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ORIGINAL RESEARCH

The Effects of Home Quarantine Duration, Parental Emotional Intelligence, and Family Socioeconomic Status on Children's Anxiety During the Pandemic: A Survey of 29,550 Parents

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Background: The pandemic has led to unprecedented home quarantine measures affecting children's anxiety levels due to routine disruptions. This study investigated the role of the length of the quarantine period, parents' emotional intelligence, and family socioeconomic status (SES) in influencing children's anxiety.

Objective: This study aims to examine the relationship between quarantine duration and children's anxiety and to explore the mediating role of parents' emotional intelligence and the moderating role of family socioeconomic status in this relationship.

Methods: An online questionnaire surveyed 29,550 parents in Guangdong, Hubei, Henan, and Guangxi provinces of China. The measurement tools used included the Preschool Anxiety Scale, the Family Socioeconomic Status (SES) Scale, and the Emotional Intelligence Questionnaire. The data were analyzed via SPSS 25.0 and Mplus 8.0.

Results: A longer quarantine period (as measured by the number of days) significantly reduced children's anxiety. Parents' emotional intelligence mediates the relationship between quarantine days and children's anxiety, explaining 51.79% of the effect. Family SES moderates the mediating effect of parents' emotional intelligence on children's anxiety, benefiting higher-SES families more than lower-SES families. Children's adaptation during the quarantine period demonstrates psychological resilience.

Conclusion: The mediating effect of parents' emotional intelligence accounted for 51.79% of the total effect of quarantine duration on children's anxiety, with longer quarantine periods associated with decreased anxiety. Family socioeconomic status moderated this effect, benefiting higher-socioeconomic-status families more than lower-socioeconomic-status families. Children's adaptation during the quarantine period demonstrates psychological resilience. To alleviate anxiety, policies should focus on supporting families with lower socioeconomic status and enhancing parental emotional skills.

Keywords: home quarantine, children's anxiety, emotional intelligence, mental health, pandemic

Introduction

To contain the spread of COVID-19, the Chinese government enacted stringent quarantine measures from the onset of the pandemic.[1] During such outbreaks, daily lives of children and their families worldwide have changed,[2] and cognitive biases in public perception can evoke significant negative emotions, including fear and anxiety.[3] Children are particularly susceptible due to their limited coping mechanisms,[4] are prone to emotional and mental disturbances caused by the pandemic and associated restrictions.[5,6] Generalized anxiety disorder (GAD) often manifests in childhood as pervasive worry and intense fear across various aspects of life.[7,8] Studies have shown that without timely intervention, childhood

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GAD can increase the likelihood of suicidal thoughts or attempts during adolescence.[9] Additionally, many severe depressive and anxiety disorders in later life have their origins in early childhood experiences.[10] Although the COVID-19 pandemic has gradually been brought under control, we are still in a period of changes and uncertainty. The research and experiences from the COVID-19 period remain valuable references for the prevention and response to major public events in the future. As such, it is crucial to focus on the factors influencing children's anxiety during the pandemic.

Despite children's potential desensitization to pandemic risks,[11] prolonged home quarantine introduces upset due to school closures, reduced outdoor activities, and disrupted daily routines, potentially increasing anxiety.[12] Limited space and resources for play during quarantine can further hamper emotional regulation in children, leading to increased anxiety, particularly if parents do not intervene. This leads us to our first research question: 1) What is the relationship between the duration of home quarantine and children's anxiety?

Amid social distancing mandates, many families found themselves isolated without interpersonal support and vulnerable to misinformation and alarming news on social media. Individuals suffer from anxiety when familiar coping mechanisms are restricted.[2] Parents, juggling their roles as caregivers and educators, experience increased emotional strain. Parents' (especially mothers') anxiety and undesirable emotions subsequently positively predict children's anxiety.[13] According to family systems theory, family relationships are interrelated, and emotions can be easily transmitted between family members, particularly parents and children.[14] Family function theory suggests that parents' emotional care positively correlates with family functioning.[15] Moreover, negative emotions in parents significantly predict heightened anxiety in children.[16] Although relatively underexplored, parents' emotional intelligence is crucial in determining children's emotional and behavioral outcomes.[17] Children whose parents have greater emotional intelligence, particularly, maternal emotional intelligence, report fewer emotional problems (eg, anxiety[18]). Thus, our second research question is as follows: 2) How does parents' emotional intelligence influence the relationship between quarantine duration and children's anxiety?

In addition to parents' emotional intelligence, family socioeconomic status (SES), which encompasses aspects such as family members' educational background, income, and occupation, may also indirectly mitigate children's anxiety.[19] While most existing studies have examined family SES as a factor influencing children's cognitive abilities and academic performance,[20] its impact on children's mental health has been less explored. Nevertheless, some studies have shown that parents' educational background functions as a buffer against children's test anxiety, whereas parents' work stress heightens children's risk of experiencing test anxiety.[21] Family SES profoundly influences family dynamics. The evidence suggests that lower SES is often associated with reduced capacity for optimal family interactions and support and can potentially impact health outcomes negatively. For example, Booysen et al suggested that families with lower SES experience diminished functioning due to resource economic pressures and their resulting stressors.[22] Furthermore, researchers have shown that family economic hardship affects children's outcomes through the family stress model, whereas economic pressure and parental distress mediate these effects.[23] Therefore, during the epidemic period, family SES, defined by education, occupation, and income, could serve as a protective factor for parents and children. Accordingly, our third research question aims to investigate: 3) What role does family SES play in moderating the relationship between parental emotional intelligence and children's anxiety? To sum up, the study's research hypothesis model is illustrated in Figure 1.

Materials and Methods

Participants

A cross-sectional survey-based study was conducted online, targeting parents who experienced home quarantine in the Chinese provinces of Guangdong, Hubei, Henan, and Guangxi. In cooperation with the regional departments of education, this study distributed online questionnaires to parents at affiliated kindergartens. The guidance section of the questionnaire explained the survey's purpose and the implementing unit and informed parents that feedback on their parenting and children's development would be provided upon survey completion. This approach encouraged parents to complete the questionnaire as accurately as possible.

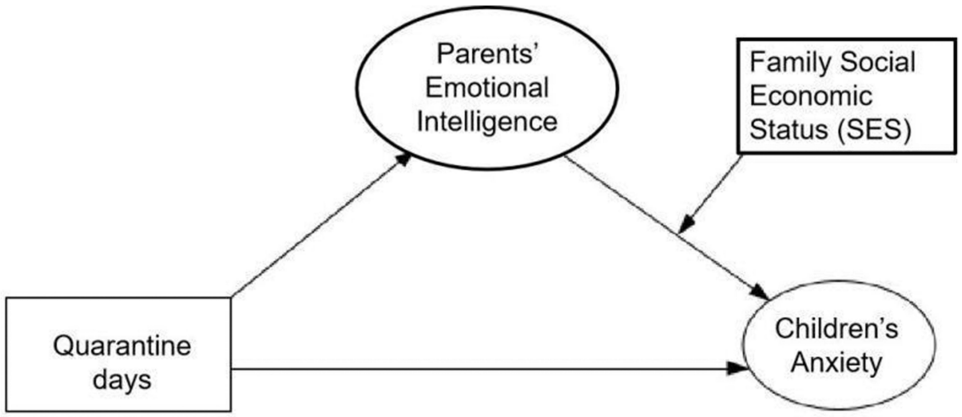

Figure 1 Research hypothesis model.

Parents with children aged 3–6 years who experienced home quarantine during the COVID-19 pandemic were included in the study. All abnormal data were cleaned, including: (1) responses to single questions completed in less than 2 seconds, (2) parents who did not complete the quarantine period, and (3) children with pre-existing anxiety disorders. A convenience sampling technique was employed due to the online nature of the survey, with the sample size determined by the availability of respondents during the data collection period, yielding 29,550 valid responses. No pilot study was conducted due to time constraints during the pandemic.

The study involving human subjects was approved by Guangzhou University's School of Education Research Ethics Committee.

Measures

A structured questionnaire, administered in simplified Chinese, including measures of demographic variables, quarantine duration, parental emotional intelligence, family socioeconomic status, and children's generalized anxiety. The questionnaire comprised three main sections: the Spence Children's Anxiety Scale (SCAS), the Family Socioeconomic Status (SES) Scale, and the Emotional Intelligence Questionnaire (EIQ). Parents reported the exact number of days their children spent in home quarantine by completing the questionnaire item: "Family members underwent joint home quarantine for (____) days". Socio-demographic variables collected included children's gender, age, and geographical distribution.

Spence Children's Anxiety Scale (SCAS)

Developed by Spence[24] and adapted for the Chinese context,[25,26] the Spence Children's Anxiety Scale (SCAS) originally comprises five dimensions: generalized anxiety, social fear, physical injury, obsessive-compulsive disorder, and separation anxiety. This study focused on five items related to generalized anxiety, with two items removed during the model fitting process. The scale's reliability is demonstrated by an alpha coefficient of 0.849 and a composite reliability of 0.853.

Family Socioeconomic Status Scale (Family SES Scale)

Developed by Shi and Shen for the Chinese context,[27] this scale evaluates family income, parents' occupation, and parents' education background. The respondents rated their family income from 1 (less than 30,000 yuan) to 5 (more than 200,000 yuan). The parents' occupation ranged from 1 (temporary workers, unemployed, unskilled personnel, and agricultural workers) to 5 (professional senior managers, senior professional technicians, and professional supervisors). Education background ranged from 1 (high school and below) to 3 (master's degree or above). For both parents' occupation and educational background, a higher score between the two parents was adopted. Using Ren's factor analysis method,[28] dimensions were synthesized with the principal factor accounting for 71.5% of the variance obtained via principal component analysis. The factor loadings for education, occupation, and income were 0.849, 0.846, and 0.842, respectively. Thereupon, the comprehensive index of family SES was obtained as "(0.849 * Education Background + 0.846 * Occupation + 0.842 * Family Income)/0.715".

Emotional Intelligence Questionnaire (EIQ)

A five-point Likert scale, compiled by Schutte et al[29] and translated by Wang,[30] measures emotion perception, self-regulation, the regulation of others, and emotion utilization. This study assessed parents on emotion perception and regulation of others, with reliability scores of 0.818 and 0.830, respectively. During model refinement, five out of seven items in the regulating emotion in others scale were retained, and six out of eight items in the emotion perception scale were retained. The restructured questionnaire's alpha was 0.874, with a composite reliability of 0.881.

Data Analysis

Analyses were conducted via SPSS 25.0 and Mplus 8.0 in several steps:

1) Descriptive statistics and correlations among variables were analyzed.
2) After the model of children's anxiety and parents' emotional intelligence were fit and revised, a confirmatory factor analysis (CFA) was employed to evaluate the measurement model.
3) Following the process proposed by Wen and Ye,[31] we evaluated the mediating effect of parents' emotional intelligence, which combines the advantages of sequential testing and the bootstrap method. A structural equation model from quarantine days (the independent variable) to children's anxiety (the dependent variable) was constructed, incorporating parental emotional intelligence for the mediation analysis. A bias-corrected nonparametric percentile bootstrap method was employed to estimate the confidence intervals given that the mediating effect (ab) generally does not follow a normal distribution.[32] This study constructed 5000 samples to compute 95% confidence intervals. The model fits well, with a CFI and TLI greater than 0.90 and a SRMR and RMSEA less than 0.08.[33]
4) The latent structure equation method (LMS) was used to assess the moderating impact of family SES.[34] Unlike traditional regressions, which consider measurement errors, the LMS provides parameter accuracy without constructing interaction terms manually, thus avoiding parameter estimation inconsistencies and normal distribution assumptions.[35] Without providing typical model fit indices, LMS necessitated additional steps: first, a benchmark model (M1) without interactions established the likelihood ratio ($loglikelihood_0$); subsequently, the moderating model (M2) through LMS yielded loglikelihood1. The significance of $D = -2$ [$loglikelihood_0$-$loglikelihood_1$] affirmed M2's fit given M1's adequacy.[36]

Additionally, before conducting the moderated mediation test via LMS, interaction terms were centralized to reduce multicollinearity and gender and age were included in the model as control variables.

Result

Common Method Bias

To avoid the common method bias, Harman's single-factor test was carried out. In total, eight eigenvalues were above 1 and the first common factor explained 25.278% of the variance, which is below the 30% threshold, indicating there was no significant common method bias.[37]

Descriptive Statistics and Correlation Matrices

Descriptive Statistics

The survey collected 29,674 responses, of which 29,550 were valid, resulting in a high response rate of 99.58%. The participant demographics included parents of 15,844 boys (53.6%) and 13,706 girls (46.4%). In terms of age distribution, 3104 (10.5%) children were aged three, 7606 children (25.7%) were aged four, 9464 children (32.0%) were aged five, 7774 children (26.3%) were aged six. There was no age data for 1602 (5.4%) of the children. The mean age was 4.78 years. The geographical distribution of the respondents was as follows: 18,992 respondents from Guangdong (64.3%), 7050 from Hubei (23.9%), 1819 from Henan (6.2%), and 1689 from Guangxi (5.7%). In terms of quarantine duration, 4875 (16.5%) children experienced 0–10 days, 4271 (14.5%) children experienced 11–20 days, 5727 (19.38%) children experienced 21–30 days, 4225 (14.3%) children experienced 31–40 days, and 1633 (5.5%) children experienced 41–50

days of quarantine. There was no quarantine duration data for 389 (1.3%) of the children. Specific demographic information of the sample is shown in Table 1.

Table 2 presents the descriptive statistics and correlation matrix for the key research variables. The results indicate that many children experienced mild anxiety (M = 1.70, SD = 0.70) and that parents had relatively high emotional intelligence (M = 4.31, SD = 0.54). Children's anxiety was negatively correlated with family SES, quarantine days and parents' emotional intelligence ($r = -0.067$, $p < 0.001$; $r = -0.053$, $p < 0.001$; $r = -0.250$, $p < 0.001$). These correlations support the analysis of mediation by parents' emotional intelligence and moderation by family SES.

Additionally, while children's gender was not correlated with family SES, number of quarantine days, or anxiety, it was positively correlated with parents' emotional intelligence ($r = 0.012$, $p < 0.05$); children's age was negatively correlated with family SES, quarantine days, and parents' emotional intelligence ($r = -0.190$, $p < 0.001$; $r = -0.047$, $p < 0.001$; $r = -0.084$, $p < 0.001$) and positively correlated with children's anxiety ($r = 0.093$, $p < 0.001$). Consequently, gender and age were included as control variables in subsequent model tests.

The Mediating Effect of Parents' Emotional Intelligence

Initially, the direct effect of quarantine days on children's anxiety was analyzed, showing a good fit: χ^2 (6, N = 29549) = 70.85, CFI = 0.998, TLI = 0.996, $SRMR$ = 0.007, $RMSEA$ = 0.020. After controlling for children's sex and age, the number of quarantine days had a significant direct predictive effect on children's anxiety ($\beta = -0.055$, $p < 0.001$), with a 95% confidence interval of [−0.068, −0.042], supporting Hypothesis 1.

Table 1 Distribution of the Survey Sample on Demographic Variables (N = 29,674)

Variable	Description	n (%)
Sex	Boy	15844 (53.6%)
	Girl	13706 (46.4%)
Age	3 years old	3104 (10.5%)
	4 years old	7606 (25.7%)
	5 years old	9464 (32.0%)
	6 years old	7774 (26.3%)
	No age data	1602 (5.4%)
Geographical distribution	Guangdong	18992 (64.3%)
	Hubei	7050 (23.9%)
	Henan	1819 (6.2%)
	Guangxi	1689 (5.7%)
Quarantine duration	0–10 days	4875 (16.5%)
	11–20 days	4271 (14.5%)
	21–30 days	5727 (19.4%)
	31–40 days	4225 (14.3%)
	41–50 days	1633 (5.5%)
	No quarantine duration data	389 (1.3%)

Table 2 Descriptive Statistics and Correlation Matrix of the Main Research Variables

	M ± SD	1	2	3	4	5
1. Child gender	1.46 ± 0.50					
2. Children's age	4.78 ± 0.97	−0.022**				
3. Family SES	12.13 ± 3.64	0.001	−0.190***			
4. Quarantine days	30.53 ± 17.72	0.01	−0.047***	0.120***		
5. Children's anxiety	1.73 ± 0.70	−0.002	0.093***	−0.067***	−0.053***	
6. Parents' emotional intelligence	4.31 ± 0.5	0.012*	−0.084***	0.163***	0.098***	−0.250***

Notes: Children's gender is a dummy variable, male = 1, female = 2; *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

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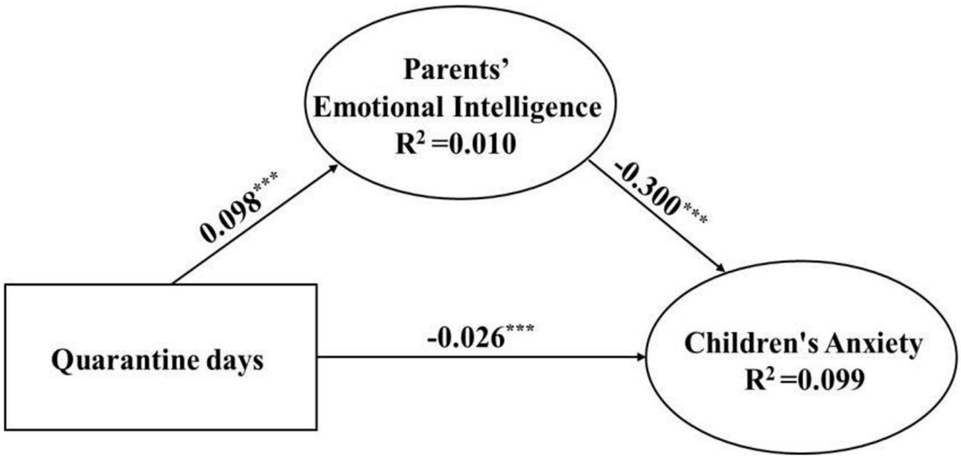

Figure 2 The impact of quarantine days on children's anxiety with parents' emotional intelligence as the mediating variable. ***$p < 0.001$.

In the next step, parents' emotional intelligence was introduced into the model as a mediator variable. The model also fit well: χ^2 (58, N = 29549) = 1411.23, *CFI* = 0.989, *TLI* = 0.986, *SRMR* = 0.022, *RMSEA* = 0.029. As shown in Figure 2, after controlling for children's gender and age, the number of quarantine days significantly predicted parents' emotional intelligence ($\beta = 0.098$, $p < 0.001$), with a 95% confidence interval of [0.085, 0.112]. Parents' emotional intelligence also significantly predicted children's anxiety ($\beta = -0.3$, $p < 0.001$) with a 95% confidence interval of [−0.316,-0.284]. In addition, the predictive effect of quarantine days on children's anxiety remained significant ($\beta = -0.026$, $p < 0.001$) with a 95% confidence interval of [−0.316, −0.013]. The mediating effect was −0.029, $p < 0.001$, with a 95% confidence interval of [−0.034, −0.025]. The mediating effect accounted for 51.79% of the total effect (ab/c), whereas the direct effect accounted for 46.43%. Therefore, parents' emotional intelligence exhibited a significant mediating effect between quarantine days and children's anxiety, supporting Hypothesis 2.

The Moderating Effect of Family SES on the Mediating Effect

A moderated mediating model was tested via the bootstrap method (5000 samples) and latent structural equations, with the data centralized in advance.

Test of Measurement Model

The results show that the benchmark model without interaction terms (M1) fits well: $Loglikelihood_0 = -245053.638$, $AIC_0 = 490181.277$, $BIC_0 = 490485.601$, χ^2 (58, N = 29549) = 1411.23, *CFI* = 0.989, *TLI* = 0.986, *SRMR* = 0.022, *RMSEA* = 0.029. We subsequently tested M2 with interactive terms and the results show that $AIC_1 = 489569.049$, which is less than AIC_0 by 612.228; $BIC_1 = 489889.824$, and less than BIC_0 by 595.777; $Loglikelihood_1 = -244745.525$. The likelihood ratio, $D = -2[Loglikelihood_0 - Loglikelihood_1] = 616.226$, with the degree of freedom = 2. According to the chi-square distribution table, a probability of $p < 0.01$ indicates that model M2 fits better than M1 does. In summary, further analysis of the moderated mediating effect can be conducted, as the fit of the model with interactive terms is acceptable.

Structural Model Testing

Family SES was found to have a significant moderating effect on the relationship between parents' emotional intelligence and children's anxiety ($\beta = -0.059$, $p < 0.001$), as shown in Figure 3. This finding supports Hypothesis 3. The mediating effect size is −0.007 ($p < 0.001$; *CI*: [−0.0008, −0.0005]) when family SES is one SD lower than Mean and −0.0013 ($p < 0.001$; *CI*: [−0.0015, −0.0011]) when one *SD* is greater. This result indicates that higher family SES enhances the alleviating effect of parents' emotional intelligence on anxiety.

As illustrated in Figure 4, the confidence interval for the two mediating effects is [−0.0008, −0.0005]. This finding indicates that as family SES (the moderating variable) increases, the effect of the number of quarantine days on children's anxiety, which is mediated by parents' emotional intelligence, also increases significantly. Therefore, the mediating effects are notably influenced by changes in the moderating variable.

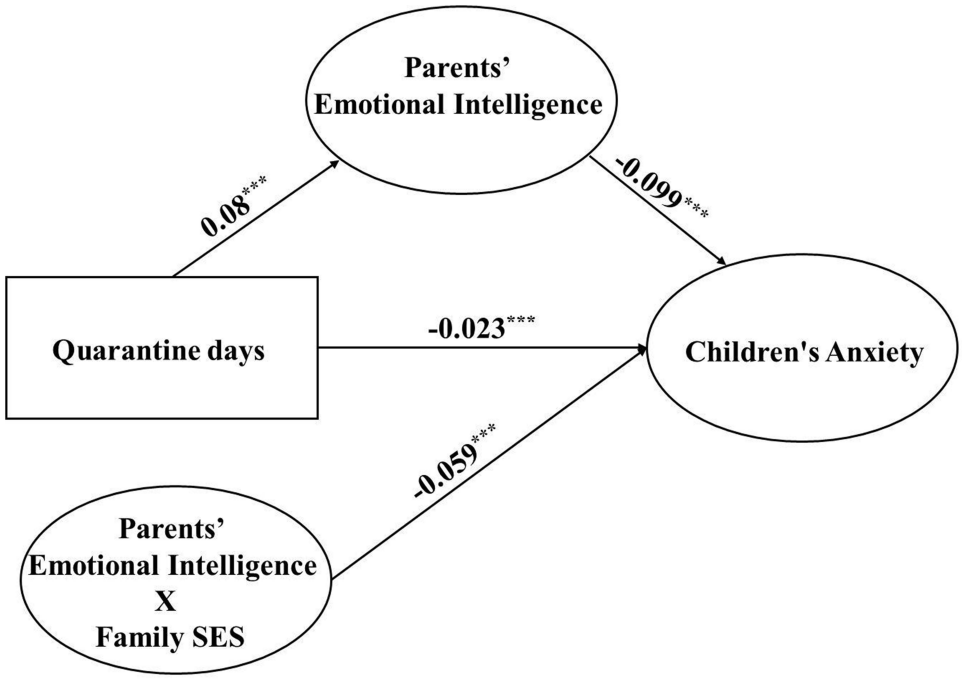

Figure 3 The impact of quarantine days on children's anxiety as per the mediating effect of parents' emotional intelligence and the moderating effect of family SES. ***$p < 0.001$.

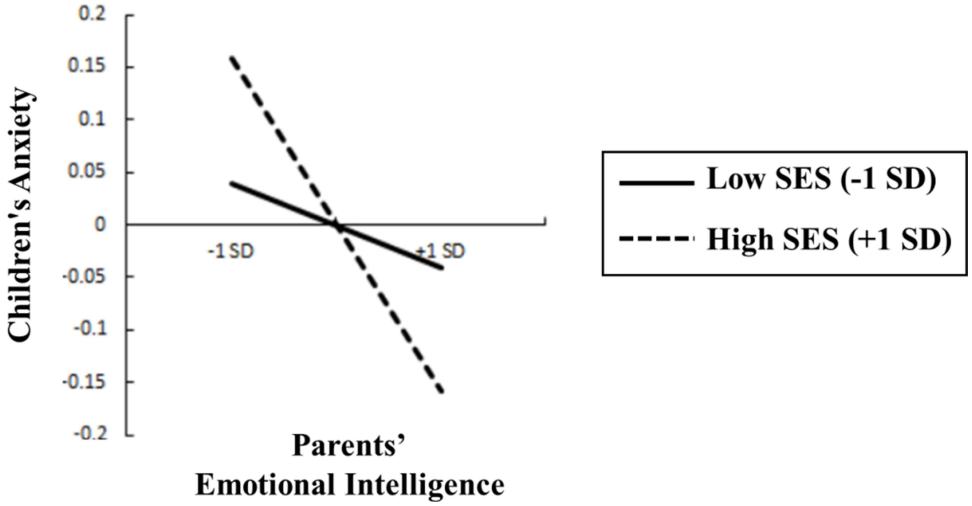

Figure 4 The moderating effect of family SES on parents' emotional intelligence and children's anxiety.

Discussion

The Mediating Role of Parents' Emotional Intelligence on Quarantine Days and Children's Anxiety

In examining the relationships among parents' emotional intelligence, quarantine days, and children's anxiety, the two key findings of this study are as follows:

First, a longer quarantine period (as measured by the number of days) significantly reduced children's anxiety. This may be explained by psychological resilience theory, which suggests that individuals adapt to changing environments during crises.[38] Over time, children self-regulate their awareness, emotions, and behaviors, thereby gradually reducing anxiety. Additionally, children receive substantial family support, which aids this adjustment. The study covered

quarantine durations ranging from 0 to 60 days, with anxiety decreasing within this range. However, the effect may not hold if the number of quarantine days increases.

Second, parents' emotional intelligence mediates the relationship between quarantine days and children's anxiety, explaining 51.79% of the effect. In the context of families under quarantine, emotional dynamics within the family became especially critical, particularly between parents and children, who mutually influence each other.[8,39] The pandemic has heightened stress levels, but parents with high emotional intelligence are more adept at recognizing and managing these heightened emotions in themselves and their children.[40] They were able to provide comfort and reassurance, helping alleviate the anxiety exacerbated by the pandemic's disruptions. On the other hand, parents with lower emotional intelligence might miss important emotional signals from their children, potentially increasing their anxiety. Over time, such oversight during a prolonged quarantine period could adversely affect children's physical and mental health, highlighting the importance of emotional intelligence in supporting family resilience during such crises.

The Moderating Role of Family SES in Parents' Emotional Intelligence and Children's Anxiety

The results indicate that family SES moderates the mediating effect of parents' emotional intelligence on children's anxiety. Specifically, families with higher SES are better positioned to leverage parents' emotional intelligence to mitigate children's anxiety. The pandemic brought unprecedented challenges, but higher SES families had more resources, such as larger living spaces and access to learning materials, which facilitated continued psychosocial development for children even when confined to the home.[41,42] Higher SES also allows parents to address their children's higher-level psychological needs amidst pandemic-related stressors.[43]

Additionally, the results underscore family function theory from an integrated perspective, especially under the strains of the pandemic. According to this theory, children's anxiety stems from a blend of family and individual factors, as family systems adapt to environmental changes. Maintaining and developing basic family functions became crucial for promoting the physical and psychological health of family members during the pandemic. Epstein and Skinner highlighted that family systems must perform tasks such as satisfying basic material needs, fostering family intimacy, and effectively dealing with emergencies.[44]

In the context of the global pandemic, family SES has acted as a crucial protective factor that helps maintain essential family functions and ensures psychological well-being. High SES facilitates positive family dynamics, supports stable relationships, and fosters positive emotions that are vital in helping children manage stress and anxiety associated with home quarantine.[44] Moreover, family function is closely related to children's implicit problems. Good family function is conducive to family members becoming stable, experiencing positive emotions, and alleviating children's anxiety during home quarantine.

Educational Suggestions

Support Low SES Families to Enhance Risk Management

The current study identifies a clear correlation between family SES and children's anxiety during prolonged home quarantine, highlighting the increased challenges faced by low SES families.[45] This finding reveals that children from lower SES backgrounds are disproportionately affected by anxiety, owing to constraints such as limited access to educational resources and psychological support. Given these insights, it is vital for governmental and educational bodies to develop robust support systems tailored to the unique challenges faced by low SES families, especially during unforeseen public health emergencies.[42,46]

These support systems should not only encompass emotional guidance but also concentrate on providing targeted educational resources.[47] One practical suggestion is the distribution of family education guidance manuals that deliver actionable strategies for managing mental health and educational needs in crisis scenarios such as the COVID-19 pandemic. These resources should be easily accessible and specifically designed to address the distinct needs of low SES households.

Additionally, establishing community-based support networks can substantially alleviate the stressors associated with low SES.[48] Such networks can facilitate resource sharing and offer peer support, creating a buffer for families impacted by economic and social disparities. During the pandemic, these grassroots initiatives have been instrumental in helping families establish environments conducive to their children's well-being and education, thereby mitigating anxiety, as evidenced by our study.[49]

Our research also highlights the importance of ensuring access to technology for children in low SES families, which is critical for bridging the educational gap.[46] By addressing these technological disparities, policymakers can foster an equitable educational framework that minimizes the mental health impact of prolonged home quarantine for children.

Enhancing Parental Emotional Intelligence Through Family Education Guidance

Our study revealed that parents' emotional intelligence plays a critical role in mitigating children's anxiety during the pandemic. To effectively reduce anxiety levels in children, enhancing parents' emotional intelligence through targeted family education programs is vital. These programs should focus on cultivating emotional awareness, self-regulation, and emotional expression and managing others' emotions.[50,51]

One effective method for enhancing parental emotional intelligence is to establish structured family time where parents and children can share daily experiences and highlights during quarantine. This practice enhances parents' emotional awareness and their ability to monitor their emotional states, which in turn helps them better understand and respond to their children's emotional cues, both verbally and nonverbally.[52] Such interactions not only strengthen family bonds but also model emotional awareness and healthy communication for children.

Second, parents should adopt healthy coping mechanisms to manage external pressures and negative emotions such as anxiety and depression. Engaging in activities such as listening to music, exercising, or having supportive conversations can help parents effectively process their feelings.[51] Practicing these strategies enables parents to mitigate emotional spillover to their children, thereby maintaining a stable emotional environment at home.

During prolonged home quarantine, fostering a positive emotional climate throughout the quarantine period is also vital. Parents should consciously stay positive both verbally and nonverbally, cultivating a warm and harmonious family atmosphere.[53] These environments encourage children to express themselves freely and feel secure, thus reducing anxiety levels.

Gaining a fundamental understanding of child psychology is another recommended strategy. This allows parents to understand the motivations behind their children's behaviors and subsequently promotes empathy and effective communication.[54] In interactions with children, parents are encouraged to recognize and praise specific positive behaviors and promptly address any emotional irregularities. This strong support system fosters resilience and facilitates children's emotional development.

Finally, parents can apply various interaction techniques to enhance their children's emotional intelligence. For example, engaging in role-playing exercises helps children articulate feelings and develop problem-solving skills. Additionally, parents can use storytelling to illustrate emotional challenges and model coping strategies, thus helping children navigate their emotions in a structured manner.

By focusing on these areas, parental emotional intelligence initiatives can significantly decrease children's anxiety, as indicated by our findings. Tailored education programs are crucial in this pursuit, as they equip parents with the tools necessary to create emotionally nurturing environments that support their children's psychological resilience and overall well-being.

Conclusion

The mediating effect of parents' emotional intelligence accounted for 51.79% of the total effect of quarantine duration on children's anxiety, with longer quarantine periods associated with decreased anxiety. Family socioeconomic status moderated this effect, benefiting higher socioeconomic status families more than lower socioeconomic status families. Children's adaptation during the quarantine period demonstrates psychological resilience. To alleviate anxiety, policies should focus on supporting families with lower socioeconomic status and enhancing parental emotional skills.

Abbreviation

SES, socioeconomic status.

Data Sharing Statement

The data that support the findings of this study are available on request from the corresponding author, upon reasonable request.

Ethics Approval and Informed Consent

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Guangzhou University [Protocol number: GZHU202023].

Informed consent was obtained from all participants in the study.

Consent for Publication

All authors approved the final manuscript and the submission to this journal.

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Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

The author(s) report no conflicts of interest in this work.

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