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The Family Stress Model in the Context of the COVID-19 Pandemic: Family Cohesion as a Source of Resilience Among Latinx Families

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Studies emerging from the COVID-19 pandemic have documented the emotional, physical, and economic hardships experienced within families across the United States. Guided by the family stress model, this study examined parents' reports of economic hardship during the COVID-19 pandemic, and the role of this hardship in Latinx parents' concurrent depressive symptoms and parenting behaviors and, in turn, their youths' well-being 1 year later. Further, we examined whether family cohesion mitigated the negative impact of families' economic strain. The present study utilized data from a longitudinal study of 295 Latinx families living within the U.S. Southwest. Parents and their adolescents were recruited in August 2020 and completed online surveys at two time points (about a year apart). Adolescents were approximately 13 years old ($SD = 1.41$ years) at Time 1 (T1), and the majority were U.S.-born (95%). Adolescents identified as male (51%), female (47%), and trans female/nonbinary (2%). Parents were 40 years old ($SD = 6.27$ years) at T1, and the majority were U.S.-born (58.2%) and identified as female (90%). Results indicated that families who experienced more economic hardship during the COVID-19 pandemic also reported greater depressive symptoms, which, in turn, were associated with lower parental warmth. Parental warmth predicted lower adolescent depressive symptoms 1 year later, accounting for prior levels of youth symptoms. Overall, findings supported the indirect associations between greater economic hardship and youth's lower well-being, but also suggested that greater family cohesion moderated links such that it offset the negative association between parent's depressive symptoms and parenting practices.

Keywords: Latinx youth well-being, family cohesion, family stress model, COVID-19 pandemic

Studies emerging from the COVID-19 pandemic have documented the emotional, physical, and economic hardships experienced within families across the United States (Brown et al., 2020; Fosco et al., 2022; Garcini et al., 2022; Maiya et al., 2024). Ethnic–racial minoritized adults reported more physical and economic hardships compared to White adults (Tai et al., 2021), and the Latinx community in particular (who make up 18.7% of the total U.S. population) were some of the hardest hit families (Boullion et al., 2023; Krogstad & Lopez, 2020; Vargas & Sanchez, 2020). For instance, in a nationally representative sample, nearly 29% of Latinx families reported that someone in their household lost their job since the start of the COVID-19 pandemic, 41% reported having trouble paying their rent or mortgage, and one in three Latinx families had their businesses impacted by COVID-19 (Vargas & Sanchez, 2020). Such economic challenges for Latinx families during the pandemic amplified the need to understand the contextual landscape of the existing Latinx health disparities.

The pandemic significantly heightened stress levels within Latinx families due to economic hardships, health concerns, and disruptions in daily routines (Brown et al., 2020). Latinx mothers subjected to economic cutbacks during the COVID-19 outbreak reported higher stress and greater depressive and anxiety symptoms compared to those who had not cut back on their expenses (Hibel et al., 2021). Additionally, findings from a sample of Latinx mothers who were hourly service workers found that caregiver and child mental health worsened at the onset of the pandemic and that more pandemic-induced hardships were associated with worse psychological well-being among caregivers and their children (Boyer et al., 2023). Studies focusing on Latinx-specific protective factors, such as family cohesion within a COVID-19 context, are still emerging and warranted.

The family stress model (Conger et al., 2010), which captures the direct and indirect pathways through which economic hardship is linked with familial relationships, parenting practices, and youth developmental outcomes, provides a framework to understand how economic hardship experienced during the onset of the COVID-19 pandemic informed youth outcomes. Specifically, the present study examined the family processes by which COVID-19 economic hardship impacted parents' mental health and parenting behaviors and then, in turn, their children's psychological well-being. We respond to Masarik and Conger's (2017) call for longitudinal studies to test the pathways of the model and to add to the mounting evidence on considering new mediating and moderating variables specific to culture and context. In addition, Z. E. Taylor et al. (2024) highlighted the need for studies that use the family stress model but adapt the variables to be culturally relevant and include resilience processes. Many Latinx families living in the United States adhere to cultural values that center the importance of family (White et al., 2015; Zeiders et al., 2013) and draw on family attributes, including family cohesion, to protect from stressful events and reduce some problem behaviors during the adolescence period (Marsiglia et al., 2009). Given this, we examined how the emotional and instrumental support derived from family cohesion may protect Latinx families from the negative impact of economic hardship. Latinx families are well-positioned to provide insight into familial resilience in the face of challenging contexts, and research within this community can inform intervention and prevention efforts aimed at reducing the impact of economic and contextual stressors among all families in the United States (Smith et al., 2022; Z. E. Taylor et al., 2024).

Latinx Youth Psychological Well-Being During the Pandemic

The focus on Latinx youth well-being is important because of the developmental salience of mental health changes during adolescence and the COVID-19 pandemic exacerbated existing mental health challenges, including depressive symptoms and generalized anxiety symptoms (Polo et al., 2024). An additional outcome important to examine is self-esteem, as it represents a primary component of an individual's self-concept. Self-esteem has been shown to be something that changes during adolescence (Umaña-Taylor et al., 2002). Adolescence is a developmental period in which social relationships are particularly salient and COVID-19 posed a unique risk given the shelter in place orders that restricted youths' access to their extended family members and school peers (Stein et al., 2024). Before the pandemic, Latinx youth reported higher depressive symptoms and were at a higher risk for major depressive disorder compared to peers from other ethnic/racial backgrounds (Polo et al., 2024). The pandemic may have exacerbated these disparities. In a longitudinal study from 2018 to 2022, Latinx youth, Grades 5–8, were up to twice as likely to present both depression and anxiety relative to a non-Latinx comparison group consisting of African American youth, European American youth, Asian American youth, as well as other non-Latinx (e.g., Middle Eastern) backgrounds. Furthermore, 50% of Latinx youth met criteria for clinical or high-risk classification in depression, social anxiety, and/or generalized anxiety. The evidence suggests that twice as many Latinx early adolescents relative to non-Latinx early adolescents were in the clinical range for generalized anxiety in the first year of the pandemic and for social anxiety in the second year of the pandemic (Polo et al., 2024). Qualitative work has also highlighted the mood changes that early adolescents experienced during the pandemic, including loneliness and sadness about missing out on spending time with friends (Cortés-García et al., 2022). The findings call for continued efforts to address the needs of Latinx early adolescents, who experienced both direct (e.g., school closures) and indirect (e.g., parents endorsed heightened and disproportionate levels of stress due to the pandemic) impacts on their psychological well-being (Brown et al., 2020).

Family Stress Model

The family stress model offers a framework for understanding youths' mental health amid the heightened economic challenges and uncertainties brought about by the pandemic. Developed by Conger et al. (1992), this model posits that economic strain and hardship lead to parental distress which, in turn, affects parenting practices, family relationships, and children's well-being (Maiya et al., 2024). As revealed in prior work with Latinx and ethnic–racially diverse samples, economic hardship is linked to parental mental health (Brown et al., 2020; Garcini et al., 2022), increased parent–child conflict (Fosco et al., 2022), reduced emotional support from parents (Davis et al., 2020), and harsher disciplinary methods (Gonzales et al., 2011; Kavanaugh et al., 2018).

Similar patterns have emerged in studies of Latinx families. For example, in a cross-sectional, multiple-reporter study comprised of Latinx adolescents and their primary caregiver (88% mothers), parents' economic stress was linked to greater parental depressive symptoms and lower levels of parental warmth (Davis et al., 2020).

A longitudinal study of Mexican-origin families provided evidence of family stress mediated effects: mothers' perceptions of greater economic pressure were associated with an increase in adolescent externalizing symptoms from early to middle adolescence later via increases in harsh parenting (White et al., 2015). Finally, in a study comprised of Mexican-American parents and their fifth grader child, findings revealed that a mediated effect between economic hardship and youth's internalizing symptoms emerged among mothers (but not fathers), such that greater economic hardship was associated with lower maternal warmth, greater harsh parenting, and in turn, more externalizing symptoms (Gonzales et al., 2011).

Surprisingly, studies conducted during the COVID-19 pandemic have revealed mixed findings regarding the financial and emotional stress parents faced due to the uncertainty of their employment status and implications for youth health outcomes. For instance, in one study of a predominantly Latinx sample, findings suggested that internalizing, externalizing, and attention problems decreased over the course of the pandemic, and familial conflict was not associated with any health indicators (Penner et al., 2021). In another study comprised of Latinx adolescents, COVID-19 stress was related to higher levels of depressive and anxiety symptoms for youth who used low and mean levels of problem-solving coping in response to COVID-19 stressors (Stein et al., 2024). However, in a qualitative study, some Latinx youth indicated that the increased time spent with family caused tensions and familial conflicts, and the drastic change in their routines caused emotional distress (Cortés-García et al., 2022). Taken together, while prepandemic evidence supports the family stress model, emerging research from the COVID-19 pandemic reveals more nuanced associations between familial dynamics and youth outcomes.

Resiliency and Family Cohesion

Importantly, Masten et al. (2021) call for research on resiliency to reflect the capacity of a dynamic system to adapt to challenge the function, survival, or development within families. Resilience encompasses the capacity and resources that can be mobilized by an individual person or family in response to challenges (Masten et al., 2021). Familial resilience is particularly important within Latinx communities, given the focus on interdependence between family members and that familial bonds provide support in the face of economic hardship, especially during the pandemic (Prime et al., 2020). Indeed, alongside the financial and health uncertainty that was brought on by the pandemic, there is also growing evidence that Latinx families combated these challenges by coming together and drawing on their familial support system as a form of resistance and resilience. Latinx families reported spending more time together during the pandemic (Stein et al., 2024); it is possible that parents were confiding in their family unit more so than other social networks during this time for support. To evaluate familial resilience, the present study examined family cohesion, which refers to the emotional bonding, physical support, and overall connectedness that family members share with each other (Behar-Zusman et al., 2020). Thus, a family member's reports on these characteristics reflect the level of familial belonging and acceptance that one feels within their family unit (Behar-Zusman et al., 2020; Marsiglia et al., 2009). Prior work with Mexican immigrant families has provided evidence for the protective nature of family cohesion for youths' outcomes, such

that adolescents who reported greater family cohesion also reported fewer conduct problems and rule breaking (Marsiglia et al., 2009).

Although no studies to our knowledge have examined how family cohesion may disrupt or change the negative impact of the economic challenges during the pandemic, prior work with Latinx families suggests that Latinx adults may seek emotional, cultural, and physical support during economically challenging times. For instance, findings from one study consisting of Mexican-origin families suggest that greater endorsement of familism values was protective, given that only mothers lowest on familism values experienced decreases in warmth associated with economic pressure (White et al., 2015). In another study of Latina mothers, network support (e.g., emotional support, childcare help; Prelow et al., 2010) was protective such that mothers with greater network support reported a weaker association between an economic stressor and psychological distress. Thus, the present study tested family cohesion as a moderator of the family stress model by examining the extent to which this source of familial resilience buffered associations between economic hardship and parent's depressive symptoms, as well as the association between parent's depressive symptoms and parental warmth.

The Present Study

Guided by the family stress model, the present study examined the longitudinal processes by which economic hardship impacted Latinx youths' well-being during the COVID-19 pandemic (see Figure 1). Specifically, we examined the links between economic hardship (reported by parent/caregiver during the early months of the COVID-19 pandemic at Time 1 [T1]), parental depressive symptoms at T1, parental warmth at T1 and their impact on youths' psychological well-being (i.e., anxiety and depressive symptoms, self-esteem) 1 year later (Time 2 [T2]), accounting for prior years psychological well-being. We hypothesized that T1 COVID-19 economic hardship would relate to greater T1 parental depressive symptoms and, in turn, lower T1 parental warmth. T1 parental warmth would, in turn, predict fewer T2 youth depressive and anxiety symptoms and greater T2 youth self-esteem. Additionally, we examined the moderating role of COVID-19 family cohesion between economic hardship and parental depressive symptoms and the association between parental depressive symptoms and parental warmth. For both paths, we hypothesized that family cohesion would diminish the associations, providing protection and disrupting the process by which economic hardship impacted youths' well-being.

Method

Participants

The present study utilized data from a longitudinal study of 295 Latinx families assessing the experiences, stressors, and well-being of Latinx families with adolescent children during the COVID-19 pandemic (Mantina et al., 2024, see Table 1 for demographic characteristics by parents and adolescents). Parents and adolescents completed their online surveys, on average, 2.8 days apart ($SD = 6.01$). At T1, parents were approximately 40 years old ($SD = 6.27$). Most parents were U.S.-born (58.2%). The majority (90%) of parents identified as female (see Table 1). Among foreign-born parents, they were, on average, 18.93 years old ($SD = 10.16$) when

Figure 1
Conceptual Model
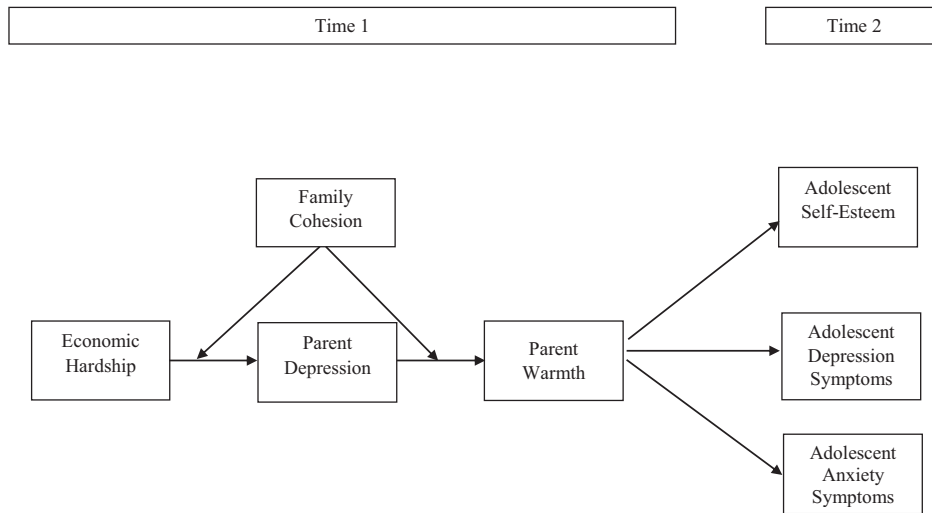
they came to the United States, and their countries of birth were Mexico ($n = 119$), Germany ($n = 1$), Puerto Rico ($n = 1$), and Venezuela ($n = 1$). In terms of ethnicity,[1] parents identified as Mexican (39.7%), Mexican-American (27.7%), Hispanic (22.3%), Chicano (4.8%), Latino/Latinx (4.5%), or Other (1.0%; e.g., Mexican Indigenous, Nuevomexicana, Salvadoran). Yearly household incomes ranged from less than $10,000 to more than $150,000, but most reported $40,001–$50,000 or lower (57.2%). At the time of data collection, most (57.9%; $n = 169$) parents were employed (47.3%; $n = 138$) and reported that they had been working the same job since the beginning of the COVID-19 pandemic. Furthermore, about a third of parent participants (37.7%; $n = 110$) indicated that they were classified as an essential worker (e.g., first responder, grocery store worker).

At T1, adolescents were approximately 13 years old ($SD = 1.41$). Almost all adolescents were U.S.-born (95.2%). A little more than half (51%) of adolescents identified as male, followed by female (47%), and gender diverse (2%). Among adolescents who were foreign-born, they were, on average, 7.43 years old ($SD = 3.52$) when they came to the United States, and their countries of birth were Mexico ($n = 12$), Puerto Rico ($n = 1$), and Venezuela ($n = 1$). In terms of ethnicity,[2] adolescents identified as Mexican-American (58.7%), followed by Hispanic (17.7%), Mexican (9.6%), Latino/Latinx (7.8%), Chicano/a (3%), or Other (3.2%; e.g., Hispanic/Native American, Mexican-American/White).

Procedure

From August 2020 to March 2021, families were recruited through social media and local organizations in a U.S. Southwestern metropolitan area. Interested families completed a brief online survey to determine eligibility. Families were eligible if one caregiver/parent and one adolescent between the ages of 11 and 15 years were of Latin American descent and living in a U.S. Southwestern metropolitan area. Given the rise in bots infiltration of online surveys (Bybee et al., 2022; Godinho et al., 2020), families were screened for eligibility through follow-up phone calls in which study personnel validated the name of the caregiver/parent (referred to as "parent" hereinafter) and adolescent, and the adolescent's age. Eligible, consenting parents and assenting adolescents received a link to complete a 30- to 45-min online survey available in English or Spanish. The online surveys were translated into Spanish using a back-translation method with decentering (Knight et al., 2009). In total, 316 parents and 302 adolescents consented/assented. Of those, 92.4% of parents ($N = 292$) and 97% of adolescents ($N = 293$) completed the online survey.

All families were followed up approximately 1 year later (November 2021 to May 2022) for the T2 assessments (Parent: $M = 1.08$ years, $SD = 0.10$ years; Youth: $M = 1.09$ years, $SD = 0.10$ years) after T1. Families were reconsented/assented and completed a 45- to 60-min online survey. At T2, 259 parents/adolescents reconsented/assented; 87% of parents ($N = 234$) and 89.2% of adolescents ($N = 231$) completed an online survey, representing 80% of parents and 79% of adolescents from the original T1 study. Both parents and youth received electronic gift cards for participating at each time point. The University of Arizona Institutional Review Board (IRB No. 2005739923; 2108136675) approved the study.

Measures

Economic Hardship During COVID-19 (T1)

Parents completed an adapted measure from Conger et al. (1992). Specifically, all items were revised to begin with the statement "Since the COVID-19 pandemic started." Subscales captured families' inability to make ends meet (two items; e.g., "Since the

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[1] We also asked for self-reports of race, but most parents reported their ethnicity instead when asked, "If you were asked to identify your race or racial background, what would you say?" (e.g., 25.3% Mexican; 24.3% Hispanic; 17.5% White).
[2] We also asked for self-reports of race, but most adolescents reported their ethnicity instead when asked, "If you were asked to identify your race or racial background, what would you say?" (e.g., 26.6% Mexican; 20.5% Hispanic; 15.5% Mexican-American).

Table 1

Demographic Characteristics Among Parent and Adolescent Participants

Demographic characteristic	Parent *n* (%)	Adolescent *n* (%)
Nativity		
U.S.-born	170 (58)	279 (95)
Foreign-born	122 (42)	14 (5)
Gender		
Female	262 (90)	139 (47)
Male	27 (9)	148 (51)
Genderqueer/gender nonconforming, nonbinary	2 (.1)	6 (2)
Parent education		
Less than high school	43 (15)	
High school or equivalent	50 (17)	
Beyond high school degree	199 (68)	
Survey language		
English	201 (69)	285 (97)
Spanish	91 (31)	8 (3)

COVID-19 pandemic started, tell us how much difficulty you had with paying your bills;" Cronbach's α = .82), not having enough money for necessities (seven items; e.g., "Your family had enough money to afford the kind of home you needed;" Cronbach's α = .94), economic adjustments/cutbacks (nine items; e.g., "Fell far behind in paying bills;" Cronbach's α = .76), and financial strain (two items; e.g., "You will have to do without the basic things that your family needs;" Cronbach's α = .86). Responses were recoded such that higher scores indicated greater economic hardship since the beginning of the pandemic, and subscales were standardized and combined to calculate an overall economic hardship mean score. The original measure has demonstrated adequate reliability and validity among Latinx families (e.g., Davis et al., 2020).

Parent Depressive Symptoms (T1)

Parents completed the 10-item Center for Epidemiological Studies Depression short form Scale at T1 (Andresen et al., 1994). Subscales assessed somatic symptoms (four items; e.g., "I had trouble keeping my mind on what I was doing"), negative affect (four items; e.g., "I felt depressed"), and positive affect (two items; e.g., "I felt hopeful about the future"). Items were scored on a 4-point Likert scale (1 = *rarely or none of the time* to 4 = *most of the time*). A mean score was calculated using the somatic symptoms, negative affect, and reverse-scored positive affect items, such that higher scores indicated greater depressive symptoms. The 10-item Center for Epidemiological Studies Depression has been validated and demonstrated adequate reliability in prior studies comprised of Latinx adults (Pichardo et al., 2021; Ward et al., 2019). In the present study, Cronbach's α for parental reports was .87.

Parental Warmth (T1)

Parents completed the parent version of the acceptance scale of the Children's Reports of Parent Behavior Inventory (Schaefer, 1965) to assess the positive emotional tone of the parent–adolescent relationship. The scale consists of eight items (e.g., "I see [Adolescent name]'s good points more than their faults."). Items were scored on a 5-point Likert scale (1 = *almost never or never* to 5 = *almost always or always*). Mean scores were computed such that higher scores indicated greater warmth from parents toward their adolescent child. This measure has demonstrated adequate validity and reliability in previous work with Mexican-origin parents (e.g., Dumka et al., 2009). In the present study, Cronbach's α was .89.

Family Cohesion During COVID-19 (T1)

Parents were also asked about whether familial dynamics changed during the COVID-19 pandemic compared to prior to the pandemic using the COVID-19 Household Environment Scale (Behar-Zusman et al., 2020). The COVID-19 Household Environment Scale contains the household conflict and cohesion subscales. The present study uses the cohesion subscale, which consists of 15 items that were designed to capture the extent to which family members were integrated in each other's lives and overcame challenges together, and whether household cohesion was stronger compared to before the pandemic. Items were scored on a 5-point Likert scale (1 = *much less than before* to 5 = *much more than before*) and captured several domains of cohesion (e.g., "Helping each other with use of technology, health needs?"; "Facing challenges or solving problems together?"; "Showing concern or emotional support for each other?"). Mean scores were computed such that higher scores indicated greater family cohesion. The measure, which was specifically adapted for the COVID-19 pandemic, has been validated in a prior study consisting of an international sample of parents and caregivers (Larson et al., 2021). In the present study, Cronbach's α was .82.

Adolescent Self-Esteem (T2)

To capture youths' self-esteem, adolescents completed the 10-item self-esteem scale (Rosenberg, 1979). Items (e.g., "I feel that I have a number of good qualities.") at Time 2. Items were scored on a 4-point Likert scale (1 = *strongly disagree* to 4 = *strongly agree*). A mean score was calculated such that higher scores indicated higher levels of self-esteem. The measure has demonstrated adequate reliability and validity in prior work with Latinx youth (Safa et al., 2024). In the present study, Cronbach's α was .90.

Adolescent Depressive Symptoms (T1, T2)

Adolescents' depressive symptoms were captured using the 10-item Center for Epidemiological Studies Depression short form Scale at T1 and T2 (Andresen et al., 1994).[3] Subscales included somatic symptoms (four items; e.g., "I was bothered by things that usually don't bother me"), negative affect (four items, e.g., "I felt depressed"), and positive affect (two items; e.g., "I felt hopeful about the future"). All items were scored on a 4-point Likert scale (1 = *rarely or none of the time* to 4 = *most of the time*). After reverse scoring positive affect items, a mean score was calculated such that higher scores indicated higher levels of depressive symptoms. The measure has been demonstrated to have adequate validity and reliability in prior work with Latinx adolescents (Giano et al., 2020), and has demonstrated invariance by adolescent age and gender (Romano et al., 2022). In the present study, Cronbach's α was .84 at T1 and .85 at T2.

Adolescent Anxiety Symptoms (T1, T2)

Adolescents completed the Generalized Anxiety Disorder–7 Scale to assess how frequently they experienced anxiety symptoms (Mills et al., 2014). The seven items (e.g., "Feeling nervous, anxious or on edge") were scored on a 4-point Likert scale (0 = *I did not experience this event* to 3 = *nearly every day*). A mean score was computed such that higher scores indicated more frequently experienced anxiety symptoms. The measure has demonstrated adequate reliability and validity in prior work with Latinx youth (Pérez-Pedrogo et al., 2022). In the present study, Cronbach's α for the scale was .91 at T1 and .93 at T2.

Covariates

Based on previous work noting differences across study variables, parent gender, youth gender, and parents' educational level were included as covariates (e.g., Gomez-Aguinaga et al., 2021; White et al., 2015). Of note, six adolescent participants and 2 parent participants identified as gender diverse. To avoid excluding them from analyses, and given gendered power structures in society, gender diverse youth and parents were pooled with female youth and parents, respectively (i.e., gender coded 0 = female, trans male, trans female, nonbinary, or a different gender identity; 1 = male).

Analytic Approach

To test research questions, longitudinal structural equation modeling was carried out using Mplus Version 8.9 (Muthén & Muthén, 2023). Good model fit was determined by a nonsignificant chi-square test, comparative fit index (CFI) value greater than or equal to .95, and root-mean-square error of approximation (RMSEA) and standardized root-mean-square residual (SRMR) values less than or equal to .05 (Hu & Bentler, 1999). Missing data were handled using full information maximum likelihood, given that this method minimizes bias in parameter estimates but retains original sample size (Arbuckle, 1996; Enders, 2022).

After estimating the longitudinal models, mediation was examined using the joint significant test (A. B. Taylor et al., 2008). With this method, an indirect effect is determined to be present if the hypothesized paths in the model are all statistically significant. The

use of this method is preferred over bootstrapping methods in serial mediation models when null hypothesis testing is of interest over producing confidence intervals (CIs; A. B. Taylor et al., 2008). Furthermore, when compared to other methods for examining indirect associations, the joint significance test has demonstrated good power and produces reasonable Type I error rates (Leth-Steensen & Gallitto, 2016).

To test moderation by family cohesion, two interaction terms were added to the final mediational model. First, the cross product between mean-centered values of family cohesion and the standardized economic hardship score was calculated, and the interaction term and family cohesion scores were included as predictors of parental depression. Next, the cross product between mean-centered family cohesion and parent depression scores were calculated, and the interaction term and family cohesion scores were included as predictors of parental warmth. Significant interactions were probed using the simple slopes technique (Aiken & West, 1991). Please email the corresponding author to discuss access to study materials, analysis code, and data. This study is not preregistered.

Results

Descriptive Statistics and Attrition Analyses

Means, standard deviations, and correlations for all study variables are presented in Table 2. Of note, paired samples t test indicated that depressive symptoms decreased from T1, $M = 2.11$, $SD = 0.66$, to T2, $M = 1.98$, $SD = 0.66$; $t(226) = 3.03$, $p = .003$. Anxiety symptoms were stable from T1, $M = 1.14$, $SD = 0.06$, to T2, $M = 1.13$, $SD = 0.06$; $t(226) = 0.26$, $p = .80$. Attrition analyses examined whether participating parent–adolescent dyads differed from nonparticipating dyads based on various T1 sociodemographic and COVID-related variables. Among T1 participating parent–adolescent dyads ($N = 290$), 229 participated at T2, and 61 dyads did not. In terms of youth demographics, no differences emerged in youth gender, $\chi^2(2) = 5.55$, $p = .06$, nativity, $\chi^2(1) = 0.001$, $p = .97$, age, $t(288) = 0.07$, $p = .94$, and grade level, $t(288) = 0.09$, $p = .93$.

In terms of parent characteristics, participating and nonparticipating dyads did not differ on parent nativity, $\chi^2(1) = 0.60$, $p = .44$, parent gender, $\chi^2(1) = 3.97$, $p = .05$, parent age, $t(287) = 0.23$, $p = .82$, family income, $t(288) = −0.91$, $p = .37$, and parent education, $t(288) = −1.43$, $p = .16$. In terms of COVID-related indicators, participating and nonparticipating dyads did not differ on parent employment status, $\chi^2(1) = 0.08$, $p = .78$, parent essential worker status, $\chi^2(1) = 1.47$, $p = .23$, and financial hardship constructs capturing parents' reports of inability to make ends meet, $t(288) = 1.28$, $p = .20$, not having enough money for necessities, $t(288) = 1.47$, $p = .14$, making economic adjustment or cutbacks, $t(288) = 1.06$, $p = .29$, and experiencing financial strain, $t(287) = −0.12$, $p = .91$.

Family Stress Model: Direct and Indirect Effects

The hypothesized model demonstrated adequate fit: $\chi^2(14) = 44.001$, $p < .001$; CFI = .95; RMSEA = .09, 90% CI [.06, .11]; SRMR = .06 (see Figure 2). Results suggested that parents who

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[3] In the present study, all subscales were correlated: somatic symptoms with negative affect ($r = .70$, $p < .001$); somatic symptoms with positive affect ($r = −.15$, $p = .01$); and negative affect with positive affect ($r = −.33$, $p < .001$).

Table 2

Correlations, Means, and Standard Deviations for All Study Variables

| Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. T1 P gender	—											
2. T1 Y gender	.02	—										
3. T1 P Ed	.02	−.04	—									
4. T1 Eco hardship	−.05	.06	−.34***	—								
5. T1 P depression	−.11	.03	.08	.40***	—							
6. T1 P warmth	−.15*	−.05	.01	−.08	−.13*	—						
7. T1 P cohesion	−.03	−.01	−.07	.05	.02	.20***	—					
8. T1 Y depression	−.004	−.20***	.22***	.03	.23***	−.24***	−.04	—				
9. T1 Y anxiety	.04	−.30***	.20***	.03	.21***	−.17**	−.04	.82***	—			
10. T2 Y depression	.09	−.30***	.14*	−.07	.25***	−.21**	−.12	.55***	.50***	—		
11. T2 Y anxiety	.09	−.28***	.14*	−.12	.24***	−.16*	−.03	.50***	.53***	.80***	—	
12. T2 Y self-esteem	−.14*	.30***	−.01	.07	−.22**	.18*	.11	−.46***	−.42***	−.68***	−.63***	—
M	0.09	0.51	5.91	−0.01	2.14	4.29	3.63	2.11	1.15	1.99	1.13	2.90
SD	0.29	0.50	2.52	3.46	0.66	0.61	0.57	0.65	0.84	0.66	0.88	0.64

Note. Gender was coded 0 = Female, trans male, trans female, nonbinary, or a different gender identity; 1 = Male. T1 = Time 1; T2 = Time 2; P = Parent; Y = Youth; Ed = Education; Eco = Economic; Depression = Depressive symptoms; Anxiety = Anxiety symptoms.
* $p < .05.$ ** $p < .01.$ *** $p < .001.$

experienced more economic hardship during the COVID-19 pandemic also reported greater T1 depressive symptoms ($B = .09$, standard error [SE] = .01, $p < .001$); greater T1 parental depressive symptoms were, in turn, associated with lower T1 parental warmth ($B = −.13$, $SE = .06$, $p = .04$). T1 parental warmth negatively predicted adolescents' T2 depressive symptoms ($B = −.13$, $SE = .06$, $p = .02$) accounting for T1 levels of youth symptoms. A marginal association emerged between T1 parental warmth and

youths' T2 self-esteem ($B = .12$, $SE = .06$, $p = .05$) and anxiety symptoms ($B = −.15$, $SE = .08$, $p = .05$). Greater T1 parents' depressive symptoms were also associated with lower T2 self-esteem ($B = −.17$, $SE = .06$, $p = .01$), more T2 adolescent depressive symptoms ($B = .17$, $SE = .06$, $p = .01$), and more T2 adolescent anxiety symptoms ($B = .25$, $SE = .08$, $p = .002$). Finally, parents' reports of greater T1 economic hardship were positively associated with youths' T2 self-esteem ($B = .02$, $SE = .01$, $p = .04$), and

Figure 2

Testing the Initial Family Stress Model Among Latinx Families
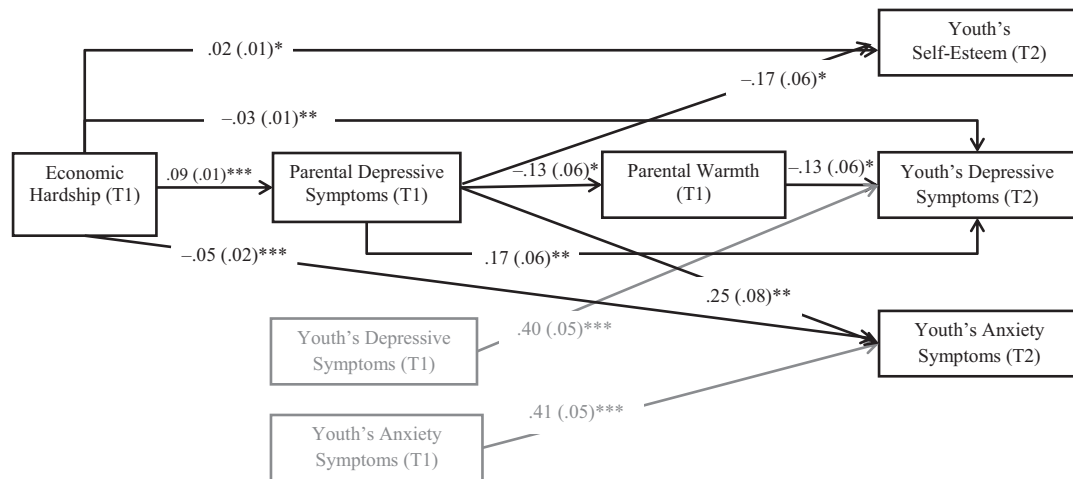
Note. $N = 295$ families. Unstandardized estimates (standard errors [SEs]) are presented. Parental warmth was regressed on parental depressive symptoms and economic hardship, and parental depressive symptoms were regressed on economic hardship. All T2 variables were regressed on T1 variables. For ease of presentation, nonsignificant associations are not illustrated. Exogenous variables were allowed to covary. Covariates are not shown in the model but are listed here: Parent depressive symptoms were regressed on parent gender ($p > .05$) and education level ($B = .06$, $SE = .01$, $p < .001$). Parent warmth was regressed on parent gender ($B = −.34$, $SE = .12$, $p < .01$) and education level ($p > .05$). Adolescent anxiety symptoms ($B = −.29$, $SE = .10$, $p < .01$), depressive symptoms ($B = −.31$, $SE = .07$, $p < .001$), and self-esteem ($B = .40$, $SE = .07$, $p < .001$) were regressed on adolescent gender. Gender was coded 0 = Female, trans male, trans female, nonbinary, or a different gender identity; 1 = Male. T1 = Time 1; T2 = Time 2.
* $p < .05.$ ** $p < .01.$ *** $p < .001.$

negatively associated with youths' T2 depressive symptoms ($B = -.03$, $SE = .01$, $p = .01$) and T2 anxiety symptoms ($B = -.05$, $SE = .02$, $p < .001$).

Moderation by Family Cohesion

The final model was reestimated to incorporate family cohesion as a moderator, which also demonstrated adequate fit: $\chi^2(25) = 61.50$, $p < .001$; CFI = .94; RMSEA = .07, 90% CI [.05, .09]; SRMR = .05. Moderation was not supported between economic hardship and parents' depressive symptoms ($B = .002$, $SE = .02$, $p = .90$; see Figure 3). We also examined whether family cohesion moderated the association between parents' depressive symptoms and parental warmth, and a significant interaction emerged ($B = .20$, $SE = .09$, $p = .03$). Simple slopes were probed at 1 SD above and below the family cohesion mean. Results revealed the buffering effects of family cohesion, such that in the context of high cohesion, T1 parental depressive symptoms were not associated with T1 parental warmth ($B = -.03$, $SE = .03$, $p = .37$; see Figure 4). In the context of low cohesion, T1 parental depressive symptoms were negatively associated with T1 parental warmth ($B = -.25$, $SE = .03$, $p < .001$). These findings also have implications for the indirect effects (tested using the joint significance test) of economic hardship on youths' mental health outcomes via parent depressive symptoms and parental warmth. Specifically, among parents who reported low family cohesion, greater economic hardship was associated with more parental depressive symptoms, higher depressive symptoms were associated with lower warmth between parents and adolescents, and in turn, warmth was negatively associated with youths' depressive symptoms and positively associated with youths' self-esteem 1 year later. In contrast, among parents who reported high levels of family cohesion, economic hardship was positively associated with parents' depressive symptoms, parents' depressive symptoms were not associated with parental warmth, and, in turn, parental warmth was negatively associated with youths' depressive symptoms and positively associated with youths' self-esteem 1 year later.

Discussion

The present study applied the family stress model to explore the extent to which economic hardship during the COVID-19 pandemic informed Latinx youth's mental health outcomes via parent's depressive symptoms and parental warmth. Focusing on Latinx families is warranted given that these families have been some of the most vulnerable and hardest hit financially by the pandemic (Vargas & Sanchez, 2020), and Latinx youth have struggled with their mental health before and during the pandemic (Polo et al., 2024).

Figure 3
Testing the Family Stress Model Among Latinx Families During the COVID-19 Pandemic and the Role of Family Cohesion
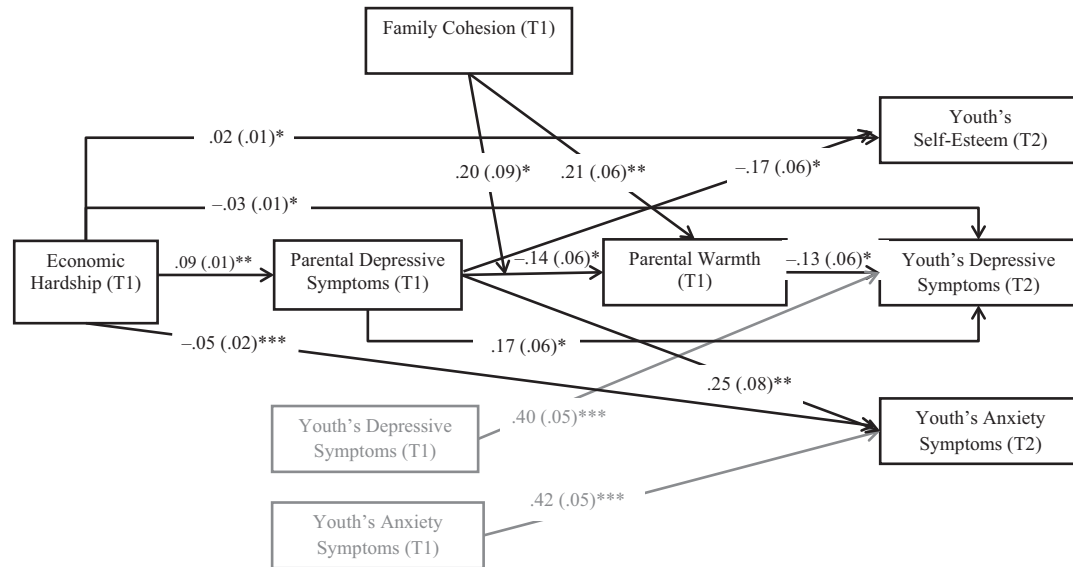
Note. $N = 295$ families. Unstandardized estimates (standard errors [*SEs*]) are presented. Parental warmth was regressed on parental depressive symptoms and economic hardship, and parental depressive symptoms were regressed on economic hardship. All T2 variables were regressed on T1 variables. For ease of presentation, nonsignificant associations are not illustrated. Exogenous variables were allowed to covary. Covariates are not shown in the model but are listed here: Parent depressive symptoms were regressed on parent gender ($p > .05$) and education level ($B = .06$, $SE = .02$, $p < .001$). Parent warmth was regressed on parent gender ($B = -.33$, $SE = .12$, $p < .01$) and education level ($p > .05$). Adolescent anxiety symptoms ($B = -.28$, $SE = .10$, $p < .01$), depressive symptoms ($B = -.31$, $SE = .07$, $p < .001$), and self-esteem ($B = .40$, $SE = .07$, $p < .001$) were regressed on adolescent gender. Gender was coded $0 =$ Female, trans male, trans female, nonbinary, or a different gender identity; $1 =$ Male. T1 = Time 1; T2 = Time 2.
* $p < .05$.   ** $p < .01$.   *** $p < .001$.

Figure 4
Family Cohesion Moderates the Association Between Parent Depressive Symptoms and Parental Warmth
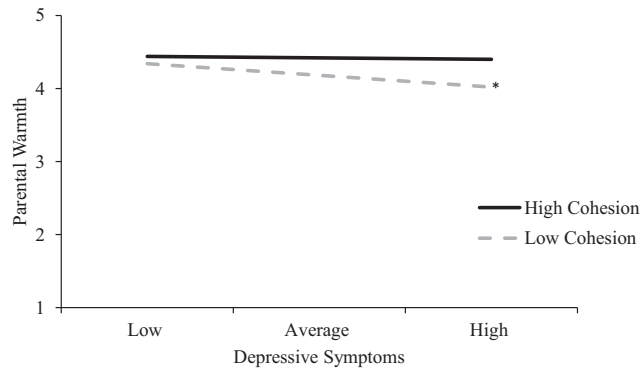
Note. $N = 295$ families. Simple slopes are plotted one standard deviation below and above the mean estimate of family cohesion.
* $p < .01$.

Furthermore, given that Latinx families are typically characterized as being family oriented and draw on familial support in the face of adversity, including the COVID-19 pandemic (Stein et al., 2024), family cohesion was also examined as a source of resilience by testing whether family cohesion moderated pathways between economic hardship to parent depressive symptoms, and between parent depressive symptoms and parental warmth. Findings were in support of the family stress model, such that greater economic hardship during the COVID-19 pandemic was indirectly associated with Latinx youths' depressive symptoms via increased parental depressive symptoms and reduced parental warmth. Furthermore, family cohesion emerged as a buffer of these downstream negative effects, such that parent depressive symptoms and parental warmth were not associated among families who reported greater family cohesion during the pandemic. These findings expand our understanding regarding how Latinx families may leverage their cultural values related to familial bonding and closeness in times of global health and financial uncertainty, which in turn provides a sense of protection for parent–adolescent relationships.

Support for the Family Stress Model Among Latinx Families During COVID-19

The first goal of the study was to utilize the family stress model to examine whether economic hardship during the COVID-19 pandemic was linked with parents' depressive symptoms, parenting behaviors, and in turn, adolescents' well-being. Findings largely supported the indirect effects between Latinx families' greater economic hardship and worsened youth's psychological well-being via increased parent depressive symptoms and lower parental warmth. Our findings among parent–adolescent dyads are consistent with another study that tested the family stress model during the COVID-19 pandemic with a sample of Latinx mothers and their young children (Boyer et al., 2023). Furthermore, the current focus on Latinx adolescents is significant as prior work has revealed that mental health struggles were more prevalent among Latinx youth before and during the pandemic compared to those from other groups (Polo et al., 2024). The present study builds on prior

knowledge of family processes (i.e., financial stress, parental mental health challenges, reduced parental warmth and acceptance) as key mechanisms for understanding adolescents' psychological well-being, but extends this work by examining these associations during the pandemic. Given that Latinx adolescents comprise approximately a quarter of the U.S. youth population (Krogstad & Lopez, 2020), it is critical to identify factors that negatively inform the mental health outcomes of this growing segment of the U.S. population so that youth prevention and intervention strategies can be developed to mitigate both short-term and long-term effects of future societal events including economic recessions, natural disasters, and public health crises (Maiya et al., 2024).

In addition to the indirect effect, there were also unexpected, albeit small, direct effects that emerged, such that greater economic hardship was associated with more self-esteem, and lower depressive and anxiety symptoms among youth. Although these findings are not consistent with the family stress model, a similar finding emerged in another study assessing Latina mothers' financial cutbacks during the COVID-19 pandemic (Boyer et al., 2023). Specifically, greater financial strain was associated with lower levels of Latina mothers' reports of their children's externalizing symptoms. Another study also detected some "silver linings" brought on by the pandemic, which included spending more time with family (Stein et al., 2024). Thus, while the economic hardship that Latinx families faced may have negatively implicated Latinx youth's psychological well-being via parental mental health and parenting, it may have also sparked more communication between parents and children (Z. E. Taylor et al., 2024), which in turn may have facilitated greater well-being via feelings of closeness by facing these challenges together.

Family Cohesion Buffers the Negative Effects of Parent's Depressive Symptoms

The second goal of the study was driven by the call of previous researchers (Kavanaugh et al., 2018; Masarik & Conger, 2017) to identify resiliency factors that could potentially disrupt the processes outlined by the family stress model. Findings partially supported our hypotheses concerning family cohesion as a buffer between some of the links of the family stress model. Specifically, family cohesion moderated the links between parental depressive symptoms and parental warmth; in the context of high family cohesion, no association emerged. This finding is consistent with prior conceptual work indicating that cultural values involving familial interdependence that are inherent among Latinx families serve a protective role by facilitating more parental warmth even in the context of a global health crisis such as the COVID-19 pandemic (Cano et al., 2020; Lorenzo-Blanco et al., 2012; Rivera et al., 2008) and aligns with empirical studies that have shown that family cohesion can mitigate the impact of parental mental health on their parenting behaviors (Prelow et al., 2010; Stein et al., 2024). We do note, however, that parent's depressive symptoms and parental warmth were assessed at the same time point; thus, the direction of effects and the long-term implications remain an important avenue to explore in future work. Even so, the role of family cohesion in family processes remains salient to Latinx families (Lorenzo-Blanco et al., 2012; Marsiglia et al., 2009); thus, an important direction for intervention and prevention work should be focused on identifying the emotional and instrumental support within families as a resource

for parents struggling with mental health processes and parenting during adolescence.

In contrast, the hypothesis that family cohesion would buffer the association between economic hardship and parent depressive symptoms was not supported. That is, family cohesion did not mitigate the effects of economic hardship on parent's own mental health. This finding may reflect that family cohesion may not be enough for parents to overcome their *own fears* of economic hardship (and then corresponding depressive symptoms); yet, feelings of family closeness and cohesion are helpful in their subsequent parenting practices. Indeed, prior research does suggest that Latinx parents reported multiple stress and fear during the pandemic, including the fear of contracting the virus, having access to adequate health care, and fearing imminent job loss (Hibel et al., 2021; Olayo-Méndez et al., 2021; Westbrook, 2024). Thus, these fears are not mitigated by their level of family closeness.

Broader Implications for Practice and Policy

Findings from this study highlight the critical role of family processes in shaping Latinx adolescents' psychological well-being, particularly in the context of economic hardship. Given that parental depressive symptoms and reduced parental warmth serve as key mechanisms linking financial stress to worsened adolescent mental health, prevention and intervention efforts should prioritize supporting both parents and youth within a family-centered framework. Family-based mental health programs tailored to Latinx families should incorporate strategies to strengthen family cohesion as a resource for promoting positive parenting practices, even when parents face psychological distress. Culturally responsive parenting interventions can leverage cultural strengths, such as familism, to enhance parental warmth and emotional availability, ultimately fostering positive parent–adolescent relationships and youth resilience. In addition to family-level prevention or interventions, broader systemic supports—such as economic relief programs, accessible mental health care, and employment assistance—are essential to alleviate financial stressors that undermine family well-being.

Overall, these findings underscore the urgent need for a stronger safety net to support families—particularly low-income families— during times of widespread economic hardship. Policies that provide direct financial assistance, expanded access to affordable health care (including mental health services), and workplace protections for parents can mitigate the cascading effects of financial stress on family functioning and youth well-being. Future efforts should integrate multilevel approaches that combine family, community, and policy-based interventions to safeguard the well-being of Latinx adolescents in the face of future economic and public health crises.

Limitations and Future Directions

The current findings shed light on the downstream effects that economic hardship during the COVID-19 pandemic has on Latinx youth's psychological well-being, as well as provide insight into family cohesion as a source of resilience. Despite its strengths and contributions, however, there are important limitations to note. First, adult reports of economic hardship, parental mental health, parenting practices, and family cohesion were only derived from one parent, of which most were mothers (90%). Thus, results may not

have captured the full scope of these processes for families with different family structures (e.g., single-parent households vs. two-parent households vs. multigenerational) and how fathers navigated economic hardship. Understanding the ways that different family structures are impacted and adapt to economic hardship is needed. Additionally, it should be noted that this study did not collect information about families' economic hardship *before* the pandemic or at the T2 follow-up. Thus, the present study could not ascertain whether the COVID-19 pandemic was the source of greater economic problems, nor could we assess whether economic problems worsened across time. Even so, the findings point to the processes enacted from economic hardship within a pandemic and the ways that family cohesion can disrupt some of the detrimental impact of hardship within families. Relatedly, parent reports of economic hardship, depressive symptoms, and parenting behaviors were collected concurrently, and as a result, we were unable to test the temporal ordering of associations. We also did not assess economic instability, or change in economic hardship over time, which could further impact family processes (Hill et al., 2013). Future research is needed to better understand whether specific historical/contextual events provide more salience to the protective nature of family processes, as well as to further understand the longitudinal association between these factors.

Conclusion

Overall, the findings provide a more nuanced understanding of the family stress model and resiliency for Latinx families in the context of a global pandemic. Despite the severe economic challenges faced by Latinx families, there is evidence of strengthened family bonds as members leaned on each other for support. Findings point to the possible protective nature of family cohesion in parental mental and parenting processes. That is, in the context of economic strain, family cohesion may help mitigate the impact of parental mental health challenges on their positive parenting practices. Our findings demonstrate the importance of family-level interventions that need to address the asset-based strategies that exist within Latinx families by incorporating concepts of family cohesion as a strength that aligns with Latinx cultural values (i.e., *familismo* and *respeto*; Lorenzo-Blanco et al., 2012; Marsiglia et al., 2009).

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