Maternal Guilt and Shame and Educational Placement of Children During the COVID-19 Pandemic

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Abstract

Objective*: The objective of this study was to understand the well-being of mothers during the COVID-19 pandemic, but more specifically, to understand if maternal guilt and shame was impacted by their child's educational placement (i.e., how their child went to school).*

Background*: Guilt and shame are feelings often elicited during motherhood; however, the COVID-19 pandemic brought about additional stressors and challenges that impacted mothers. Past research has not measured guilt and shame during the pandemic alongside other measures of well-being.*

Method*: Data were collected in November and December of 2020 via a self-report online survey.*

Results*: Moderate levels of maternal guilt and shame were reported and did not differ based on educational placement. Guilt and shame were related to other measures of well-being including COVID-19 anxiety, depression, parental stress, and internal health locus of control. Guilt was predicted by three factors: shame, COVID-19 anxiety, and mothers' education; whereas, shame was predicted by two factors: guilt and parenting self-efficacy.*

Implications: *System level changes and suggestions for individual practitioners include reforming education and labor laws, paternal support, and self-care.*

Conclusion: *The COVID-19 pandemic was a hard time for mothers as evidenced by their feelings of maternal guilt and shame alongside other measures of their general well-being. Additional attention, research, and support for maternal mental health is warranted.*

Keywords: Maternal guilt, maternal shame, pandemic parenting, parenting self-efficacy, maternal well-being

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While the COVID-19 global pandemic brought universal difficulty to people across the world, there were groups hit especially hard. One of those groups were parents, especially mothers as they tended to carry more home and child duties (Kerr et al., 2021; Yavorsky et al., 2021; Zamarro & Prados, 2021). The nature of parenting changed as mothers and fathers were quarantined in their homes with their children while trying to balance work, childcare, their children's education, and constant fear related to the dangers of the illness (Suffren et al., 2021). This study seeks to better understand the well-being of mothers during the first year of the COVID-19 pandemic by focusing on maternal guilt and shame. It further investigates if educational placement impacted such feelings alongside additional measures of well-being.

Educational Placements

After schools shut down during the Spring of 2020, parents needed to consider how their children would attend school moving forward, as schools across the U.S. began to offer varied educational placements (e.g., in-person, remote, hybrid). This was a contentious topic, as noted by data from one survey which reported that one quarter of parents believed their child was underprepared for school to start back up in the fall of 2020 (Saavedra et al., 2020). Across the U.S., parents essentially had four educational placement options for their children. First, students could attend school face-to-face (at the physical school building). Second, they could attend via remote online education. Third, they could join in using a hybrid format that combines face-to-face with online learning (e.g., alternating days). Lastly, parents could disenroll their children from school and homeschool instead. Thinking about the various personal and family situations that existed and the options that school districts made available, some parents had a choice in their child's educational placement, while others did not and were forced into one of the placement types (Mandavilli, 2020).

How children attended school was a difficult issue for many parents (Mandavilli, 2020), and remained a prominent parenting concern as the pandemic evolved. Educational placement became a complicated risk-evaluation process where parents may not have felt satisfied with their choice or the placement they were forced into (Widdicombe, 2020). The factors parents needed to consider include, but were not limited to, their communities' COVID-19 infection rates, the prevalence and seriousness of childhood COVID-19 infection, children's transmission of COVID-19, and vaccination eligibility (Mandavilli, 2020). They also needed to consider personal and family variables including resources, family help, childcare options, and characteristics of their children, such as age, disabilities, and their children's vaccination status. Considering such difficulties, what were mothers feeling and how did the educational placement of their children play a role in these emotions?

Maternal Guilt, Shame, and Well-being

There is extensive research on maternal guilt and shame and how it pertains to various aspects of life for mothers (see Liss et al., 2013; Miller & Strachan, 2020; Prikhidko & Swank, 2018; Sirois et al., 2019; Slobodin et al., 2020); however, more research is needed to better understand mothers' well-being, specifically during the pandemic. As a guiding framework, current understanding posits that guilt is a moral emotion that can cause the need or desire to repair harm in others (Rotkrich & Janhunen, 2010). It focuses on wrongful behavior, the effects such behavior has on other people, and the negative emotions associated with feeling like you have done something wrong. At its most basic form, guilt is remorse for a bad action (Liss et al., 2013). Thus, maternal guilt can be understood as the feeling mothers have when they have done something in their parenting they feel is "bad." On the other hand, shame is a self-directed emotion that causes peopke to view themselves from an external perspective and is more an overall negative self-evaluation (Liss et al., 2013; Rotkrich & Janhunen, 2010). Individuals feel shame when they reflect on themselves as bad or wrong (Liss et al., 2013). This often involves self-rumination on their negative evaluation of themselves (Kim et al., 2011). In other words, feeling maternal shame is the feeling mothers have when they believe they are a "bad mom."

The experiences of guilt and shame as just described can result in negative perceptions of oneself. Higgins (1987) explains that when someone feels discrepancy between their actual and ideal self (i.e., self-discrepancy theory), they can often experience negative mental health outcomes. Liss and colleagues (2013) found that guilt and shame were related to maternal self-discrepancy and that this relationship was strong among mothers with high levels of fear of negative evaluation. Additional research indicates that maternal guilt and shame relates to other aspects of well-being for mothers (see Liss et al., 2013; Miller & Strachan, 2020; Prikhidko & Swank, 2018; Sirois et al., 2019; Slobodin et al., 2020). To build upon the current literature, we measured variables including depression, parenting self-efficacy (PSE), parental stress, health locus of control, and COVID-19 anxiety with the goal of better understanding mothers' general well-being alongside maternal guilt and shame during the COVID-19 pandemic.

Depression is certainly a facet of overall well-being and is a common mental health concern for women in the U.S. Derrella and Milan (2021) found that maternal depression has more self-focusing and unfavorable responses when considering moments of maternal guilt. They also found that those with depressive symptoms have greater degrees of self-blame, a feeling that contributes to guilt and shame. Interestingly, depression has also been found to be related to parenting self-efficacy, whereby the lower the mother's self-efficacy, the greater their depression (Bates et al., 2020; Gross et al., 1994; Kohlhoff & Barnett, 2013). Racine and colleagues (2021) released a meta-analysis (of studies published between January of 2020 and March of 2021) that yielded 18 independent studies investigating maternal depression and anxiety. The researchers conducted a random-effect meta-analysis that allowed them to calculate pooled prevalence estimates suggesting that mothers' levels of clinically significant depression and anxiety represent a "pressing concern" to the authors (Racine et al., 2021, p.14).

Parenting self-efficacy (PSE) is defined as a parent's confidence about their knowledge and abilities to raise children (Vance & Brandon, 2017). Parenting a child comprises the complete being of the parent, emotionally, psychologically, physically, and includes their ideology about raising a child, which is in part captured by PSE. In a large meta-analysis, Albanese et al., (2019) reviewed 115 relevant studies and found that 40 of them describe how PSE impacts parental mental health.

The most common finding is the relationship between PSE and depression (both post-partum depression and that occurring in later states of parenting). Some of the articles reviewed found that PSE was a moderator for other variables including setting realistic prenatal expectations, family stress, stress and parental mental health, social support, and parental satisfaction. We assert that raising children during a global pandemic with little specific guidance on how to do so, with less community support due to lockdowns, and relying on personal intuition was abnormally challenging. With the weight of health, education, and work/home responsibilities, checking in on mothers' PSE is essential to get a picture of how the pandemic impacted their feelings of guilt and shame and general well-being.

Stress, a condition naturally occurring within parenting, was heightened as part of the COVID-19 pandemic (Adams et al., 2021). Parental stress refers to the strain that can exist from the specific responsibilities of caregiving and relationship development between parents and their children (Berry & Jones, 1995), and is related to depression as well as PSE (Albanese et al., 2019). Research has also found that parents' self-conscious emotions such as guilt and shame are linked to parental stress (Kalantar Ghoreishiet al., 2019).

Locus of control has also been found to be related to well-being. Health locus of control (LOC) is understood as an individual's belief that their health is (internal LOC) or is not (external LOC) determined by their own behavior (Wallston., et al., 1978). Research on adults in South Korea during the pandemic documented that an internal LOC was positively correlated with well-being, but the correlation was mediated when individuals had mental health problems (Shin & Lee, 2021). Another study found that an external LOC was related to depression and anxiety, and that having an internal LOC made the pandemic easier for people to endure (Krampe et al., 2021). Researchers have found that an external locus of control is related to feelings of depression, anxiety, and higher feelings of alienation (Krampe et al., 2021; Mahmoud et al., 2021). These studies suggest that the sense of control mothers feel they have over their health, and likely the health of their children, is an important variable to consider when investigating their well-being. In addition, because of the relationships established between health LOC, depression, stress, and general anxiety, measuring anxiety specifically related to COVID-19 is also considered in the current study.

Research Questions and Hypotheses

While mothers' maternal guilt and shame have been studied, data is lacking that examines these feelings, along side other measures of mothers'well-being, during the COVID-19 pandemic. Furthermore, other studies have not considered the specific impact that educational placement might be having. Therefore, we conducted a nationwide survey in the Fall of 2020, strategically timed to collect data while mothers were wrestling with issues pertaining to their children's education. The current study has three research questions and two hypotheses, each based off the previously described literature, and the challenges associated with parenting during the pandemic.

The first research question asks; what trends exist in the amount of guilt and shame mothers feel during this time? We hypothesize that mothers will feel high levels of both guilt and shame. The second research question asks; what relationships exist between maternal guilt, shame, well-being, and demographic variables? We hypothesize that guilt and shame are positively related to one another, as well as three other measures of well-being used in this study (depression, parental stress, and COVID-19 anxiety). However, we expect a negative correlation between PSE, health locus of control, guilt, and shame. Demographic variables will be tested in an exploratory manner. The last research question asks; does children's educational placement impact maternal feelings of guilt, shame, and well-being? This research question is also exploratory, as no previous research is available to base a precise prediction.

Method

Participants

A total of 339 participants from across the U.S. participated. We conducted an a priori statistical power analysis to determine the adequate sample size that would be needed to conduct the multiple regression analysis with the desired probability level = .05, with 8 predictors, an anticipated effect size (f^2) = .15, and the desired statical power level = .80. Results indicated that a total sample of 128 participants was required to achieve such power. All participants were over the age of 18. The individuals were self-identified mothers of children attending a preschool through 12th grade educational program.

Self-reported race identities include: one (.3%) Arab, six (1.9%) Asian/Pacific Islander, three (.9%) Black/African American, 280 (86.4%) Caucasian, 20 (6.2%) Hispanic or Latinx, six (1.9%) multiracial, five (1.5%) would rather not share, and three (.9%) who self-described their ethnicity. Most of the mothers reported having one (21.2%), two (54.7%), or three (16.9%) children while only a few mothers reported having more than 3 children (7.2%). Mothers' level of education reveals this sample as a well-educated group. Most of the mothers either held a bachelor's degree (33%) or a master's or doctorate degree (45.1%). See Table 1 for additional demographic data.

Materials

An online survey was administered via the Qualtrics survey platform. To measure maternal guilt and shame, we modified the Caring Shame and Guilt Scale written by Martin, et al. (2006). The scale has 12 items, six that ask about shame and six that ask about guilt in relation to a caregiving role. The only modification we made to the scale items were to replace the phrase "my relative" with "my child." The items that asked about guilt focus on mothers' worry for their child, how much time they spend with their child, feelings of sadness for not doing the best for their child, and the mother's responsibility for caring for their child. For example, one item asked, "If I did not spend my time caring for my child, I know I would feel deep regret." The items that inquired about shame focus on self-criticism, living up to external expectations, and fear around being criticized by others. For example, one item asked, "I am critical of myself if I think I have not been caring enough." The response options provided were on a scale from 0 (*not at all like me*) to 4 (*extremely like me*). In its original version, Martin et al. (2006) reported Cronbach's alpha levels at .87 for shame and .78 for guilt, while Cronbach's alphas for the current study, using the modified version, were .79 and .84, respectively.

Mothers' well-being was measured using a variety of other tools. To understand feelings of depression, the Short Depression-Happiness Scale (SDHS) was utilized. Joseph and colleagues (2004) developed this six-item instrument which is scored using a four-point scale from1 (*never*) to 4 (*often*). In the development of the scale researchers reported a Cronbach's alpha range from .77 to .92 (Joseph et al., 2004), and in the current study the Cronbach alpha was .82. To measure internal health LOC we used the Internal Health Locus of Control subscale, which is part of the larger Multidimensional Health Locus of Control Scale (MHLC) (Wallston, 2020; Wallston, et al., 1978). The subscale measures participants' beliefs that their health is determined by what they do (i.e., they have some control). The subscale score has six items and responses to the items range from 1 (*strongly disagree*) to 6 (*strongly agree*). Wallston and colleagues (1978) conducted an original validation of this measure which reported Cronbach's coefficient values ranging from .67 to .77. Cronbach's alpha for the current study was .83.

To understand mothers' level of stress specific to parenting, the current study adopted Berry and Jones's 1995 Parental Stress Scale. The scale has 18 items where participants respond on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's alpha for the Parental Stress Scale in the current study was .87. A relatively new seven item scale was developed in 2020 that measures people's anxiety specific to COVID-19 (Chandu et al., 2020). The responses on the COVID-19 Anxiety Scale are on a four-point scale from 1 (*not at all*) to 4 (*extremely like me*). Chandu et al. (2020) report the internal consistency reliability of the scale using Cronbach's alpha as .74 while in the current study was .84. Additionally, the current study used the Parenting Self Efficacy Scale (PSE), which is a subscale from the larger Parenting Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978). The PSE is an eight-item tool that helps describe how competent parents feel in their parenting role. On this scale, individuals indicate their level of agreement between 1 (*strongly agree*) and 6 (*strongly disagree*). However, all items are reverse scored so that high scores indicate positive parental experience. Previous researchers have found the PSE subscale to have a .68 Cronbach's alpha specifically for participants who are mothers (Gilmore & Cuskelly, 2008). In the current study, the Cronbach alpha was .84.

Lastly, the survey includes questions the authors wrote to gain information about participants' demographics and understand children's educational placements. The demographic questions asked about ethnicity, income, area of residency, level of education, job status, partner status, if they are currently seeking treatment for a mental health concern, and how many children they have. We asked original and independent questions to understand children's demographics and educational placements. These questions began with the prompt, "As much as possible, please think about the child whose needs weighed most heavily on your mind when determining your child(ren) 's educational decisions."

While not all mothers could choose their children's educational placement, some were, and we believe that if they could choose, they would do so by considering the child with the highest risk level for getting sick from COVID-19. For example, if a mother has three children and the youngest has asthma, we assumed they would make decisions about educational placement thinking about the youngest child's risk. Some questions ask for information regarding the child mothers were thinking of, including their age, gender, grade in school, and the severity level of any disability and medical needs the child has. One question asked how their child was currently attending school (remote only (online), in-person learning only (at the school building), hybrid (a combination of remote and in-person learning), or homeschooled).

Procedure

Following IRB approval, recruitment and data collection occurred in November and December 2020. This timing was strategic, as mothers were facing uncertain educational placements during this time. First, participants were recruited via word of mouth, social media (Twitter, Facebook, Instagram, and LinkedIn), and snowball sampling. After reading the consent form, participants took the online survey using the Qualtrics system. The order of the questions was as follows: the Caring Shame and Guilt Scale, demographic questions, child and educational placement questions, the COVID-19 Anxiety Scale, the Parental Stress Scale, the Parenting Self-Efficacy Scale, the Short Depression-Happiness Scale, and the Health Locus of Control scale. The survey took an average 19.98 minutes to complete. After completing the survey, they read a debriefing form and could enter a small gift card drawing for one of four 25-dollar gift cards. Only 113 mothers entered the drawing, so the chance of winning was 3.5%.

Results

Levels of Guilt and Shame

The first research question asked what trends exist in the amount of guilt and shame mothers feel during this time? The levels of guilt and shame mothers were feeling during the fall of 2020 were examined via descriptive statistics. In accordance with the hypothesis, analysis revealed that mothers were feeling both guilt (M = 17.99, SD = 3.97) and shame (M = 13.71, SD = 4.58) and that these feelings were "moderately " to "quite a bit" as these were the most common answers provided. The range of scores for guilt and shame was zero to 24. For guilt the median score was 18.5 with a mode of 20. For shame the median score was 13 with a mode of 10.

Predictors of Guilt and Shame

The second research question asks what relationships exist between maternal guilt, shame, well-being, and demographic variables? Pearson correlations were computed to examine relationships among variables (see Table 2). Consistent to the hypotheses, maternal guilt and shame were both significantly and positively correlated to COVID anxiety, depression, parental stress, and the needs of the child. Guilt was also positively related to health LOC. Surprisingly the data revealed no relationship between guilt and PSE, and a negative relationship for shame. Additionally, health LOC and mothers' level of education were not related to shame. Household income was also negatively correlated with guilt and shame. Finally, the number of children mothers had was not significantly related to either guilt or shame.

Two stepwise multiple regression analyses were conducted to examine what variables best predicted maternal guilt and shame. Guilt was tested with the eight factors that had significant correlations, including shame, COVID anxiety, depression, mothers' level of education, needs of the child, health LOC, income, and parental stress. Shame was also tested with the eight factors that had significant correlations with it, which included guilt, parental stress, depression, COVID anxiety, PSE, needs of the child, income, and area of living (included due to the differences found and recoded using dummy variables).

Prior to conducting the two regression analyses, several descriptive statistics and graphs were generated to examine the test assumptions (Abu-Bader, 2016). Pearson correlation coefficients and scatter plots show a linear relationship between guilt and all factors. Inspections of both the histogram and normal probability plots of the residuals indicate that the errors were normally distributed. Moreover, inspection of the scatterplot of predicted scores against the residuals confirms that the assumption of homoscedasticity was met. Finally, evaluation of the correlation matrix and both VIF and tolerance values show no multicollinearity exists among the eight factors.

The stepwise multiple regression analysis results revealed that three of the eight factors emerged as significant predictors of guilt, $F(3, 162) = 42.85$, $p < .001$, $\eta^2 p = 0.44$. With a beta of .56 ($p < .001$), shame emerged as the strongest predictor of guilt, accounting for 39.2 percent of the variance in guilt. The second strongest factor was COVID anxiety (ß = .18, $p = .005$) accounting for an additional 2.8 percent of the variance in guilt. The third strongest factor was mothers' level of education (ß = -.15, $p = .011$). Mothers' level of education accounted for 2.3 percent of the variance in guilt. These results indicated that higher levels of guilt were a function of shame, COVID anxiety, and education. See Table 3.

The results of the stepwise multiple regression analysis revealed that two of the eight factors emerged as significant predictors of shame, $F(2, 194) = 78.27$, $p < .001$, $\eta^2 p = 0.46$. Guilt was the strongest predictor of shame (ß = .63, $p < .001$), accounting for 46 percent of the variance in shame.

The second factor was PSE (ß = .25, $p < .001$) accounting for an additional 6.4 percent of the variance in shame. These results indicated that higher levels of shame were a function of guilt and PSE. See Table 4.

Guilt and Shame with Educational Placement

Lastly, a set of exploratory analyses examined if children's educational placement impacts maternal feelings of guilt, shame, and well-being. Mothers reported the following frequencies in the ways in which their child were attending school: remote only (n = 131, 39.1%), in person only (n = 137, 40.9%), hybrid (a combination of remote and in person) (n = 44, 13.1%), homeschool (n = 23, 6.9%). No significant differences were found between how children attended school and guilt ($F(3,320) = .91$, $p = .44$) or shame ($F(3,320) = 1.38$, $p = .25$). See Figure 1.

Measures related to maternal well-being (depression, stress, PSE, and anxiety) and educational placement were also assessed. The only significant difference found was regarding COVID-19 Anxiety, $F(3,328) = 3.66$, $p = .013$, $\eta 2 = .032$. Post hoc comparisons indicate that the COVID-19 anxiety was higher for mothers whose children attended school remotely (M = 17.5, SD = 4.0) than those whose children were attending school in person only (M = 15.83, SD = 4.74), $p = .01$.

Discussion

The current study's focus was to better to understand maternal guilt and shame along side the general well-being of mothers during the global pandemic and if these emotions were impacted by children's educational placement. Overall results indicated that mothers felt moderate levels of guilt and shame, with slightly more guilt than shame. The current study is the first that we are aware of to document these specific feelings in mothers during the pandemic and to do so together with other measures of maternal well-being.

While some theories, such as conditional maternal investment (Rotkrich & Janhunen., 2010), explain guilt and shame via biological determinants, it is more likely that such feelings arise due to the impacts of culture and society. For example, psychologists refer to the "mommy myth" (Douglas & Michaels, 2004) which describes the imagined *ideal* mother as ever-kind, completely present, and endlessly nurturing. Being such a mother was difficult to attain pre-pandemic (Christopher, 2012; Douglas & Michaels, 2004; Hare-Mustin & Broderick, 1979). During the pandemic, living up to such a perfect standard in parenting is even more challenging. Schmidt and colleagues (2021) documented that during the days in lockdown, when parents were heavily involved in their children's remote learning efforts, more negative parent-child interactions were reported which contributed to increases in stress and affective well-being.

The correlation results in the current study support the notion that mothers faced difficulties early in the pandemic. We found maternal guilt and shame related to depression, COVID-19 anxiety, and parental stress. Such findings are not surprising, as parenting during the pandemic involved constant risk evaluation, a lack of community support during isolation periods and through social distancing, the constant threat of illness, and disruptions to life such as missing work or canceling plans.

The results also reveal that most mothers felt similar amounts of guilt and shame regardless of their children's educational placement. The distribution of participants among the four educational choices indicates that most children were going to school remotely (39.1%) or in-person (40.9%) and that the remaining two options were much lower (13.1% hybrid and 6.9% homeschool). Although some families might have been able to choose how their children attended school, they most likely felt forced to enroll their children in the remote or face-to-face options due to the specific district and state restrictions where they live. Several factors contribute to potential disparities in educational options, such as children's age, needs, health, living area, and race.

For example, in a cross-country poll in late September 2020, researchers found that 75% of Black and 48% of white parents reported that their children were fully online (Barnum, 2020). Another study found that older students were more likely to remain online, and younger students were more likely to return to face-to-face instruction (Asmar, 2020).

In addition to the comparisons between school options on guilt and shame, the analyses reveal no significant differences for three of the other well-being outcome variables (depression, stress, and PSE) based on educational placement. The only significant difference was in mothers' levels of COVID-19 anxiety, whereby mothers whose children attended school remotely reported more COVID-19 anxiety than mothers whose children attended school in person. It could be that when schools were closed to in-person learning, this heightened mothers' anxiety levels because the school districts or state governments indicated a lack of safety. Another finding to consider regarding COVID-19 anxiety is that it was the second predictive factor in mothers' level of guilt.

These results suggest that we should monitor specific anxiety around the virus. However, use caution when interpreting this result as the opportunity of additional variables impacting both guilt and anxiety in mothers might exist.

Two additional and noteworthy findings emerged. First, having an internal locus of control regarding one's health was related to guilt, suggesting that the more mothers felt like their health was in their control, the more guilt they felt. This would be understandable if they or their children had gotten sick and they felt they were to blame. Other researchers report similar results. For example, Krampe and colleagues (2021) found that external LOC was correlated to depression and anxiety, while Shin and Lee (2021) found a positive correlation between internal LOC and well-being. Health LOC should be the focus of additional studies to understand better its relationship to or effect on mental health, especially for mothers.

Second, we found that PSE is a predictive factor in mothers' levels of shame but not guilt. This finding builds on other studies documenting the importance that PSE plays in mothers' well-being. A large meta-analysis conducted by Albanese et al., (2019) found that low PSE is associated with depression. PSE is also a moderator of family stress (Yeung & Chan, 2011). Such findings, taken together with those reported in the current study, highlight the importance of PSE in maternal well-being. As investigations on mothers' mental health continue, PSE should remain at the forefront as an essential variable to consider.

Implications

Readers can consider the implications of the current study in two ways. There are large system level changes, that if implemented, could create positive effects for mothers. There are also actions that individuals can take to directly support maternal well-being. One system level change, advocated by the Department of Labor's Women's Bureau, is to continue to reform and improve women's labor rights in the U.S. as they relate to pregnancy, postpartum leave, and breastfeeding (Women's Bureau, 2022). We should also consider educational reform. The U.S. public education system needs to elicit confidence from parents and excellence for all children, which includes building better communications and partnerships between schools and families (Epstein, 2018). Finally, women need consistent, excellent healthcare that is easily accessible, affordable, recognizes the importance of maternal mental health, and works specifically and directly to reduce the lack of equity that exists among mothers of color and low-income mothers (Hamilton et al., 2018).

There are more specific actions that individual family members, educators, researchers, medical practitioners, and family policy specialists who are supporting mothers can consider. The first is to be aware of mothers COVID-19 anxiety and their feelings around parenting self-efficacy. Our data found these two factors to be predictive variables for guilt and shame respectively. Doctors could measure these constructs quickly and easily in pre-appointment paperwork. Once mothers who are experiencing guilt and shame are identified, help could be offered. For example, researchers have found that paternal support is inversely related to maternal depression, but that such support can wane over time (Smith& Howard, 2008). For this reason, fathers, when possible, should be involved in maternal healthcare and parenting decisions in an ongoing manner. There are a variety of successful interventions that practitioners could suggest (see Pilkington et al., 2019) and we asert these would be successful for any partner/spouse regardless of gender.

Another specific action that could be taken by practitioners is to educate mothers about problematic social media use (e.g., Ruggieri et al., 2020). Elevated social media use has been shown to accentuate self-comparison behaviors, and self-esteem issues which can lead to increased feelings of anxiety (Moujaes & Verrier, 2021).If the 'mommy myth' is true, the idealized mother is likely seen via social media applications and is a contrived façade. A reduction in the use of social media can be considered a form of self-care. Self-care behaviors are decisions and actions that promote wellness while decreasing the impact of illness and chronic health issues (Dugan & Barnes-Farrell, 2020). It has been suggested that when mothers can find the time, self-care limits their stress and decreases negative mental health symptoms.It is helpful to provide mothers with specific examples of self-care and provide constructive solutions to the challenges that prevent them from taking the time they need for themselves.

Limitations

It is important to consider all findings within the current study's limitations. Most importantly, we do not have a baseline measure of guilt and shame. We cannot conclude that guilt and shame were higher or lower for mothers during the pandemic than in pre-pandemic times, only that they were moderate according to the scale. Furthermore, we could not find any previous data from other studies to which we could compare our results. The Caring Shame and Guilt Scale assess guilt and shame felt by any caretaker (not specifically mothers).

For this study, we slightly modified the scale items by replacing the phrase "my relative" with "my child," and we only surveyed mothers. Additional research is ongoing, which will add validation data to the modified scale.

There are other methodological limitations to note. The current study utilized self-report as the data collection technique. Self-report in online research risks validity due to social desirability biases. There is an inherent risk that some participants who answered were not mothers. Also, attention checks were not part of the survey and should be added to future surveys. Another consideration is that we promoted mothers to think about one of their children (the one with the most needs) before answering the questions about their child and their educational placement. Readers need to interpret the results with the understanding that some questions used this prompt.

Some limitations exist due to the participant sample. Notably, the data reported here represented predominantly white, higher socioeconomic status, and highly educated women. This sample does not accurately represent the general population of America, nor does it allow for statistically robust comparisons between groups. Although guilt and shame differed based on mothers' education level and residency area, the current sample lacked variability in these demographics. However, other researchers examining well-being during the pandemic are reporting informative results. For example, Racine et al. (2021) found that older mothers who are highly educated reported more mental health concerns. In addition, they found that mothers from racial or ethnic majority groups reported higher issues of mental health concerns.

Conclusion

In conclusion, this research study found moderate levels of maternal guilt and shame felt by participants. These feelings are related to other measures of well-being (COVID anxiety, depression and parental stress) but were not dependent on the educational placement of their child during the fall of 2020. Furthermore, internal health locus of control and guilt are related and parenting self-efficacy and shame are related. Regression analysis indicate that COVID anxiety and parenting self-efficacy are two factors that emerge as predictors of guilt and shame, respectively, and this warrants further investigation.

Maternal mental health is worthy of continuing attention and research, and we encourage everyone to attempt to help. Researchers have found that unconditional acceptance, comfort, genuineness of relationships, and depth of friendship are necessary to support mothers (Luthar & Ciciolla, 2015). These later items provide supports that many people can offer to mothers. While maternal guilt and shame will likely persist long after the pandemic, increasing research, conversations, systemic changes, and support provided to mothers is essential for their well-being and that of their families.

References

Abu-Bader, S. H., (2016). *Advanced and Multivariate Statistical Methods for Social Science Research.* Oxford University Press.

Adams, E. L., Smith, D., Caccavale, L. J., & Bean, M. K. (2021). Parents are stressed! Patterns of parent stress across COVID-19. *Frontiers in Psychiatry*, *12*, doi: 10.3389/fpsyt.2021.626456

Albanese, A. M., Russo, G. R., & Geller, P. A. (2019). The role of parental self- efficacy in parent and child well- being: A systematic review of associated outcomes. *Child: Care, Health & Development, 45*(3), 333-363. https://doi.org/10.1111/cch.12661

Asmar, M. (2020, October 14). *'We know it's serious': Roughly 40% of Denver's Black and Hispanic students choose to stay virtual*. Chalkbeat Colorado. https://co.chalkbeat.org/2020/10/14/21516851/denver-black-hispanic-students-virtual-learning

Barnum, M. (2020, October 8). *Most American students are learning virtually, poll shows*. Chalkbeat. https://www.chalkbeat.org/2020/10/8/21508138/parents-schools-covid-online-poll

Bates, R.A., Salsberry, P.J., Justice, L.M., Dynia, J. M., Logan, J. A. R., Gugiu, M. R., & Purtell., K. M. (2020). Relations of maternal depression and parenting self-efficacy to the self-regulation of infants in low-income homes, *Journal of Child and Family Studies, 29*, 2330–2341.https://doi.org/10.1007/s10826-020-01763-9

Berry, J. O., & Jones, W. H. (1995). The parental stress scale: Initial psychometric evidence. *Journal of Social and Personal Relationships, 12*(3), 463-472. https://doi.org/10.1177/0265407595123009

Chandu, V., Pachava, S., Vadapalli, V., & Marella, Y. (2020). Development and initial validation of the COVID-19 anxiety scale. *Indian Journal of Public Health, 64*(6), 201-204. https://doi.org/10.4103/ijph.IJPH_492_20

Christopher, K. (2012). Extensive mothering: Employed mothers' constructions of the good mother. *Gender & Society, 26*(1), 73-96.https://doi.org/10.1177/0891243211427700

Epstein, J. L. (2018). School, family, and community partnerships in teachers' professional work. *Journal of Education for Teaching, 44*(3), 397-406, DOI: 10.1080/02607476.2018.1465669

Derella, O. J., & Milan, S. (2021). I felt like a terrible mom: Parenting-related cognitive processes maintaining maternal depression. *Journal of Child and Family Studies, 30*(10), 2427-2439. https://doi.org/10.1007/s10826-021-02053-8

Douglas, S. & Michaels. M. (2004). *The mommy myth: The idealization of motherhood and how it has undermined women*. Free Press.

Dugan, A. G., & Barnes-Farrell, J. (2020). Working mothers' second shift, personal resources, and self-care. *Community,Work & Family, 23*(1), 62-79. http://dx.doi.org/10.1080/13668803.2018.1449732

Gibaud-Wallston & Wandersman, (1978). *Development and utility of the parenting sense of competence scale*. Toronto: The Annual Meeting of the American Psychological Association

Gross, D., Conrad, B., Fogg, L. & Wothke, W. (1994). A longitudinal model of maternal self-efficacy, depression, and difficult temperament during toddlerhood. *Research in Nursing & Health, 17*(3), 207-215. https://doi.org/10.1002/nur.4770170308

Hamilton, N., Stevens, N., Lillis, T., & Adams, N. (2018). The fourth trimester: Toward improved postpartum health and healthcare of mothers and their families in the United States. *Journal of Behavioral Medicine, 41*(5), 571-576.https://doi.org/10.1007/s10865-018-9969-9

Hare-Mustin, R. T., & Broderick, P. C. (1979). The myth of motherhood: A study of attitudes toward motherhood. *Psychology of Women Quarterly, 4*, 114-128

Heggeness, M. L., Fields, J., Garcia Trejo, Y. A., & Schulzetenberg, A. (2021). *Tracking Job Losses for Mothers of School-Age Children During a Health Crisis*. Retrieved from United States Census Bureau: https://www.census.gov/library/stories/2021/03/moms-work-and-the-pandemic.html

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*(3), 319–340. https://doi.org/10.1037/0033-295X.94.3.319.

Joseph, S., Linley, P. A., Harwood, J., Lewis, C. A., & McCollam, P. (2004). Rapid assessment of well-being: The short depression-happiness scale (SDHS). *Psychology and Psychotherapy: Theory, Research and Practice, 77*(4), 463-478. https://doi.org/10.1348/1476083042555406

Kalantar Ghoreishi, M., Asadzadeh, H., & Abolmaali Hosseini, K. (2019). Structured pattern for parental stress based on self-conscious affect and family performance of children with autism. *Journal of Modern Rehabilitation, 12*(3), 201-208. https://doi.org/10.32598/JMR.V12.N3.201

Kerr, M. L., Rasmussen, H. F., Fanning, K. A., & Braaten, S. M. (2021). Parenting during COVID-19: a study of parents' experiences across gender and income levels. *Family Relations, 70*(5), 1327-1342. https://doi.org/10.1111/fare.12571

Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Phycological Bulletin, 137*(1), 68-96. https://doi.org/10.1037/a0021466

Kohlhoff, J., & Barnett, B. (2013). Parenting self-efficacy: Links with maternal depression, infant behaviour and adult attachment, *Early Human Development, 89*(4), 249-256.https://doi.org/10.1016/j.earlhumdev.2013.01.008

Krampe, H., Danbolt, L.J., Haver, A. Stålsett, G., & Schnell, T. (2021). Locus of control moderates the association of COVID-19 stress and general mental distress: Results of a Norwegian and a German-speaking cross-sectional survey. *BMC Psychiatry, 21*(1), 437-437. https://doi.org/10.1186/s12888-021-03418-5

Liss, M., Schiffrin, H. H., & Rizzo, K. M. (2012;2013;). Maternal guilt and shame: The role of self-discrepancy and fear of negative evaluation. *Journal of Child and Family Studies, 22*(8), 1112-1119. https://link.springer.com/article/10.1007%2Fs10826-012-9673-2

Luthar, S. S., & Ciciolla, L. (2015). Who mothers mommy? Factors that contribute to mothers' well-being. *Developmental Psychology, 51*(12), 1812-1823. https://doi.org/10.1037/dev0000051

Mahmoud, A.B., Reisel, W.D., Hack-Polay, D. Hack-Polay, D., & Fuxman, L. (2021). No one is safe! But who's more susceptible? Locus of control moderates pandemic perceptions' effects on job insecurity and psychosocial factors amongst MENA hospitality frontliners: A PLS-SEM approach. *BMC Public Health 21*(1), 1-2032. https://doi.org/10.1186/s12889-021-12071-2

Mandavilli, A. (2020, September 1). *A Parents' Toughest Call: In-Person Schooling or Not?* Retrieved from The New York Times: https://www.nytimes.com/2020/09/01/health/coronavirus-parents-schools.html

Miller, C. L., & Strachan, S. M. (2020). Understanding the role of mother guilt and self-compassion in healthy behavior in mothers with young children. *Women & Health, 60*(7), 763-775. https://doi.org/10.1080/03630242.2020.1713966

Moujaes, M., & Verrier, D. (2021). Instagram use, instamums, and anxiety in mothers of young children. *Journal of Media Psychology: Theories, Methods, and Applications, 33*(2), 72-81. http://doi.org/10.1027/1864-1105/a000282

Prikhidko, A., & Swank, J. M. (2018). Motherhood experiences and expectations: A qualitative exploration of mothers of toddlers. *The Family Journal, 26*(3), 278–284. https://doi.org/10.1177/1066480718795116

Pilkington, P., Rominov, H., Brown, H. K., Dennis, C. L. (2019). Systematic review of the impact of coparenting interventions on paternal coparenting behaviour. *Journal of Advanced Nursing, 75*, 17– 29. https://doi.org/10.1111/jan.13815

Racine, N., Eirich, R., Cooke, J., Zhu, J., Pador, P., Dunnewold, N., & Madigan, S. (2021). When the bough breaks: A systematic review and meta- analysis of mental health symptoms in mothers of young children during the COVID- 19 pandemic. *Infant Mental Health Journal, 43*(1), 36-54. https://doi.org/10.1002/imhj.21959

Rotkrich, A., & Janhunen, K. (2010). Maternal guilt. *Evolutionary Psychology*, 90-106. https://doi.org/10.1177/147470491000800108

Ruggieri, S., Santoro, G., Pace, U., Passanisi, A., & Schimmenti, A. (2020). Problematic Facebook use and anxiety concerning use of social media in mothers and their offspring: An actor–partner interdependence model. *Addictive Behaviors Reports, 11*, 100256.https://doi.org/10.1016/j.abrep.2020.100256

Saavedra, A., Rapaport, A., Silver, D., Polikoff, M., Garland, M., & Haderlein, S. (2020). *Parents' Perspectives on the Effects of COVID-19 on K-12 Education*. https://healthpolicy.usc.edu/evidence-base/parents-perspectives-on-the-effects-of-covid-19-on-k-12-education-april-july-2020/

Schmidt A., Kramer, A.C., Brose, A., Schmiedek, F., & Neubauer, A.B. (2021) Distance learning, parent-child interactions, and affective well-being of parents and children during the COVID-19 pandemic: A daily diary study. *Developmental Psychology, 57*(10), 1719-1734. https://doi.org/10.1037/dev0001232

Shin, S., & Lee, E. (2021) Relationships among the internal health locus of control, mental health problems, and subjective well-being of adults in South Korea. *Healthcare,9*(11), 1588. https://doi.org/10.3390/healthcare9111588

Sirois, F. M., Bögels, S., & Emerson, L. (2019). Self-compassion improves parental well-being in response to challenging parenting events. *The Journal of Psychology, 153*(3), 327-341, https://doi.org/10.1080/00223980.2018.1523123

Slobodin, O., Cohen, R., Arden, A., & Katz, I. (2020). Mothers' need frustration and controlling parenting: The moderating role of maternal guilt. *Journal of Child and Family Studies, 29*(7), 1914–1926. https://doi.org/10.1007/s10826-020-01720-6

Smith, L. E., &Howard, K. S. (2008). Continuity of paternal social support and depressive symptoms among new mothers. *Journal of Family Psychology, 22*(5), 763–773. https://doi.org/10.1037/a0013581

Suffren S., Dubois-Comtois K., Lemelin J. P., St-Laurent D.,&Milot T. (2021), Relations between child and parent fears and changes in family functioning related to COVID-19. *International Journal of Environmental Research and Public Health, 18*(4). 1786-1797.https://doi.org/10.3390/ijerph18041786

Vance, J. A., & Brandon, H. D. (2017). Delineating among parenting confidence, parenting self-efficacy, and competence. *Advances in Nursing Science, 40*(4), E18–E37. https://doi.org/10.1097/ANS.0000000000000179

Wallston, K. A. (2020). Multidimensional healthlLocus of control (MHLC) scales. https://nursing.vanderbilt.edu/projects/wallstonk/form_a.php

Wallston, K. A., Strudler Wallston, B., & DeVellis, R. (1978). Development of the multidimensional health locus of control (MHLC) scales. *Health Education Monographs, 6*(1), 160-170. https://doi.org/10.1177/109019817800600107

Widdicombe, L. (2020, August). Should you send your child back to school during the pandemic? *The New Yorker*. https://www.newyorker.com/news/news-desk/should-you-send-your-child-back-to-school-during-the-pandemic

Womens Bureau. (2022). U.S. Department of Labor. https://www.dol.gov/agencies/wb

Yavorsky, J. E., Qian, Y., & Sargent, A. C. (2021). The gendered pandemic: The implications of COVID- 19 for work and family. *Sociology Compass, 15*(6). https://doi.org/10.1111/soc4.12881

Yeung, J. W. K., & Chan, Y. C. (2011). The mediating role of parental psychological
health in Chinese families in an impoverished context in
Hong Kong. *Drustvena Istrazivanja, 20*(4), 1085–1100. https://doi.org/10.5559/di

Zamarro, G., & Prados, M. J. (2021). Gender differences in couples' division of childcare, work and mental health during COVID-19. *Review of Economics of the Household, 19*(1), 11-40.https://doi.org/10.1007/s11150-020-09534-7

Table 1

Demographic information

Characteristics	N	%
Household income		
<10,000-29,999	8	2.4
30,000-59,999	28	8.3
60,000-89,999	50	14.7
90,000-149,999	115	33.9
150,000+	132	38.9
Did not answer	6	1.8
Level of education		
High school or less	12	3.5
Trade school and some college	38	11.2
Associates	24	7.1
Bachelors	112	33.0
Masters or doctorate	153	45.1
Partner status		
Married/civil union	301	89.1
Single	28	8.3
Living with other	9	2.7
Current mental health concern		
Yes	100	29.6
No	231	68.3
Would rather not say	7	2.1
Employmentstatus		
Employed full time from home	119	35.1
Employed full time outside the home	79	23.3
Employed part time from home	45	13.3
Employed part time from home	30	8.8
No outside employment	65	19.2
Did not respond	1	.3
Area of residency		
Urban (city)	103	30.4
Suburban (outside of city)	205	60.5
Rural (countryside)	31	9.1

Table 2

Correlation Matrix for all major variables

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Guilt	330	17.99	3.97	-										
2. Shame	328	13.71	4.58	.60**■	-									
3. COVID Anxiety	336	16.69	4.36	.26**■	.26**■	-								
4. Parental Stress	330	40.62	9.57	.13*	.36**■	.31**■	-							
5. Self-Efficacy	331	34.45	6.71	-.01	.27**■	.25**■	.61**■	-						
6. Health LOC	333	23.13	5.53	.14*	.05	-.11*	-.17**■	-.21**■	-					
7. Depression	336	10.87	3.10	.20**■	.33**■	.24**■	.55**■	.39**■	-.18**■	-				
8. Education	339	4.05	1.13	-.18**■	-.09	.10	.04	.04	-.08	-.06	-			
9. Needs of Child	212	19.39	26.03	.17*	.26**■	.18**■	.28**■	.19**■	.03	.19**■	-.10	-		
10.Number of Children	278	2.15	1.02	.05	.00	-.01	.13*	-.05	-.01	.04	-.10	.18*	-	
11. Income	333	4.01	1.05	-.14*	-.14*	.01	.03	.05	-.11	-.01	.46**■	-.12	-.10	-

Notes. The income value of 4 on the scale indicated an income of $90,000-149,000. * = Correlation is significant at the .05 level (2-tailled). ** = Correlation is significant at the 0.01 level (2-tailed). ■= Correlation is significant at less than .009 level (2-tailed) using Bonferroni correction.

Table 3

Summary of Stepwise Multiple Regression of Predictors of Guilt

						Model Summary	
Variables	B	β	*R*	R^2_{Adj}	R^2_{Change}	*t*	*F* value
Included in Model A			.63	.39	.39		105.72***
(Constant)	9.98					12.31**	
Shame	.58	.63				10.28***	
Included in Model B			.65	.41	.03		58.97***
(Constant)	7.69					6.74***	
Shame	.54	.57				9.20***	
COVID Anxiety	.18	.17				2.80**	
Included in Model C			.66	.39	.02		42.85***
(Constant)	8.57					7.34***	
Shame	.52	.55				8.98***	
COVID Anxiety	.18	.17				2.85**	
Education	-1.27	-.15				-2.56*	
Not in Model C							
Depression		-.03				-.546	
Highschool		.07				1.12	
Associates		.06				.911	
Bachelors		-.14				-1.47	
Needs of Child		-.02				-.29	
Health LOC		.12				1.97	
Income		-.07				-1.25	
ParentalStress		-.07				-1.14	

Note. (*) = $p < .05$, (**) = $p < .01$(***) = $p < .001$

Table 4

Summary of Stepwise Multiple Regression of Predictors of Shame

						Model Summary	
Variables	B	β	R	R^2_{Adj}	R^2_{Change}	t	F value
Included in Model A			.629	..393	.396		121.378***
(Constant)	.884					.733	
Guilt	.718	.629				11.017***	
Included in Model B			.678	.460	.064		78.269***
(Constant)	-2.885					-2.058*	
Guilt	.720	.631				11.645***	
Self-Efficacy	.173	.252				4.65***	
Not in Model B							
Parental Stress		.086				1.246	
Depression		.044				.705	
COVID Anxiety		.082				.1.404	
Needs of Child		.097				1.741	
Income		-.087				1.579	
Urban		-.104				-1.915	
Suburban		.093				-1.915	

Note. (*) = p< .05, (**) = p < .01(***) = p < .001

Figure 1

Average Guilt and Shame Scores based on How Children Attended School