0.01$). Further, of the parents reporting an increase in parenting-specific stress during the pandemic, 63.8% also reported a decrease in income, while fewer reported an increase or no change in income (8.5% vs. 27.8%, respectively; $p < 0.01$). There were no associations between changes in overall stress or parenting-specific stress among parents who worked from home versus not during the pandemic ($p > 0.05$).

Parenting difficulties during COVID-19

During COVID-19, about one-third (34.6%) of parents reported it was very or extremely difficult to continue parenting in the same way as they did prior to COVID-19; about half (51.4%) of parents reported it was somewhat more difficult. Figure 1 illustrates factors that parents felt impacted their parenting during the pandemic, according to their perceived stress during COVID-19. Across all parents, the most common factor was a change in children's daily structure and routines (reported by 86% of total parents), while many parents also reported their worry and anxiety around COVID-19 (68% of total parents) and demands related to children's online schooling at home (65% of total parents) impacted their parenting during the pandemic. Unique answers not shown in Figure 1 were provided by 8.4% of parents. These responses were categorized as shown in Table 1, with example quotes for each category to provide representation of these answers.

Table 1
Parent “other” responses to factors influencing parenting difficulties during the COVID-19 pandemic,
categorized by topic

Category	Responses (n)	Example Quotes
Parents’ work or graduate school demands	12	<p>“Working from home with children home as well”</p> <p>“Balancing my spouse’s job responsibilities”</p> <p>“A lack of time due to increased school tasks (grad school)”</p>
Parents’ time and resource availability	11	<p>“Worry about possible lack of food and trying to stay healthy”</p> <p>“More time with my kids since I’ve been working at home”</p> <p>“Juggling all responsibilities at the same time instead of getting dedicated time for different responsibilities”</p>
Mental and emotional health	8	<p>“Being in the house has become overwhelming”</p> <p>“My child’s distress over not attending school and activities”</p>
Children’s behavior or special needs	6	<p>“Child’s behavior has gotten worse”</p> <p>“Autism and routine changes”</p> <p>“My child has ADHD and several behavioral issues that have been set backwards. It’s extremely hard to be positive about the regression.”</p>
Children’s schooling	5	<p>“No ability for my child to have schooling during this time”</p> <p>“Parenting and having my child do their schoolwork”</p> <p>“My 10-year-old has a younger sister who has different demands for virtual learning, and her daycare does not provide the same structured learning as her older sister”</p>
Not seeing extended family	4	<p>“Inability to visit grandparents who live nearby”</p> <p>“Lack of support from extended family members due to social isolation”</p>
Missing out	5	<p>“Senior year of high school and missing so much...”</p> <p>“Missing organized sports”</p>
Marital conflict	3	<p>“Increased conflict with spouse”</p> <p>“Marital strain”</p>
Medical conditions / death	3	<p>“Death in the family”</p> <p>“My parents being in the hospital with COVID-19 and also me and my husband. My mother being diagnosed with cancer.”</p>

Note: These responses were provided when parents selected “other” in response to survey questions that asked about factors influencing parenting difficulties during COVID-19. A single response could

Strategies to manage parenting difficulties

Figure 2 illustrates strategies that parents found effective at managing parenting difficulties during the pandemic, according to their perceived stress during COVID-19. Across all parents, the most common strategies included doing family activities together (72% of all parents), keeping in touch with family / friends virtually (68% of all parents), and keeping children on a daily routine (52% of all parents). About 3% of parents reported “other” strategies. Of these responses, the most common was engaging in hobbies / exercise (n=5; e.g., “We have started taking daily walks outside”; “Escape to Netflix, Hulu”). Other responses included making family changes (n=3; e.g., “Family meals are more often and when we come together after work and school”), adapting their mental and spiritual outlook (n=3; e.g., “accepting the need to be flexible”; “prayer and virtual church”), and cutting back (n=3; e.g., “doing less for my job,” “not listening to the news”).

Discussion

This study showed a substantial increase in parents’ stress from before to during COVID-19, with even greater stress for families with a job loss / furlough and decreased family income during the pandemic. The majority of parents reported that it was difficult to continue parenting in the same way as they did prior to COVID-19, and the most common factors that influenced parenting were changes in children’s daily structure and routines, worry and anxiety around COVID-19, and demands related to children’s online schooling at home. To manage these parenting difficulties, most parents found that doing family activities together, keeping in touch with family / friends virtually, and keeping children on a daily routine were effective. These findings highlight the need to address the increasing stress that families are experiencing and provide adequate resources to manage parenting stress during COVID-19.

About one-in-five parents reported high stress, while three-in-four parents reported an increase in parenting-specific stress during COVID-19. Other studies have found that stress is a common reaction to this pandemic²⁷ and that parents are experiencing more stress than non-parents.¹⁸ Disseminating research findings that show many parents have increased stress during this time can help to normalize parents’ feelings of stress and provide reassurance that other parents are likely feeling the same way. To support parents during these unprecedented times, public health messaging should continue to promote healthy ways for coping and provide information on managing stress for parenting-specific challenges. For example, organizations like the CDC, WHO, UNICEF, and others have collaborated to provide open access, online resources in 90 different languages on evidence-based strategies for managing parenting stress during COVID-19.²⁸ This includes resource sheets on topics such as “Parenting Teens”, “Parenting in Crowded Homes and Communities”, “Family Harmony at Home”, and “Keeping Calm and Managing Stress.” Future research should examine if families are using resources such as these, and if they are helping to mitigate stress. Furthermore, policymakers at multiple levels (e.g., local, state, schools,

employers) should consider the potential impact of COVID-19 policy changes on parents' stress and include thoughtful resources to help mitigate this impact (e.g., providing coordinated strategies for parents to help mitigate the impact of school closures). There is a dire need for coordinated efforts among policymakers to prioritize these systemic changes to can reduce the impact of COVID-19 on parents and families.

For some parents, prolonged periods of high stress may result in substantial mental health impacts including greater depression, anxiety, and reduced quality of life.²⁹ High amounts of stress have also been associated with maladaptive behavior changes, including substance abuse, eating behavior changes, and excessive alcohol consumption.²⁹ Given potential for a looming mental health crisis, adequate access to quality mental and behavioral health care is of paramount importance. Yet, prior to COVID-19, access to mental health resources did not meet the needs (neither the quality or quantity) for millions of Americans,³⁰ with particular concern about inadequate access for families with Medicaid. Furthermore, healthcare costs have long been a significant barrier to providing mental health resources for those who are uninsured.³¹ During COVID-19, millions of Americans have become unemployed and lost employer-provided insurance, further reducing access to mental health resources. In this study, parents with a job loss / furlough reported a greater increase in stress during COVID-19; thus, families who are more likely to need these mental health resources may not be able to access them. In response to this, the Centers for Medicare & Medicaid Services have expanded access to telehealth services, including the provision of mental health, during COVID-19³² and The National Alliance on Mental Illness has provided a COVID-19 resource and information guide for finding free in-person and online mental health support. While these initiatives represent initial strategies to address the increased mental health concerns, additional public health and policy response are urgent to prevent an impending mental health crisis.³⁴

When parents were asked which factors influenced their parenting during COVID-19, the most common response was a change in children's daily structure and routines. Most children thrive under a well-planned, predictable routine, which makes them feel safe and secure, contributes to healthy habits, and leads to less problematic behaviors.³⁵ Structure and routines also benefit parents by helping them to feel organized and in control, which increases parenting competence and reduces daily stress.³⁵ About half of families in this study reported keeping children on a daily routine was effective in managing parenting difficulties during COVID-19. During this time of unpredictability in a rapidly changing environment, it can be difficult for families to keep a consistent daily routine. Parents who are experiencing high stress and have not yet created a daily routine at home may benefit from creating a schedule together with their children, and parents who have established a daily routine need flexibility to adapt to the ever-changing circumstances. It is important for parents to receive guidance on the importance of creating daily structure and routines, as well as education on how to best create adaptable routines with their child.

Routines may include designated time for children's online schooling, which was another common factor that parent felt greatly impacted their parenting. During COVID-19, many parents have had to take on the

additional role of teaching their children from home, amongst other work and household tasks. Many parents expressed that limited time due to these work and household demands was a common stressor, and two-thirds of parents report that children's online schooling impacted their parenting. Many parents are understandably overwhelmed by the many responsibilities and roles they have had to take on; for example, one parent mentioned that, "juggling all responsibilities at the same time instead of getting dedicated time for different responsibilities," impacted their parenting. In addition to parents having to cope with these changes, children are also coping with the lack of sociability from friends and structure that school and extracurricular activities provided. In fact, just over half of parents reported that children's desire to be with friends have impacted their parenting during this pandemic. Doing family activities together at home and connecting with family and friends virtually are ways to help with coping, bonding, and providing sociability in an environment that limits outside social interactions.^{4,5,28}

Another common stressor among parents was managing worry and anxiety around COVID-19. These findings are similar to another study that found reading / hearing about the severity and contagiousness of COVID-19 was the most commonly experienced stressor among a sample of US adults.³⁶ With an abundance of information available, it is important for families to stay informed, yet also limit the amount and source of information that may be causing anxiety. Organizations such as the CDC and WHO recommend taking breaks from listening to the news and reading about COVID-19, including posts on social media.^{4,5} Just under half of parents in this study reported that controlling the information they seek on COVID-19 and finding ways to effectively manage their anxiety were effective in reducing parenting difficulties. Data from this study suggest that other ways in which parents effectively managed their anxiety and stress included engaging in hobbies and exercise, such as going on family walks, taking time for themselves, and adapting their mental outlook.

Limitations of this study include the use of a self-reported questionnaire on which parents' stress prior to COVID-19 was retrospectively reported. Obtaining baseline measures of parents' perceived stress was not feasible given the sudden onset of this pandemic. To minimize recall bias, this survey was administered only a few months after the start of COVID-19, yet responses could be biased in unmeasured ways. This study used items that had not been previously validated to assess factors influencing parenting and effective strategies to manage parenting difficulties. This methodological decision was made in order to address the research question related to stressors and parenting strategies specific to COVID-19, rather than more general stressors or strategies that are included in existing questionnaires. Response options provided may not have encompassed all possible stressors and coping strategies. To overcome this limitation to some extent, a response option of "other" was included where parents could provide an alternative response. These "other" responses represent only a small percentage of respondents, yet they provide rich data and a unique, detailed perspective on some of the stressors and coping strategies that parents were using. Other limitations include the use of a convenience sample of mostly mothers with limited racial / ethnic diversity (i.e., mostly White) that is not a nationally representative sample of all US parents, thus limiting generalizability of these findings; however, this sample did provide a diversity across family income and parent education. Lastly, parental stress could have varied across geographical

locations where different policies were enforced at the time of survey completion. Larger, more nationally representative data sets, such as the Stress in America Poll,¹⁸ should be referenced for changes in stress across a broader US population and by location.

Conclusion

Overall, this study provides timely data on the significant increase in parents' general stress and parenting-specific stress, at a single timepoint during the height of stay-at-home orders and school/business closures during COVID-19. Longitudinal data are needed to examine how parent's experiences, emotions, and needs change over the course of this pandemic, as stay-at-home orders are eased, and some children return to school. Information from this study can be used to raise awareness of the potential impacts this stress may have on parents' and families' mental health, particularly as COVID-19 has persisted and stressors have become chronic. Appropriate mental health resources are needed to help mitigate the negative impacts on mental health for those in need. Information on the specific stressors that influenced parenting and the strategies parents found effective at managing parenting difficulties can be used to inform stress management initiatives and targeted prevention messaging that are specific to parenting challenges during the COVID-19 pandemic.

List Of Abbreviations

Coronavirus Disease 2019 (COVID-19)

Centers for Disease Control and Prevention (CDC)

World Health Organization (WHO)

Computers and Humans Apart (CAPTCHA)

Perceived Stress Scale (PSS)

Declarations

Ethics approval and consent to participate

This study was approved by the Institutional Review Board at [redacted] University. Passive permission was used to receive informed consent.

Consent for publication

Not applicable

Availability of data and materials

The datasets used during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests

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Author contributions

ELA and MKB conceptualized the research questions and obtained grant funding. ELA completed data collection, data analyses, and drafted the initial version of the manuscript. All authors designed the study, interpreted the data, critically reviewed the manuscript, and approved the final version as submitted.

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Not applicable

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Figures

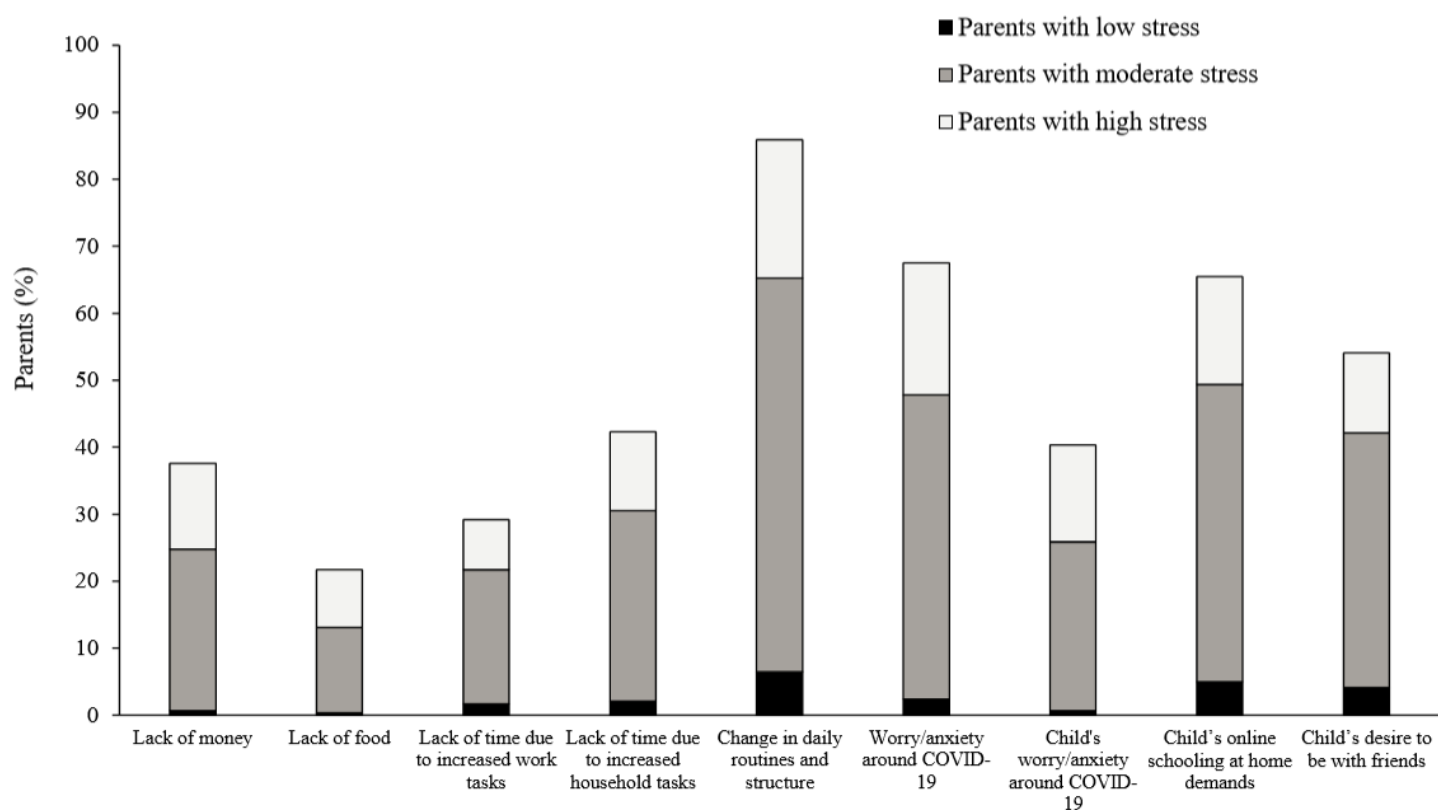


Figure 1

Title: Parent-reported stressors that impacted parenting during COVID Legend: Percentage of parents reporting low, moderate, and high stress during COVID-19, who also reported different stressors impacted their parenting during the pandemic in a nationwide sample of US parents with a child 5-18 years of age (N=584). Parent could choose more than one of these factors and were asked to select all that apply.

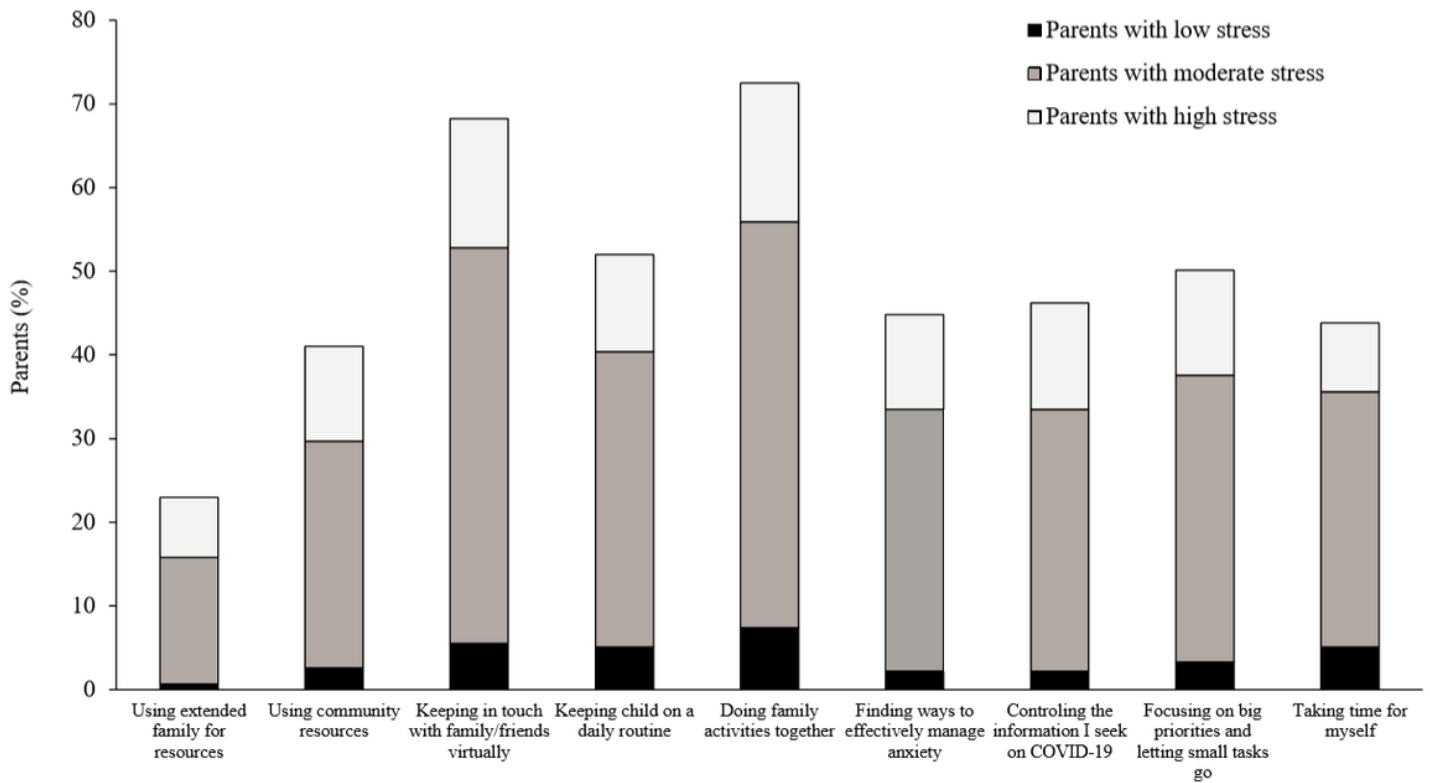


Figure 2

Title: Parent-reported strategies effective at managing parenting difficulties during COVID-19 Legend: Percentage of parents reporting low, moderate, and high stress during COVID-19, who also reported different strategies that were effective in managing their parenting difficulties during the pandemic in a nationwide sample of US parents with a child 5-18 years of age (N=584). Parent could choose more than one of these strategies and were asked to select all that apply.