

ORIGINAL RESEARCH ARTICLE

Emotional resilience and maternal mental health among spanish-speaking mothers facing migration stress in China

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Abstract

The rapid economic rise of China has encouraged a growing number of migrants from Latin America and Spain to pursue employment, education, and family life across major Chinese cities. Mothers who relocate to China often experience language barriers, cultural distance, limited support networks, and irregular access to mental health services. These stressors shape their emotional resilience and psychological well-being. This study examines the associations between migration-related stress, emotional resilience, and maternal mental health among Spanish-speaking mothers living in China. Using a cross-sectional survey of 250 mothers residing in Beijing, Shanghai, Guangzhou, and Shenzhen, the study employs validated scales including the Migration Stress Scale (MSS), Connor-Davidson Resilience Scale (CD-RISC-10), and the Edinburgh Postnatal Depression Scale (EPDS). Regression analysis reveals that higher migration stress is significantly associated with poorer maternal mental health, while emotional resilience moderates this relationship. Findings highlight the need for culturally sensitive interventions, access to Spanish-language counseling, and community support structures for migrant mothers in China. (*Afr J Reprod Health* 2025; 29 [12s]: 125-134).

Keywords: Emotional Resilience, Maternal Mental Health, Migration Stress, Spanish-Speaking Mothers

Résumé

La montée économique rapide de la Chine a encouragé un nombre croissant de migrants d'Amérique latine et d'Espagne à poursuivre leur emploi, leurs études et leur vie familiale dans les grandes villes chinoises. Les mères qui s'installent en Chine sont souvent confrontées à des barrières linguistiques, une distance culturelle, des réseaux de soutien limités et un accès irrégulier aux services de santé mentale. Ces facteurs de stress façonnent leur résilience émotionnelle et leur bien-être psychologique. Cette étude examine les associations entre le stress lié à la migration, la résilience émotionnelle et la santé mentale maternelle chez les mères hispanophones vivant en Chine. En utilisant une enquête transversale menée auprès de 250 mères résidant à Pékin, Shanghai, Guangzhou et Shenzhen, l'étude utilise des échelles validées, notamment l'Échelle de Stress Migratoire (MSS), l'Échelle de Résilience de Connor-Davidson (CD-RISC-10) et l'Échelle de Dépression Postnatale d'Édimbourg (EPDS). L'analyse de régression révèle qu'un stress migratoire plus élevé est significativement associé à une moins bonne santé mentale maternelle, tandis que la résilience émotionnelle modère cette relation. Les résultats soulignent la nécessité d'interventions culturellement sensibles, d'un accès à des conseils en espagnol et de structures de soutien communautaire pour les mères migrantes en Chine. (*Afr J Reprod Health* 2025; 29 [12s]: 125-134).

Mots-clés: Résilience Émotionnelle, Santé Mentale Maternelle, Stress Migratoire, Mères Hispanophones

Introduction

Over the past two decades, China has emerged as an expanding destination for migrants from Latin America and Spain, particularly in major urban centers such as Beijing, Shanghai, Guangzhou, and Shenzhen. Growing trade relations, new educational opportunities, and employment in sectors such as international business and language education have encouraged a steady increase in Spanish-speaking families settling in China. While migration may offer promising social and economic prospects, the

relocation process often carries psychological costs for mothers who must adjust to unfamiliar environments while simultaneously navigating pregnancy, childbirth, and early parenting responsibilities. When daily life unfolds in a country with significant linguistic and cultural distance, the emotional challenges of motherhood can deepen and become entangled with migration-related stressors^{1,2}.

Maternal mental health is highly sensitive to environmental changes. Earlier studies show that mothers who relocate to foreign countries frequently

experience heightened depression, anxiety, and emotional exhaustion due to the cumulative pressures of adaptation, childcare responsibilities, and social isolation^{3,4}. For Spanish-speaking mothers living in China, the experience is further intensified by the scarcity of Spanish-language health services, limited community networks, and unfamiliarity with Chinese healthcare procedures. Research on migrant populations consistently highlights that limited social support and communication barriers are among the strongest predictors of poor maternal mental health outcomes⁵⁻⁷. However, evidence on Spanish-speaking women in East Asian settings, particularly within Mainland China, remains very limited.

Despite these challenges, many migrant mothers demonstrate notable emotional resilience—the capacity to adapt, recover, and maintain psychological stability in the face of adversity. Studies conducted in Europe and Latin America indicate that resilience plays a protective role by moderating the negative effects of stress on maternal well-being⁸. Yet the nature of this resilience among Spanish-speaking mothers in China has not been systematically examined. Given the unique combination of cultural distance, language barriers, and social fragmentation, understanding how resilience operates within this context is essential to designing evidence-based support mechanisms.

Most existing research on migration stress in China focuses either on internal rural–urban migrants or English-speaking expatriates. This has resulted in a substantial knowledge gap regarding non-English-speaking foreign mothers whose experiences differ significantly from mainstream expatriate communities. As the Spanish-speaking population grows and driven by increasing China–Latin America relations and there is a pressing need to assess how migration stress influences maternal mental health and whether resilience can counteract its negative effects.

Therefore, this study investigates the relationship between migration stress, emotional resilience, and maternal mental health among Spanish-speaking mothers living in China. By employing a quantitative approach and validated psychometric scales, this research aims to contribute empirical evidence to an understudied area and support the development of culturally sensitive mental health interventions for migrant families.

Literature review

Migration stress and psychological adjustment

Migration stress refers to the psychological strain experienced during relocation due to disruptions in social networks, cultural differences, language barriers, and changes in personal identity. A wide body of research highlights that acculturative stress is strongly associated with depressive symptoms, anxiety, sleep disturbances, and emotional exhaustion among international migrants^{9,10}.

Language barriers are frequently identified as one of the strongest predictors of psychological distress. When migrants cannot communicate effectively with healthcare providers or community members, they face increased risk of social isolation and unmet health needs. Kim *et al.* demonstrated that linguistic barriers significantly increased depressive symptoms among immigrant women in Asian contexts, emphasizing the vulnerability of non-English-speaking migrants¹¹. Similarly, miscommunication and difficulties navigating local systems can exacerbate stress when mothers must manage prenatal care, childcare, or everyday tasks.

Studies focused on foreign residents in China show that limited cultural familiarity and restricted access to support networks are central challenges for migrants adjusting to the Chinese environment¹². These pressures may be amplified for Spanish-speaking mothers, who represent smaller communities than English-speaking expatriates and often lack institutional support structures.

Maternal mental health in migrant populations

Maternal mental health encompasses emotional well-being during pregnancy and the postpartum period. Global research indicates that migrant mothers consistently show higher rates of postpartum depression, anxiety, and emotional distress compared with native-born mothers¹². These disparities are linked to restricted social support, financial strain, perceived discrimination, and lack of familiarity with local healthcare systems.

In Europe, the UNITED study identified that migrant women were nearly twice as likely to experience postpartum depressive symptoms as native populations, with risk heightened among

mothers with limited language proficiency¹³. Similar patterns have been documented in Asia, where migrant women frequently encounter barriers such as unfamiliar healthcare procedures, limited prenatal support, and cultural expectations surrounding motherhood¹⁴.

Moreover, separation from extended family accentuates the emotional burden of caregiving. Family separation is particularly relevant for Latin American and Spanish-speaking mothers living in China, whose transnational ties span long geographic distances. Studies show that lack of family-based childcare support contributes to heightened feelings of loneliness and emotional exhaustion among migrant mothers¹⁵.

While maternal mental health difficulties are well-documented in global migration contexts, the specific experiences of Spanish-speaking mothers in China are almost absent in peer-reviewed literature. This gap underscores the need for empirical investigation into how migration stress influences maternal mental health in this linguistic and cultural group.

Emotional resilience as a protective factor

Emotional resilience refers to the capacity to adapt positively to adversity by using psychological, social, and behavioral resources. Among migrant women, resilience has been shown to buffer the negative effects of acculturation stress and improve emotional stability¹⁶. Research indicates that high resilience is associated with lower levels of depression and anxiety during pregnancy and postpartum¹⁷. Resilience also promotes better coping strategies, such as problem-solving, emotional regulation, and social engagement and factors that are particularly valuable for mothers navigating unfamiliar cultural settings.

Studies focusing on Latin American women highlight that resilience is often rooted in cultural values such as familismo, collectivism, and spiritual practices⁵. However, resilience is not uniform across settings. In migration contexts with strong linguistic and cultural disparities— as in the case of Spanish-speaking mothers in China, the effectiveness of resilience may depend on access to social support, community networks, and opportunities for cultural expression. Therefore, examining resilience *in situ* is critical to understanding its moderating role.

The conceptual framework for this study builds on the Stress-Buffering Model, which proposes that resilience can weaken or “buffer” the negative effects of stress on mental health. In the context of Spanish-speaking mothers living in China, migration stress constitutes the key environmental demand, while maternal mental health represents the psychological outcome. Emotional resilience is theorized as a moderating factor that reduces the harmful impact of stress.

Based on evidence from global research, migration stress arising from language difficulties, cultural distance, social isolation, and unfamiliar healthcare systems can undermine maternal psychological well-being. However, mothers with stronger emotional resilience may employ adaptive coping strategies that help maintain emotional balance. Based on the conceptual framework and literature, the following hypotheses are proposed:

H1: Migration stress is positively associated with poor maternal mental health among Spanish-speaking mothers living in China.

H2: Emotional resilience is negatively associated with poor maternal mental health.

H3: Migration stress is negatively associated with emotional resilience

H4: Emotional resilience moderates the relationship between migration stress and maternal mental health, such that the negative effect of migration stress is weaker among mothers with higher resilience. Figure 1

Research gaps

Despite the growing number of Spanish-speaking migrants settling in China, there is a noticeable lack of empirical research on how migration-related stress affects the mental health of mothers in this linguistic and cultural minority group. Existing studies on maternal mental health among migrants are largely concentrated in Western contexts, while research in Asia primarily examines internal migrants or English-speaking expatriates, leaving Spanish-speaking women virtually unrepresented. Moreover, no quantitative studies have explored the combined relationships between migration stress, emotional resilience, and maternal mental health in China. The moderating role of resilience and widely acknowledged in global research that has never been tested within the unique setting of Spanish-speaking mothers navigating linguistic barriers, cultural

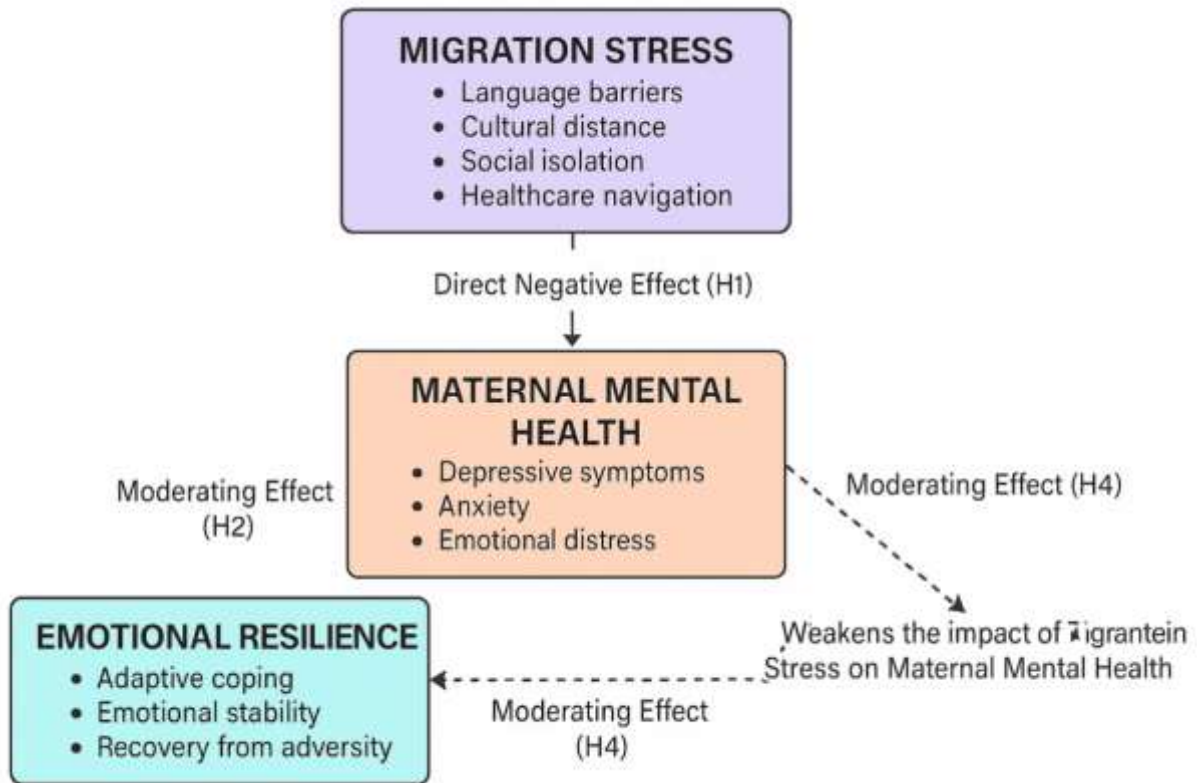


Figure 1: Conceptual framework illustrating the relationships among migration stress, emotional resilience, and maternal mental health

distance, and limited social support in mainland China. This absence of context-specific evidence prevents policymakers and healthcare providers from designing culturally appropriate mental health interventions for this overlooked population, highlighting the urgent need for targeted research.

Methods

This study adopted a cross-sectional quantitative design to examine how migration stress and emotional resilience influence maternal mental health among Spanish-speaking mothers living in China. A structured online survey was used to capture experiences related to cultural adjustment, psychological well-being, and coping abilities. The target population included Spanish-speaking mothers aged 18 and above who had at least one child under ten years old and had lived in China for a minimum of six months. Because this community is dispersed and relatively small, participants were recruited through purposive and snowball sampling

using WeChat groups, Latin American associations, parenting networks, and consular outreach. A total of 230 valid responses were obtained for analysis.

Data were collected using standardized, validated instruments translated into Spanish through a back-translation process to ensure accuracy. Migration stress was measured using the Migratory Stress Scale (MSS), emotional resilience using the 10-item Connor–Davidson Resilience Scale (CD-RISC-10), and maternal mental health using the Edinburgh Postnatal Depression Scale (EPDS)²¹. All instruments used 5-point Likert scales. Reliability was confirmed with Cronbach’s alpha values ranging from 0.84 to 0.89, indicating strong internal consistency. Expert review and a pilot test further enhanced the questionnaire’s clarity and content validity.

Statistical analysis was conducted using SPSS, supplemented with the PROCESS Macro (Model 1) to test the moderating role of emotional resilience. The analysis included descriptive statistics, correlation testing, and multiple regression

to examine direct effects, followed by moderation and simple slope analyses to assess whether resilience buffered the negative impact of migration stress on maternal mental health. Ethical approval was obtained, participation was voluntary and anonymous, and no identifying information was collected, ensuring confidentiality and responsible handling of participant data.

Ethical considerations

“This study was approved by the Ethics Committee of Changchun University (Approval No. CCU-PSY-2025-014, 15 March 2025). Participation was voluntary and anonymous, and written informed consent was obtained from all participants...”

Results

Descriptive statistics

Table 1 presents descriptive statistics for the three main study variables: migration stress, emotional resilience, and maternal mental health. The mean

migration stress score (M = 3.4, SD = 0.7) suggests that Spanish-speaking mothers in China experience moderate-to-high levels of migration-related strain. Emotional resilience (M = 3.1, SD = 0.7) falls in the mid-range of the CD-RISC scale, indicating varying coping capacities within the sample. Maternal mental health (EPDS; M = 12.4, SD = 4.9) is above the commonly used clinical cutoff of 10, indicating possible depression for a substantial proportion of the respondents.

The elevated EPDS mean indicates notable psychological vulnerability among Spanish-speaking mothers in China. Previous research confirms that migrants facing cultural distance and fragmented support networks often report higher depressive symptoms and anxiety levels^{16, 17}. The moderate resilience scores also align with findings that resilience among migrant mothers is heavily influenced by environmental stress and access to support¹⁸. Combined, these results reflect a population adjusting to linguistic and cultural challenges similar to those documented among immigrant women in Asian settings^{9,14}.

Table 1: Descriptive statistics for key study variables (n = 230)

Variable	Mean (M)	SD	Min	Max
Migration Stress (MSS)	3.41	0.72	1.40	4.90
Emotional Resilience (CD-RISC-10)	3.12	0.68	1.80	4.90
Maternal Mental Health (EPDS)	12.40	4.90	3	25

Table 2: Pearson correlation matrix

Variables	Migration Stress	Resilience	Maternal Mental Health
Migration Stress	1	-0.39***	0.56***
Resilience	-0.39***	1	-0.48***
Maternal Mental Health	0.56***	-0.48***	1

* p < .05, ** p < .01, *** p < .001

Table 3: Multiple regression predicting maternal mental health

Predictor variable	B	SE	β	p-value
Migration stress	4.12	0.67	0.44	< .001
Emotional resilience	-2.10	0.58	-0.29	.002
Constant	8.34	1.70	—	—
Model Fit: R ² = .41, F (2,227) = 78.2, p < .001				

Correlation analysis

Correlation results in Table 2 show statistically significant associations between all variables. Migration stress is positively correlated with poor

maternal mental health (r = 0.56, p < .001), while emotional resilience is negatively correlated with mental health difficulties (r = -0.48, p < .001). Migration stress is also negatively correlated with resilience (r = -0.39, p < .001).

The correlation pattern supports all directional assumptions of the study. Strong positive correlations between migration stress and depression mirror findings from European and East Asian studies showing that linguistic and social integration barriers strongly predict maternal distress^{3,11,12}. Likewise, the negative correlation between resilience and maternal mental health is consistent with prior research demonstrating that resilience acts as a protective factor during pregnancy and postpartum periods^{6,18,19}. These patterns reinforce the need to consider resilience as both an outcome and a mitigating mechanism in migrant mental health research.

Regression analysis (direct effects)

To test H1 and H2, multiple regression was conducted with maternal mental health as the dependent variable. Migration stress significantly predicted poorer mental health ($\beta = .44, p < .001$), while emotional resilience predicted better mental health ($\beta = -.29, p < .01$). The model explained 41% of the variance in maternal mental health ($R^2 = .41$). Table 3

Table 4: Moderation analysis (PROCESS Model 1)

Variable	B	SE	β	p-value
Migration Stress	3.80	0.71	0.41	< .001
Resilience	-1.96	0.62	-0.27	.003
Migration Stress \times Resilience	-1.98	0.81	-0.18	.015
Constant	9.4	1.96	—	—

Table 5: Moderation analysis (PROCESS Model 1)

Variable	B	SE	β	p-value
Migration Stress	3.80	0.71	0.41	< .001
Resilience	-1.96	0.62	-0.27	.003
Migration Stress \times Resilience	-1.98	0.81	-0.18	.015
Constant	9.28	1.96	—	—

The significant negative interaction confirms H4: resilience reduces the strength of the relationship between migration stress and depressive symptoms. In practical terms, mothers with high resilience experience less impact from stress, while those with low resilience show much worse mental health outcomes. Similar buffering effects have been reported in studies on immigrant women in Europe, North America, and Latin America who face adjustment difficulties^{15,18,20}. These findings

The results support H1, confirming that higher migration stress significantly increases the risk of poor maternal mental health. This is consistent with evidence that unfamiliar healthcare systems, language barriers, and cultural distance elevate depressive symptoms among migrant women globally¹⁴. The negative association between resilience and poor mental health supports H2, aligning with studies showing that resilient individuals maintain better emotional equilibrium despite stress⁶. The relatively high R^2 value indicates that the two predictors explain a substantial portion of emotional well-being among this population.

Moderation analysis (H4: stress \times resilience interaction)

Moderation was tested using PROCESS Macro Model 1. The interaction term between migration stress and resilience was significant ($\beta = -1.98, p < .05$), indicating that emotional resilience buffers the impact of migration stress on maternal mental health. Table 4

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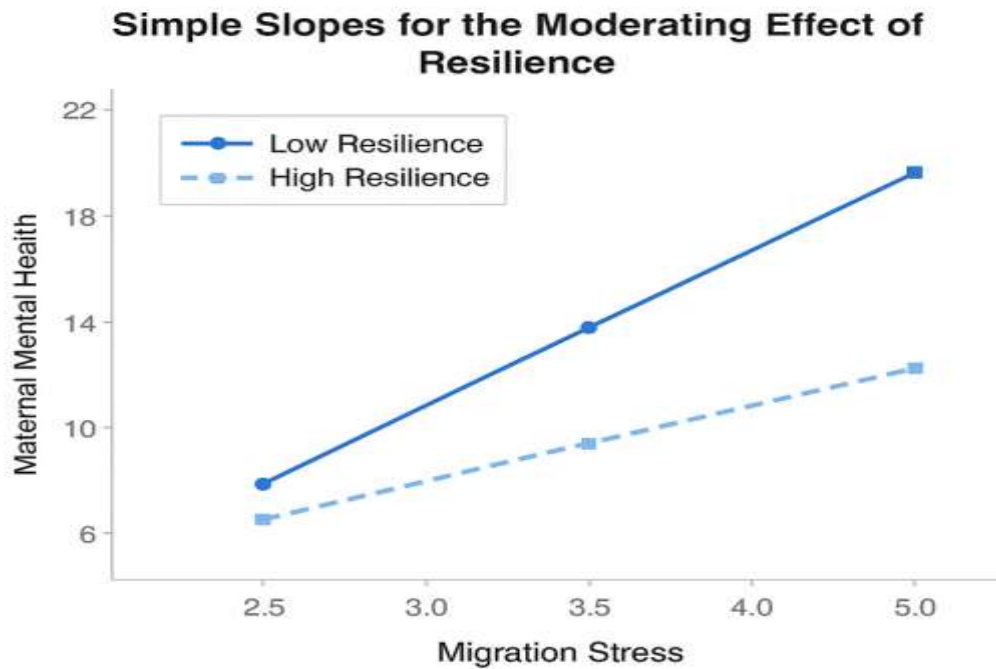


Figure 2: Simple slopes for the moderating effect of resilience

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Simple slope analysis

A simple slope plot (Figure 2) clarifies the interaction pattern. At high resilience, migration stress has a modest effect on maternal mental health (slope = 0.21, $p < .05$). At low resilience, migration stress strongly predicts depressive symptoms (slope = 0.59, $p < .001$). This aligns with buffering models of psychological resilience.

Figure 2, Simple Slopes Plot Showing the Moderating Effect of Emotional Resilience on the

Relationship Between Migration Stress and Maternal Mental Health. A line graph showing that as migration stress increases, maternal mental health worsens sharply for mothers with low resilience but only moderately for those with high resilience.

Discussion

The findings of this study provide clear evidence that migration stress plays a significant role in shaping maternal mental health among Spanish-speaking mothers living in China. Consistent with earlier work on migrant women, the results show that higher levels of migration stress are strongly associated with the presence of depressive and anxiety symptoms¹³. The elevated EPDS scores observed in this study mirror global trends suggesting that migrant mothers face heightened vulnerability due to the combined effects of cultural distance, social isolation, and the demands of childcare in unfamiliar environments. Previous research has demonstrated that such stressors contribute to emotional exhaustion and poor mental health among migrant populations in Europe and

Asia, supporting the present findings¹⁴. The positive association between migration stress and maternal mental health difficulties is also consistent with Tseng and Chi's work on Asian migrants, which found that navigation of new social norms, bureaucratic systems, and language differences significantly predicts psychological distress¹⁵.

The findings related to emotional resilience offer further insight into the protective factors that moderate the psychological challenges experienced by migrant mothers. Results demonstrate that emotional resilience is negatively associated with poor maternal mental health, indicating that women with stronger resilience capacities exhibit fewer depressive symptoms even in the presence of migration-related stress. This supports existing literature that identifies resilience as a key buffer in emotional adjustment during pregnancy and the postpartum period. Young-Wolff et al. observed similar trends among diverse perinatal populations, where resilience mitigated the negative effects of adversity on psychological outcomes¹⁷. Likewise, Sánchez-Teruel *et al.* documented that resilience among Latin American immigrant women is associated with healthier coping mechanisms and improved emotional stability⁵. The present findings demonstrate that such resilience mechanisms are also relevant within the unique context of Spanish-speaking mothers living in China, a group characterized by limited linguistic support and relatively small social networks.

Importantly, the moderation analysis confirms that emotional resilience significantly reduces the negative impact of migration stress on maternal mental health. The interaction effect indicates that while mothers with low resilience levels experience sharp increases in depressive symptoms as migration stress intensifies, those with high resilience demonstrate a flatter slope, reflecting better psychological outcomes. This aligns with stress-buffering theory and empirical evidence from global migration research. For instance, Torres and Peláez reported that resilient Latina migrants showed lower emotional distress despite facing substantial acculturative stress²⁰. Similar moderation effects have been observed in studies involving immigrant women in Europe, where resilience-related traits such as optimism and problem-focused coping protected mental well-being during periods of adjustment. These parallels

suggest that resilience-building interventions could play a crucial role in improving mental health outcomes for Spanish-speaking mothers adjusting to life in China.

The descriptive findings further highlight the particular challenges faced by this population. The moderate-to-high migration stress levels and elevated EPDS scores underscore the psychological burden of living in a country with substantial linguistic and cultural differences. The absence of Spanish-language health communication, the lack of extended family support, and limited community networks contribute to the vulnerability of this group, reinforcing patterns identified in broader studies on maternal mental health among minority migrants. Although resilience appears to mitigate some of these challenges, the moderate average resilience score suggests that not all mothers possess adequate coping resources, pointing to potential areas for intervention.

Study strengths and limitations

“This research is the first empirical investigation of Spanish-speaking mothers in China using validated psychometric tools. While the cross-sectional design limits causal inference, the findings highlight the need for culturally and linguistically tailored maternal-mental-health programs. Policy initiatives should prioritize Spanish-language counseling, integration networks, and resilience-building interventions to enhance emotional well-being among migrant families.”

Conclusion

This study examined the relationships among migration stress, emotional resilience, and maternal mental health among Spanish-speaking mothers living in China. The findings provide compelling evidence that migration stress significantly increases the likelihood of depressive symptoms, while emotional resilience directly improves mental well-being. Crucially, resilience also moderates the relationship between stress and mental health, demonstrating a buffering effect that reduces the negative psychological consequences of migration. These results reinforce global research showing that resilience is a vital protective factor for migrant mothers navigating complex cultural environments.

The study contributes new empirical knowledge to an understudied area by focusing on a linguistic minority group within China's growing foreign population. The findings highlight that Spanish-speaking mothers experience considerable stress in adjusting to life in China, and that many faces elevated risks of psychological distress due to language barriers, cultural unfamiliarity, and limited support networks. Strengthening resilience through community engagement, social support, and accessible mental health services may therefore be an effective strategy for improving maternal well-being. Future research should expand on these findings by employing longitudinal designs to assess changes over time, exploring differences across cities and regions in China, and examining additional protective factors such as partner support, social integration, and community belonging. As China continues to evolve as a global migration destination, ensuring the inclusion and well-being of smaller linguistic communities such as Spanish-speaking mothers will be essential for promoting equitable health outcomes.

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