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Predictors of Traumatic Experiences and Mental Wellbeing Among Recent Immigrant Mothers and Children

Andy U. Torres
The University of Texas Rio Grande Valley, andy.torres01@utrgv.edu

Frances Morales
The University of Texas Rio Grande Valley, frances.morales01@utrgv.edu

Amanda Palomin
The University of Texas Rio Grande Valley, amanda.palomin01@utrgv.edu

Marika Dawkins
The University of Texas Rio Grande Valley, marika.dawkins@utrgv.edu

Alfonso Mercado
The University of Texas Rio Grande Valley, alfonso.mercado@utrgv.edu

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Introduction

Asylum-seeking immigrants have left their countries and are looking for protection from major human rights violations and persecution but have not yet been legally designated as refugees as they await decision regarding their asylum petitions (Cohn, Passel, & Gonzalez-Barrera, 2017). Although asylum-seeking immigrants are sometimes conflated with asylum-seeking refugees or asylum refugees, there is at least one key difference – asylum-seeking immigrants are awaiting a legal decision on their asylum process (*see* Cohn, Passel, & Gonzalez-Barrera, 2017). This difference is important to identify, given that the mental health literature is scarce, and both groups have undergone (and continue to do so) different legal and psychological challenges in their journey.

By the end of 2020, asylum-seekers from Honduras, El Salvador, and Guatemala (commonly and collectedly referred to as The Northern Triangle) totaled 72% (n=517,032) of the asylum seekers in the United States (Migration Data Portal, 2021). 2021 estimates indicate only approximately 470,000 immigrants from the Northern Triangle applied for asylum in various countries, and it is estimated that 20.63% temporarily resettled in Mexico (UNHRC, n.d.) while they await their U.S. asylum petition. The U.S.-Mexico border provides the access point with the shortest distance between the Northern Triangle and the United States, which explains why the U.S.-Mexico border is often the first point of US contact for many asylum-seeking families from the Northern Triangle.

Reasons for fleeing the Northern Triangle are numerous and diverse but are mostly centered in escaping poor environmental conditions and high crime and poverty. In the last decade, numerous hurricanes, earthquakes, and droughts have negatively impacted the region (Babich & Batalova, 2021). Approximately 2.2 million habitants of the Northern Triangle and Nicaragua were impacted due to severe droughts. Much of the west coast of Central America has been coined as the “Dry Corridor” (Naranjo et al., 2019), which is cited as a reason for fleeing the region in search of improved living conditions (Babich & Batalova, 2021; Naranjo et al., 2019).

Regarding violence and poverty, families fleeing the Northern Triangle more commonly report that they want to escape extreme poverty, sociopolitical turmoil, and various types of violence including domestic, political, or community violence (Cohl et al., 2017). Compared to other Latin American immigrant groups, families from the Northern Triangle are more likely to endorse escaping violence from their native countries as a reason to immigrate to the United States (Cohl et al., 2017). These statistics are also supported by the crime data in Central America. In fact,

Honduras had the world's highest murder rate in 2014, followed by El Salvador, according to reports by the Department of Homeland Security (2014).

The high exposure to various and numerous traumatic events reported by asylum-seeking refugees highlights their potential heightened risk for trauma disorders. As a matter of fact, an analysis report by the World Health Organization (2018) revealed that rates of Post-Traumatic Stress Disorder (PTSD) among world-wide refugees and asylum seekers are higher when compared to host nations. This rate is expected given that extreme poverty, exposure to community violence, and natural disasters, are common predictors of trauma-related disorders in minors and adults (Ginzburg et al., 2020; Heleniak et al., 2018; Lee et al., 2020). Specific to the Northern Triangle, some studies have observed symptoms of post-traumatic stress disorder among these families (e.g., Mercado et al., 2021; Venta & Mercado, 2019). Children reported high Post-Traumatic Stress in Venta and Mercado's (2019) study, where a total of 60% of children met screeners cut-off for a likely diagnosis of PTSD.

Mother-child dyads from the Northern Triangle endorse unique violence-related reasons to flee their countries. For example, mothers cited gang violence (77%) and domestic abuse (33%) as the leading reasons for fleeing Central and South America (MacLean et al., 2019). Given that these unique stressors are considered pre-immigration risk factors for poor mental health (WHO, 2018), it is speculated that asylum-seeking mothers are more likely to exhibit poorer mental health outcomes compared to other community control groups. The lived experiences of asylum-seeking refugees, the uncertainty about the application, detention experience and time, and limited social integration, may negatively impact the overall wellbeing of asylum-seeking refugees. For example, McLean et al. (2019) identified that 17% of mothers reported separation from their children in detention or related centers. Moreover, Rivera (2017) pointed out that the mother-child immigrant dyad is likely to endure various adverse events during the journey, such as maternal separation and verbal violence, and stigmatization from law enforcement agents at detaining facilities. Altogether, it is inferred that mothers may exhibit high rates of psychological symptoms due to the compounding effects of pre-migration trauma, while stressors associated with the status of their asylum application and that of their children may significantly impact their mental health, resulting in high indexes of trauma-related symptoms. Therefore, further research is needed to bridge this empirical gap. Hernandez (2019) illustrates how Central American and immigrant mothers' experiences at the U.S. border violates human and women's

rights. These experiences include mother-child separation, women's incarceration, uncertainty about reunification with their children, and overall maltreatment and rights violations (Hernández, 2019). These mothers may experience guilt, as they may internalize the traumatic exposure at U.S. detention centers lived by the children (Bianco, 2019). Hernandez also argued that the intersectionality of being a woman and an immigrant poses a significant threat to the mental wellbeing of immigrant mothers who face various gender-based and other violations of human rights. Hence, additional research is needed to develop a profile of maternal mental health in the context of family separation for Central Americans and other refugees in the United States.

Importantly, the mother-child separation has significant negative psychological consequences on the wellbeing of the child (de la Peña et al., 2019; Jones-Mason et al., 2021; Venta et al., 2021), and this has been explored much more compared to the impact on mothers. Caretaker separation, regardless of the timeframe, can have negative consequences on the development of healthy attachment in the child (Jones-Mason et al., 2021; de la Pena et al., 2019). In turn, this separation can hinder the child's ability to develop emotional regulation skills (Jones-Mason et al., 2021; de la Pena et al., 2019). Furthermore, because mother and children are likely to have been exposed to traumatic experiences in its home country or during the journey to the United States, the trauma-related symptoms may have poorer prognosis due to family separations (*see* de la Pena et al., 2019). Ultimately, the children are at risk for detachment, as seen in a case where the mother and child are reunified, but the child becomes distressed and refutes the mother's presence (Jones-Mason et al., 2021). To the best of the authors' knowledge, Bianco (2019) is the only study to identify the mental health of the mother-child dyad among asylum-seeking refugees. Bianco concluded that mothers experience unique stressors related to difficult parenting decisions, such as leaving the child behind at the U.S. border or migrating with an infant child. In turn, the dyad endorsed poor mental health outcomes, including high internalizing and trauma-related symptoms. These findings highlight the need for further health and policy research.

At present, it is unclear if the dyad's poor mental health outcomes are related to the collective experience of traumatic exposure lived as a family in their native countries or to unique stressors faced by the mother in her journey to the United States. As aforementioned, women’s experience as mothers negatively influences their mental health in their pre-migration stage, in the journey to the United States, and upon arrival at the U.S. border (Bianco et al., 2019; Hernandez, 2019; McLean et al.,

2019). Relatedly, there is a link between children's mental health (e.g., internalizing and trauma-related symptoms) and maternal mental health, where the mothers may endorse internalizing symptoms (e.g., guilt) as they attribute their children's health to their caretaking abilities (Bianco et al., 2019). Indeed, this may bridge the theoretical framework to reinforce advocacy efforts to stop family separation (Hernandez, 2019; Mercado et al., 2021) and identify psychological efforts to improve mental health outcomes of mothers and children among Central American refugee families.

The present study

The purpose of this study was to identify the relationship between mothers' and children's mental wellbeing in a Central American asylum-seeking immigrant sample. After controlling for demographic variables and total instances of trauma experienced by the child and the mother, it was hypothesized that children mental health scores would predict maternal mental health scores.

Method

This descriptive quantitative study is part of a larger immigration study at the U.S.-Mexico border identifying the health and cultural factors of recently arrived asylum-seeking families from the Northern Triangle. Approval from the Institutional Review Board (at a state university located in the southwestern border region of the U.S.) was obtained prior to data collection.

Procedure

Using a combination of interviews and surveys, data were collected between Fall 2017 and Summer 2018 at a humanitarian respite center for recently arrived immigrants after being processed by U.S. immigration officials (i.e., those who have spent less than 24 hours within the borders of the United States) in a border community of South Texas. The center predominantly serves asylum-seeking immigrants and refugees from Central America but also extends its hospitality to immigrants from Mexico, South America, Africa, Asia, and across the globe. Most participants were families petitioning for asylum in the United States for the first time and through the legal sponsorship of a relative already living in the United States. The families arrived at the shelter and received accommodation, food, and help with traveling to their destination.

The authors established inclusion criteria for participation in the study. Only adult Spanish-speaking women who were mothers to their

biological child or the legal guardian to a minor were invited to participate. The authors included only Spanish-speaking mothers, as mothers are the primary caretakers in Latin American cultures, and because this study was implemented in the native language of Central American countries. The exclusion criteria included not being an asylum-seeking or refugee and having previously participated in this study.

The authors benefitted from this humanitarian respite center convenience sample and invited a subgroup of families who were already given a meal and had a non-immediate date of departure from the shelter. The authors introduced themselves as students and faculty of a state university in the region. The mothers who were invited to voluntarily participate in this study were informed about their rights (e.g., they were free to withdraw or not participate at any point during the survey without penalty), benefits ($20 gift card), and the nature of the study (length of time and types of questions). To enhance confidentiality of this protected group, the researchers of this study deployed the survey with a waived consent form; participants were asked for verbal consent and then to mark with a checkmark indicating if they agreed or disagreed to participate in this study.

Participants

In total, participants were comprised of 60 women-child dyads. Maternal ages ranged from 18 to 52 years (M=30.71, SD = 7.54). The children's ages ranged from 0 to 21 years (M=10.78, SD= 5.73). Countries of nationality included Honduras (46.7%), El Salvador (40%), Guatemala (10%), and other (3.3%). A total of 45% of children were male, 45% were female, and 10% of the sample chose not to respond or data were missing. In terms of mothers' education, most of the sample completed middle school only (33.3%), followed by those who completed elementary school only (28.3%). Most participants were married (41.7%), followed by those who were single (28.3%). The sample had an average of 1.65(.86) of people they were traveling with. The maternal sample revealed a range of 0-12 of traumatic exposures, with a mean of 3(3.10); the children demonstrated a wider range, 0-27, with a mean of 2.73(6.30) instances of traumatic exposures. (Table 1a).

Measures

All surveys were administered in Spanish by a bilingual (English and Spanish natives or fluent speakers) team of researchers; all surveys were readily available by validation studies in Spanish. The research team interviewed the mothers using an array of demographic and mental health surveys that screened for mental health and wellbeing. The entire study consisted of 10 mental health screeners and cultural scales (*see* Mercado

et al., 2021). The entire study completion time was approximately 30-60 minutes All demographic items and surveys contained questions about the traveling family, maternal mental health, and the child's mental health. Due to logistical and time limitations, the research screeners could not be deployed to screen for the health of all the children in the surveyed family unit; therefore, for the purpose of this study, the children mental health screeners only applied to the oldest child as seen in other related immigration studies (e.g., see MacLean et al., 2019, 200). All questioned were answered by the mothers or guardians.

Demographic data were collected from the participating mothers. Mothers were asked about their age, marital status, education level, nationality, and the number of people they were traveling with; the mothers were also asked about their oldest child's age and gender. In addition to demographic questions, participants completed four psychometrically validated, self-report questionnaires in Spanish inquiring about the mothers' and children health and traumatic experiences; the measures are described below.

Mental Health Screeners

Maternal mental health was assessed via the Spanish version of the 36-item Short Form 36 Health Survey (Ware Jr & Sherbourne, 1992); specifically, the authors utilized the general mental health scale which consists of five items (24, 25, 26, 28, and 30) that screen for emotional wellbeing. Some items are negatively phrased, such as "*Have you been a very nervous person?*" and "*Have you felt so down in the dumps that nothing could cheer you up?*" Other items are positively phrased, "*Have you felt calm and peaceful?"* The answer choices range from "*All of the time* (1)," "*Most of the time* (2)," "*A good bit of the time* (3)," "*Some of the time* (4)," "*A little of the time* (5)," and "*None of the time* (6)." Items 26 and 30 were reversed coded as 1=100, 2=80, 3=60, 4=40, 5=20, 6=0. Items 24, 25, and 28 were recoded into 1=0, 2=20, 3=40, 4=60, 5=80, 6=100. All scores from the five items were then scored to compute an average score for mental wellbeing.

Children's mental health was measured using the Spanish version of the 28-item Child Health Questionnaire (Raat et al., 2005). This scale is a parent report that screens for physical and psychosocial children health between 5 and 18 years of age. The scale includes a total of 13 subscales, including a mental health subscale. This subscale exclusively screens for depression and anxiety related symptoms with only three items. The items include: "*How much of the time do you think your child felt lonely?*" "*How much of the time do you think your child acted nervous*?" and "*How much time do you think your child felt bothered or*

upset?" The item answers are recoded (some are reversed coded) and then standardized into scores that go from 0 to 100; higher scores indicate better mental health. Additional item samples and Likert anchors are not included to comply with copyright law protecting the scale materials.

Traumatic Experiences Screeners

Parental traumatic experiences and exposure were assessed using the Spanish version of the Trauma History Questionnaire (Hooper et al., 2011), a 24-item checklist that asks parents whether they have experienced 24 possibly traumatic events. Examples of items include "*Has anyone ever tried to take something directly from you by using force or the threat of force, such as stick-up or mugging?*" or "*Has anyone in your family ever beaten, spanked, or pushed you hard enough to cause injury?*" Participants were asked to indicate "*No*" or "*Yes*" to each item and subsequently to indicate the "*Number of times*" the instance occurred and the "*Approximate ages*" of the instances. The scale screens for crime-related events (4 items), general disaster and trauma (13 items), and physical and sexual experiences (7 items.) All items were scored to generate a total number of traumatic exposures. Although the scale can be used for its subscales, the authors of this study utilized the entire sum of traumatic exposure as a priori decision to screen for trauma exposure.

Child traumatic experiences and exposure were assessed via the Spanish version of the Childhood Trauma Questionnaire Short Form (Bernstein et al., 2003). This s-item scale consists of six standard items that include "*Prior to the age of 18, did you experience a death of a very close friend or family member?"* and two answer choices, "*yes*" and "*no*." It also contains a follow-up question; if the participant responded in the affirmative, the participant was asked, "*How old are you?"* Subsequently, the scale asks, "*On a 7-point scale where 1=not at all traumatic, 4=somewhat traumatic, and 7=extremely traumatic, how traumatic was this?*" and "*on a 7-point scale where 1=not at all and 7=a great deal, how much did you confide in others at the time?"* The scale was used to calculate the instances of traumatic exposures and experiences by adding up all items that were answered in the affirmative (Insert Table 1b).

Analytical Strategy

To test the hypothesis, that children mental health would predict maternal mental health (after controlling for demographic variables and total instances of trauma experienced by the child and the mother), a hierarchical regression model was utilized; the model was deployed to identify the unique variance explained by the demographic variables (controlling variables), total instances of traumatic exposure (second

block), and children mental health scores (third block). The goal of this study was to identify if after controlling demographic variables and the total number of traumatic instances, the child mental health scores would still predict maternal mental health; given the strong correlation between mental health and trauma exposure, it was expected that the second block (trauma exposure) would predict a significant amount of the dependent variable (DV). Thus, it was of particular interest to identify how much more variance the third block (children mental health) could explain after controlling for two strong predictors to maternal mental health (demographic profiles and trauma). Because a multiple or logistical regression would not have the statistical abilities to answer this research question, the researchers deployed a hierarchical regression analysis.

Results

Bivariate Correlations

A series of Pearson r correlations were calculated to identify correlations between the dependent variable (DV) and the independent variables (IV). To screen the data for suitability to compute a regression model (*see* Table 2). Coinciding with extant research, age and maternal health were moderately correlated and negatively correlated, r=-.371, p=005. Education level was positively

moderately correlated with maternal mental health, r=.379, p=.004. The DV for maternal mental health was also negatively and moderately correlated with the child's age, r=-.352, p=.008; with the children's mental health scores, r=.542, p <.0001; and negatively moderately associated with the total exposure of the children total number of traumatic exposures, r=-.355, p=.007 (Table 2).

Hierarchical Regression

Only one of the between-IV correlations violated the multicollinearity assumption, r>.7 (Warner, 2012), and collinearity diagnostic reveals a variance inflation factor (VIF) lower than five for all variables, revealing hierarchical regression was suitable (Tabachnick & Fidell, 2019). The IV that violated the assumption was the strong association between maternal age and child's age, r=.744, p<.0001. Therefore, for the purposes of this study, the authors retained maternal age as a control variable and eliminated children's age.

Table 3 contains the computed standardized regression coefficients, R^2, and change R^2 (ΔR^2). The hierarchical regression was evaluated with blocks in the following order: demographic variables, toral instances of traumatic exposure, and children's mental health scores.

The first block contains maternal age, nationality, civil status, education level, number of children traveling with the mother, and

children's gender. The model was significant and explained 27.4% of the variance, adj. R^2 = .274, F(6,40) =3.887, p =.004.

The second block includes the total number of traumatic experiences from the child and the total number of traumatic experiences reported by the mother. The model remained significant and explained 26.1% of the DV's variance, adj. R^2 = .261, F(8,38) = 2.036, p =.01. Neither of the variables was a significant predictor of maternal mental health scores at the independent level; the second block did not significantly change the variance explained by blocks 1, Δ*adj.* R^2= .022, Fchange(2,38) = .674, p= .521.

The third block contains the children mental health scores. The model was significant and explained 30.3% of the maternal mental health scores variance, adj R^2 = .303, F(9,37)=3.217, p =.006. The fourth block did not significantly change the adj. R^2, Δ *adj.* R^2= 3.261, Fchange (1,36) = .079, p = .079. (Insert Table 3).

Discussion

The present study examined the relationship between traumatic experiences and maternal mental well-being in a recent immigrant sample. Contrary to the study's hypothesis, the total number of traumatic exposures experienced by the mother and child did not significantly increase the explained variance in the relationship between the mother and child mental health correlation. In the final model (third block), maternal education remained the only significant individual predictor of maternal mental health, where higher education level predicted higher mental health scores in this U.S. asylum-seeking Central American refugee sample. These findings contrast with Bjelland (2008) and Araya et al. (2003), where some evidence suggested that higher education levels were associated with lower anxiety and depressive symptoms. In contrast, Di Cesare et al. (2013) identified a positive relationship between maternal education level and maternal mental health outcomes among mothers with children who had developmental disabilities. Noteworthy, Araya et al. (2003) has highlighted that this education level and mental health association appears to be stronger in Latin American populations compared to other U.S. community samples. In summary, this finding supports the importance of education in mitigating poor mental health outcomes. Specifically, education can increase persons' awareness of available resources and their willingness to seek help, which might subsequently lead to the de-stigmatization of mental health in the affected group.

Overall, the findings reveal that traumatic experiences did not significantly predict maternal mental health; furthermore, the children's

mental health scores were not a significant predictor of maternal mental health after controlling for maternal and children demographics and for the dyad's traumatic exposure. This finding further indicates that the unique experience of maternal mental health may be better explained by other variables not included in this model. First, women face unique challenges during their journey to the United States that may include but are not limited to verbal aggression, perceived racism, and the impact of leaving relatives behind in their native country (Bianco et al., 2019; Hernandez et al., 2019). Although the traumatic experience may increase the likelihood of other trauma-related symptoms, the cultural values of the Central American refugees may act as protective factors, as speculated by Mercado et al., 2021. Additionally, it is further assumed that other mental health factors were not captured by the psychometric screeners used in the present sample and were likely missed. Thus, the use of mixed methodologies is encouraged for researchers sampling this population because a mixed method approach is likely to offer greater depth and breadth of both the lives and lived experiences of recent immigrant mothers and their children.

Implications

Trauma exposure was not a significant predictor of maternal mental health; however, clinicians should be aware of the high exposure rate among this population (Mercado et al., 2018) and continue to screen for trauma-related symptoms. One explanation for this finding is that the mental health screeners utilized did not capture trauma-related symptoms associated with Acute Stress Disorder or Post-Traumatic Stress Disorders. Another explanation is the “salmon effect” (*see* Bostean, 2013), where only immigrants with the healthier outcomes are typically able to migrate from their native land into the United States. Extrapolating on this effect, it is possible that only those with post-traumatic growth, higher resiliency, or wider healthier coping strategies were able to sustain the migration journey from the Northern Triangle into the U.S., and such protective factors may have resulted in the observed not-significant relationship between trauma and health.

An additional implication for clinicians is the impact of education level on mental health scores. The relationship between mental health and educational level has been examined in Bjelland (2008), Araya et al. (2003), and Di Cesare et al. (2013). Higher educational levels may be a protective factor by means of increased cognitive coping strategies, increased parenting skills which indirectly improve maternal mental wellbeing, or by learning to navigate social support systems – even when unknown. These are of course tentative mechanisms, as the literature

pertaining to Central American and Latin American refugees remains understudied. Given that the sample for this study is comprised of women and children of Latin American descent, the nexus between education and mental health is important to the Latinx community. According to the National Alliance on Mental Illness (NAMI), Hispanic and Latinx communities are as vulnerable to mental illness as others in the population but are also less likely to receive mental health treatment compared to the U.S. mean (approximately 35% vs 46%). Like this study, the organization also identified several variables (e.g., poverty, cultural factors, language) that may serve as barriers to the Latino population and that may potentially impact mental health. Historically, mental health is stigmatized, and Latin American families may be hesitant to discuss mental health issues that are seen as taboo. Clinicians and mental health practitioners working with this population should consider culturally sensitive methods to implement mental health and child development psychoeducation as standard routine care.

A final implication is the difference in the ranges of traumatic exposures of mothers and children. While the average of total exposure was nearly identical, children had a wider range of traumatic exposure of almost twice as much when compared to that of the mothers. It is possible that children were more likely to be directly or indirectly exposed at school or other peer settings. Another possibility is that children may be more exposed to gang violence and activities in their communities, as criminal organizations often recruit minors as opposed to adults (Inter-American Commission on Human Rights, 2016, p.13). Children in Central America are directly affected by war in the region, and minors are typically at constant risk of danger and dying in schools (Kadir et al., 2019; Shenoda et al., 2018). In Rojas Flores et al. (2013), children's exposure to community violence was also of high concern among parents from El Salvador, where even daily commute was considered a risk factor; similarly, the study of 36 caretakers identified a total 23% of direct exposure to community violence and 77% to indirect community violence. Because this study sampled private or parochial schools, it is possible families in less affluent regions of Central America are exposed to even higher violence (Rojas Flores et al., 2013). United States Immigration policy can thus benefit from considering these matters for asylum-seeking petitions.

Limitations and Future Research

This study brings forth strengths. It incorporated a holistic model that includes demographic variables, trauma exposure, and mental health about the children and mothers. Second, it is a study that sampled Central

American refugees, a population where there is paucity of research in relation to maternal mental health. Third, this study identified some evidence suggesting that children may be exposed to a wider range of traumatic exposures or events compared to their adult caretakers.

Despite these strengths, this study also had limitations. It had a limited sample size and group participants from many countries for the purposes of the analytic plan. It is possible that unique cultural values, different sociopolitical climates, and overall different migration trajectories may influence the maternal mental health, and a larger more diverse sample size may facilitate such dynamics. Additionally, this study relied completely on self-reported measures that may be subjected to biases, such as interpretation of the questions, honesty, sampling bias where respondents may not have accurately reflected the population of interest, rating scales that could have been considered too restrictive, and participants that may not have assessed themselves precisely. Physiological measures of stress, such as salivary cortisol, may be needed to identify health status of these families; furthermore, a more comprehensive mental health screening measures that incorporates culture-bound expressions of distress may have facilitated the identification of the mother-child mental health association. For example, other screeners may be more useful to screen for trauma instances and their direct impact on mental health. The UCLA Child/Adolescent PTSD Reaction Index for DSM-5 and the Harvard Trauma Questionnaire (HTQ) are capable of screening specific traumatic experiences and the unique symptomatology of each instance. However, there is no standardization or validation of theses scales in Latin American Spanish (or any Spanish dialect). Future research calls for the validation of these scales in Central American asylum-seeking immigrants and refugees.

This study supplements qualitative and mixed methods studies such as Bianco (2019), a qualitative study that identifies maternal mental health and its predictive variables. However, future studies can benefit by incorporating mixed methodologies across both domains – health and trauma. For instance, traumatic experiences may not be fully captured by psychometric scales, specifically if the participant actively engages in guarded responses. While qualitative methods may not be immune to such responses, researchers can benefit by incorporating proxy questions to traumatic experiences such as "*Have you ever feared for the life of your child*?"

While follow-ups may be methodologically difficult, they can likely provide ample insight into the mental health and trauma exposure in the post-arrival stage of these families. Mothers and families may be more

likely to speak about their mental health experiences if done from the comfort of their new home with their relatives present. Lastly, future research can benefit by identifying the intersectionality of Latina and Central American mothers in the United States.

Conclusion

Asylum-seekers endorse a high index of trauma exposure and mental health symptoms of clinical significance; however, mothers are subjected to additional various social injustices in their pre-migration life, upon arrival into the United States, and as speculated, in their acculturation process in the United States. These stressors may pose greater challenges to their mental health. Clinicians can screen for violence against women's rights and their consequences in mental health. Likewise, policy makers and community stakeholders should incorporate screener requirements for women's right violations, as well as evidence-based trainings for center staff and law enforcement agents. Lastly, given that this study also revealed that children may be exposed to greater traumas than adults, child advocates, policy makers, practitioners, and researchers should examine and support laws and mental health programs designed to minimize children's traumatic experiences and strengthen mental health services upon their arrival into the United States.

Table 1A: *Demographic Variables*

	Range	M (SD)	% (n=)
Maternal Age	18-52	30.7(7.54)	
Nationality			
Honduras			46.7% (28)
Guatemala			10% (6)
El Salvador			40% (24)
Other			3.3% (2)
Maternal Education Level			
None			10%(6)
Elementary			28.3%(17)
Middle School			33.3%(20)
High School or equivalent			25%(15)
No answer or missing			3.3% (2)
Maternal civil Status			
Single			28.3% (17)
Married			41.7%(25)
Civil Union			15% (9)
Widow			3.3%(2)
Divorced or Separate			11.7%(7)
# of people traveling with	0-4(a)	1.65(.86)	
Child Age	.1-20	2.13(2.16)	
Child Gender			
Male			45%(27)

Female	45%(27)
Missing or no answer	10%(6)

(a) one mother was traveling alone and was pregnant

Table 1B :*Health and Trauma Variables*

	Range	M (SD)
Total # of Maternal Traumatic Exposures	0-12	3(3.10)
Total # of Child Traumatic Exposure	0-27	2.73(6.30)
Maternal Health Scores	35-100	69.65(17.59)
Child Health Scores	8.33-100	67.09(25.23)

Table 2: *Correlation Matrix*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Maternal Age										
2. Nationality	0.070									
3. Civil Status	0.192	-0.070								
4. Educational Level	-.277*	0.200	-0.102							
5. # of People Traveling with	0.034	0.023	-0.206	0.163						
6. Children Age	.744**	0.138	0.222	-0.151	.326*					
7. Child Male Gender	-.344**	-0.247	0.007	0.042	-0.156	-.414**				
8. Children Mental Health Scores	-.441**	-0.102	0.020	0.226	-0.036	-.414**	0.233			
9. Maternal	0.276	0.078	0.158	-0.154	0.176	.381**	-0.210	-.389**		

Total Instances of Trauma Exposure										
10. Child Total Instances of Trauma Exposure	0.207	-0.036	0.081	-0.167	0.064	.272*	-0.044	-.351*	.479**	
11. Maternal Mental Health Scores	-.371**	0.025	-0.071	.379**	-0.199	-.352**	0.012	.542**	-0.186	-.355**

Significant levels: * at .05, ** at .01, *** at .001

Table 3: Hierarchical Regression Model Predicting Maternal Mental Health Scores

	Model 1		Model 2		Model 3	
	B	*t*	*B*	*t*	*B*	*t*
Intercept	88.596****	5.566	87.009****	5.396	68.198***	3.620
Maternal Age	-0.924***	-2.575	-0.864*	-2.295	-0.725	-1.937
Nationality	-2.634	-0.833	-2.590	-0.812	-1.111	-0.346
Civil Status	-0.020	-0.009	-0.633	-0.281	-0.670	-0.306
Level of education	5.145**	2.756	4.801*	2.517	5.520***	2.910
# of People Traveling with	-6.484*	-2.229	-5.366	-1.737	-4.247	-1.385
Child Male Gender	-1.701	-1.508	-1.636	-1.429	-1.247	-1.100
# of Maternal Traumatic Experiences			0.146	0.152	0.440	0.467
# of Child Traumatic Experiences			-0.588	-1.057	-0.437	-0.799
Child Mental Health Scores					0.143	1.798

R^2	.607	.624	.663
Adj. R^2	.368**	.390**	.439***
ΔR^2		.022	.049

Significant levels: * at .05, ** at .01, *** at .001

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