Trauma Exposure and Mental Health of Central American Immigrant Youth

Ernesto Castañeda *, Daniel Jenks, Jessica Chaikof, Carina Cione, SteVon Felton, Isabella Goris and Eric Hershberg

Abstract: This paper investigates the mental health stressors experienced by Central American youth immigrants and asylum seekers, including unaccompanied minors, surveyed in the U.S. in 2017. This population is hard to reach, vulnerable, and disproportionately exposed to trauma from a young age. They face numerous challenges to mental health, and increased psychopathological risk, exacerbated by high levels of violence and low state-capacity in sending countries, restrictive immigration policies, the fear of deportation for themselves and their family members, and the pressure to integrate once in the U.S. Using survey data and the validated PHQ-9 questionnaire and Child PTSD Symptom Scale (CPSS), we find that Central American youth have seen improvements in their self-reported mental health after migrating to the U.S. but remain at risk of further trauma exposure, depression, and PTSD. They exhibit a disproportionate likelihood of having lived through traumatizing experiences that put Central American immigrants at higher risk for psychological distress and disorders and may also create obstacles to integration that in turn create new stressors that compound with PTSD and depression. PTSD, depression, or anxiety can be minimized through programs that aid their integration and mental health.

Keywords: PTSD; acculturation stress; transnational families; caregiving; generational trauma; immigrant integration

1. Introduction

Central American youth emigrating to escape violence, poverty, family separation, and abuse may have an increased risk for developing mental health issues such as trauma, anxiety, and depression. Upon settling in their new place of residence, immigrants grapple with new cultural, social, and economic demands. They must find safe housing, learn a new language, earn money, navigate prejudice, and establish social support systems. They are thrown into an acculturation process, defined by Alegria et al. as “the acquisition of the cultural elements of the dominant society,” which include norms, values, ideas, and behaviors [1]. The relative success of this acculturation process in turn shapes immigrants’ mental health, their ability to integrate, and how they are perceived by their new society [1]. During the transition, one may accumulate acculturative stress, or the stress of trying to integrate into a new country’s culture while seeking to retain one’s values, traditions and beliefs of their home country [2]. This unique type of stress is a direct result of the acculturation process that immigrants face upon their arrival and it can be more difficult to manage by immigrants who have experienced trauma or been diagnosed with PTSD [1,3,4]. Post-migration stressors may inhibit immigrants’ recovery from pre-migration trauma, which extends and worsens mental health problems [5]. Therefore, the challenges that Central American immigrants face prior to and after arriving in the U.S. will shape their mental health status, vulnerability to further trauma, and integration experience.

Immigrant youth experience major stressors and traumas in their country of origin. Families often separate for economic reasons by sending the child to stay with a relative
while the parents live and work in the U.S. The separation of the family across physical 
borders and multigenerational households is defined as a transnational family [6]. Despite 
the distance, parents still attempt to fulfill familial obligations through remittances — the 
money and gifts that parents send back to support their children and express their love. 
The remittances are made possible through the sacrifice of the parents [6]. They under-
stand moving to the U.S. and leaving behind their children with relatives to create a better 
life for their children to be an act done out of love. Even though the parents became stable 
providers of economic resources such as money, clothes, food, and toys, children are still 
often unable to understand the parental separation as anything other than abandonment 
[7]. Even though children may eventually reunite with their parents in the U.S., feelings 
of resentment and abandonment still linger [6,7]. Despite the best intentions of the par-
ents, by being left behind, the child will struggle to form close and trusting relationships 
in their adult lives, including with partners and children [6]. The experiences of long-term 
separation, the issues in their country of origin, and their journey across the border will 
weigh on their mental health status post-immigration.

IMMIGRANT YOUTH

One of the key issues among immigrant youth is who is taking care of them. For example, 
Walker et al. (2020) found that familial cohesion and stability play a role in behavioral 
outcomes among immigrant youth. Those who are cared for by their parents or relatives 
have better behavioral outcomes than those who do not experience familial supervision 
or guidance [8]. Other research has found that children from families divided across bor-
ders have a higher likelihood of experiencing separation anxiety, ongoing grief, and low 
self-worth [6,7]. In addition, a caregiver’s documentation status affects the well-being of 
the young people they look after. Immigrant youth who live with undocumented caregiv-
ers are more likely to be stressed [8]. Members of low-income families with undocu-
mented members are also at increased psychopathological risk [8].

Young immigrants’ heightened vulnerability to psychopathology was further proven 
when immigrant youth scored above the clinical cutoff score of 11 for the Child PTSD 
Symptom Scale (CPSS) [9]. The CPSS assesses PTSD symptoms and diagnoses in children 
ranging from ages 8 to 18 based on three items: reexperiencing trauma, avoidance, and 
arousal [10]. Asylum seekers’ and immigrant youths’ higher rates of PTSD indicate their 
higher risk for common comorbid mental health issues, such as depression, anxiety, and 
insomnia [11–14]. Furthermore, discrimination and acculturation stress exacerbate PTSD 
symptoms and can result in new traumas [15].

The migration and integration processes present unique stressors that mold mental 
health outcomes. Immigrant youth are at an increased risk for PTSD due to 1) premigra-
tion trauma; 2) traumatic migration experiences; 3) migrating unaccompanied; 4) migrat-
ing at an older age, thus experiencing higher acculturation stress; 5) experiencing pro-
longed family separation; 6) threats of deportation and forced separation; and 7) discrim-
ination and hate crimes; 8) they may struggle to maintain healthy adult relationships in 
the future. In this way, migration can be understood as a social determinant of mental 
health among immigrant youth and adults.

TRAUMAS

Driving factors for immigration can involve political instability that often results in 
crime, violence, economic reforms, and low state capacity. To escape from these hard-
ships, many Central Americans emigrate. Immigrants may experience three different 
trauma stages: premigration traumas in their home country, traumas on the migratory 
journey, and a hostile environment in the new country [16]. Common forms of premigra-
tion trauma include war, physical and sexual abuse, natural disasters, gang violence, vic-
timization, and witnessing a crime. For migrant youth traveling alone, they face an 
increased risk of starvation, dehydration, assault, kidnapping, and others forms of violence 
[17–20]. These traumatic experiences not only put immigrants at higher risk for
psychological distress and disorders but may also create obstacles to integration that in turn create new stressors that accumulate into compounded traumas [16].

There are three different pathways that shape the lives of migrant families and their children: immigrating without a child due to limited options for legal migration and forced separation that occurs either after arriving or during their time in the U.S. Oftentimes, migrants must make the journey to the U.S. without their children so as not to endanger them to the perils of traveling or because they plan to work abroad temporarily to send remittances [21]. Other families are forcibly separated upon arriving at the U.S. border or after they have made it across and established their new lives. These traumatic childhood experiences impact the emotional and psychological well-being of children due to their parents’ inability to fulfill the expectations of parenting because of immigration laws. Parents who choose to leave their children behind are operating under structurally constrained choices and are forced to sacrifice any present needs for their children’s future economic security [22,23]. According to Dreby, when limited options force families to separate, their decision is contingent upon what the family believes to be most beneficial in the long-run [24]. Families view immigrating to the United States as a means to achieve economic stability for the family [24]. Nonetheless, children left behind are more likely to feel abandoned and experience resentment wrongly.

Often looking to reunite with parents, minors who arrive at the border without any adult family members are designated as “unaccompanied alien children” (UACs) and are subject to additional legal protections, such as a right to a court hearing. However, legal representation will not be guaranteed, which places them in “the fast-track court hearings” [16,25,26]. These make it harder to develop legal claims for immigrant youth. Once in the United States, immigrant children will still be at risk for mental health disorders due to poor living conditions, lack of opportunities, discrimination, limited access to federal resources, and fear of deportation and detention [16].

The mental health of immigrants is not only connected to the trauma they face prior to arriving in the U.S. but also to U.S. government policies, which have become increasingly restrictive since the 1990s. Immigrants and their children have faced a hostile and often xenophobic social and political environment. The changes in policy over the past three decades primarily targeted undocumented immigrants who had previously managed to fly under the radar [27].

The Illegal Immigrant Reform and Immigration Responsibility Act of 1996 (IIRIRA) was one such policy. It established a “bar of inadmissibility” for five to ten years for undocumented immigrants who overstayed their visas and allowed for deportation without counsel or legal representation [16,27]. Additionally, the IIRIRA increased resources for immigration enforcement agencies such as Customs and Border Patrol. The IIRIRA was not the only discriminatory policy passed at this time. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) restricted undocumented immigrants’ rights to social services, including access to food stamps, healthcare, and Social Security [27]. These acts removed the federal government’s responsibility to grant aid to immigrants and allowed state governments to limit or exclude legal immigrants from federal and state programs with the belief that they had not been here long enough to be entitled to such services [27]. These policies played a critical role in subjecting immigrant children to a higher risk of mental health disorders that included PTSD, anxiety, and depression.

In this way, pre-existing traumas and subsequent mental health struggles influence immigrants’ psychological well-being and integration experience in the U.S. A study reported that female immigrants from Mexico, Central and South America experienced high levels of trauma from domestic, community, emotional, physical, and sexual violence [28]. Some girls experienced abuse at the hands of relatives whom their parents had left them with after migrating. A minor can be subjected to emotional violence by being left behind and forced to deal with abusive caretakers and lack of basic needs. In addition to experiencing childhood violence, women dealt with physical violence from their domestic
partners. Sometimes, physical violence was considered normal, and family members encouraged women to stay in the relationship [29].

This is not to say that everyone has similar histories of trauma. For example, some immigrants make the journey via airplane and enter the U.S. with an immigrant visa or as tourists, so they experience less violence and trauma on the journey. However, those without recourse to family reunification often complete the journey through land. During the journey, they are vulnerable to life-threatening incidents with gangs, thieves, or coyotes that often involve a weapon [29]. In addition, a few women report having sexual relations with men who help them cross into the United States. These sexual experiences are unpleasant but strategic in increasing their chances of surviving and reaching U.S. soil. After arriving in the U.S., many women experience sexual and physical violence but feel that they cannot report it to authorities due to their immigration status [29]. This shows the mental health advantages of providing administrative avenues to immigrate and for family reunification. Racist immigration policies that increase animosity against immigrants have heightened the fear of deportation and worsened immigrants’ mental health [16,30].

MENTAL HEALTH AMONG IMMIGRANTS

Upon immigrating to the United States, many immigrants experience “acculturative stress” [1,3,31]. Language challenges, economic hardships, discrimination, and lack of social support all have contributed to acculturative stress [3]. The time spent in the U.S. can serve as a factor for acculturative stress due to the demands created by mainstream society [31].

As Latin immigrants integrate into American society, they often experience discrimination due to their immigrant identities or undocumented status. As they acculturate, they may perceive more discrimination, which can lead to psychiatric disorders [31]. A study done by Finch and Vega found that as someone born outside the United States acclimates to their new home, their perception of discrimination slowly increases as they learn English and become familiarized with the area [32]. This increased awareness of discrimination and acculturation stress led the researchers to find a significant correlation between acculturation and depression. With Latin youth populations being at the highest risk for depression among multiple ethnic groups [33], it is no surprise that the perception of discrimination among migrants leads to a significant decrease in self-esteem [34]. In multiethnic and multigenerational states like Florida and California, 55% of adolescent Latin individuals experienced at least one form of discrimination [34]. Central American immigrants with high levels of acculturative stress are more likely to experience depression, suicidal ideation, and anxiety [3,35]. Hovey concluded that this might be because they feel caught between two different cultures and are being pulled in two different directions [36]. However, Dunn and O’Brien reported in their study that Latin immigrants experienced lower levels of stress with assimilating into American society compared to other groups, yet they still felt the pressure to learn English quickly [37].

According to Cook et al., Latin immigrants who have lived in the United States for less than ten years experience lower rates of psychiatric and depression disorders. However, Latin immigrants living in the U.S. for over twenty-one years and are more acculturated are more likely to have a psychiatric disorder than their U.S.-born counterparts. Factors that protect immigrants from mental health disorders, such as family cohesion, may erode over time due to the demands of having to negotiate between two different cultures [38].

Despite some of the challenges that immigrants face on their arrival to the United States, some can access mental health services to potentially mediate or lessen symptoms of PTSD, depression, and anxiety. According to a study on the usage of such services among Latina immigrants, age played an important role. Only 36% of Latina immigrants referred to mental health services receive therapy or psychiatric consultation. Also, younger women and those experiencing only anxiety use mental health services less frequently. Immigrants who experience longer elapsed times between the referral and the intake appointment are less likely to use services. The authors argue that this may be due
to their unavailability, canceled appointments, the crisis no longer being an issue, or clients not understanding or agreeing to referrals. Case managers are also key factors in helping Latina immigrants access mental health services [39]. Although Latina immigrants are disproportionately vulnerable to experiencing trauma and developing comorbid disorders, such as depression, few receive professional help and are thus, likely to have poorer mental health.

2. Materials and Methods

We conducted a survey with 58 participants who were Central American immigrant youth, 41 adults sponsoring recently arrived youth, and 23 social service providers in the metropolitan Washington, D.C. region. In this paper, we focus on the youth respondents. Because this population is vulnerable and hard to reach, our sampling methods included recruitment through local advocacy and legal non-profits, school programs, and snowball sampling. Participants were paid $25 USD for their participation. The University IRB approved the study [Number to be provided after peer review].

The survey instrument gathered demographic information as well as details regarding dangers in youths’ home countries, migration journeys, family dynamics, U.S. sponsors, and youths’ experiences with immigration courts and schools in the U.S. Youth were also asked whether they had spent time in a detention center, shelter, health clinic, or rehabilitation center over the past six months. Self-reported mental health status, PTSD symptoms, and depressive symptoms were assessed using the CPSS and PHQ-9 scales.

Thirty-seven youth reported El Salvador as their country of origin, with Honduras and Guatemala followed with 16 and 5, respectively (see Table 1). Age at the time of migration ranged from 8 to 20. Interviews took place when youth were at a minimum of 10 years old and a maximum of 22 years old, and the average age at the time of interview was 16. At the time of their arrival at the border, 34 were unaccompanied, and 24 were accompanied. Additionally, nine arrived with documentation, and 49 minors were undocumented. When interviewed, 22 minors resided in Prince George’s County, MD, 24 in Montgomery County, MD, and 12 in Fairfax County, VA. On average, most interviews lasted between one and one and a half hours.

This paper focuses on the mental health outcomes reported in two validated scales and additional questions included in the survey. We assess trauma exposure and symptoms of PTSD with the PCL-5, symptoms of depression with the PHQ-9 modified for teens, and mental health prior to and after migration with a custom survey question.

Because the survey was comprehensive and asked questions about minors’ lives in their home countries, in the U.S., and their migration journeys, we anticipated that there would be changes in youths’ mental and physical health statuses post-migration. To track this, at the beginning of the survey in question 8, respondents were asked to “Describe your health status prior to migration” by checking “yes” or “no” to the following mental health-related conditions: “Constant Stress,” “Anxiety (unease or excessive concern),” and “Depression.” Respondents were given these options in Spanish: “Estrés constante,” “Ansiedad (intranquilidad o preocupación excesiva),” and “Tristeza.” At the end of the survey, they answered the same question about their health after migration. They were asked these at the beginning and end respectively so that their mind could progress through the interview, thinking about things before migration at the beginning and after migration near the end.

Respondents filled out a PHQ-9 modified for teens in the Spanish language to screen for depression symptoms (minus the questions related to suicidal ideation, sometimes known as PHQ-8 modified for teens [40]. This scale has been validated in English and Spanish and is often by psychologists and clinicians internationally. The instrument asks if respondents have experienced individual depression symptoms in the last two weeks on the scale of (0) “None” (Ninguno), (1) “Various days” (Varios días), (2) “More than
Half” (Mas de la mitad de los días”), or (3) “Almost every day” (“Casi todos los días”). We scored following the table below.

<table>
<thead>
<tr>
<th>SCORING</th>
<th>SEVERITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>No or minimal depression</td>
</tr>
<tr>
<td>5-9</td>
<td>Mild depression</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate depression</td>
</tr>
<tr>
<td>15-19</td>
<td>Moderately severe depression</td>
</tr>
<tr>
<td>20-24</td>
<td>Severe Depression</td>
</tr>
</tbody>
</table>

Respondents filled out the Child PTSD Symptom Scale (CPSS), a version of the PCL-5 used by the Cognitive Behavioral Intervention for Trauma in Schools (CBITS) [41], designed to screen for PTSD in children and adolescents [42]. It is a self-reporting checklist assessment utilizing the DSM-4’s definition of symptoms apparent in those suffering from Posttraumatic Stress Disorder (PTSD). The 17-question assessment was administered in Spanish and asked respondents to report and rate symptoms they experienced in the past two weeks. They were asked to choose how often they experienced symptoms by selecting (0) “Not at all” (Nunca), (1) “Once in a while” (Ocasionalmente), (2) “Half the time” (El 50% del tiempo), (3) “Almost always” (Prácticamente en todo momento). Following CBITS scoring guidelines, 14 points or higher indicate moderate to severe PTSD. The instrument is routinely used to provide services and was translated by the Los Angeles Unified School District.

[Table 1 around here – available as its own file but provided here for easier peer review]

**Table 1** Descriptive statistics among immigrant minors in the DC metropolitan area (N = 58)

<table>
<thead>
<tr>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>At time of Arrival</td>
<td>58</td>
</tr>
<tr>
<td>At time of Interview</td>
<td>58</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>31</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
</tr>
<tr>
<td>Non-binary</td>
<td>1</td>
</tr>
<tr>
<td>U.S. Legal citizenship status at Time of Arrival</td>
<td></td>
</tr>
<tr>
<td>Documented</td>
<td>9</td>
</tr>
<tr>
<td>Undocumented</td>
<td>49</td>
</tr>
<tr>
<td>Country of Origin</td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td>37</td>
</tr>
<tr>
<td>Honduras</td>
<td>16</td>
</tr>
<tr>
<td>Guatemala</td>
<td>5</td>
</tr>
<tr>
<td>Jurisdiction within DC Metropolitan County</td>
<td></td>
</tr>
<tr>
<td>Prince George’s County</td>
<td>22</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>24</td>
</tr>
<tr>
<td>Fairfax County</td>
<td>12</td>
</tr>
</tbody>
</table>
3. Results

3.1 Traumatic Experiences

Youth were exposed to trauma or struggled with previous traumatic experiences. Youth shared that they had seen people, including loved ones, killed in front of themselves and personally experienced violence and abuse. Here we present three excerpts of participant narratives as examples of some of the experiences that youth shared. These narratives point to stressors that youth experience before, during, and after migration.

Carlos

Carlos, who was 15 when interviewed, briefly described his life in El Salvador, which often felt indirectly dictated by the gangs:

“They wanted to force me to join the Maras. And that is why you can’t study: because I was scared to leave the house, to go to school.”

Death threats were also common if youths did not want to join the gangs. Carlos continued:

“They only followed me once, but they didn’t get me. I headed home. If someone doesn’t join the Maras, they kill you, young. There are no options. If you don’t join the Maras, they kill you. I felt a lot of pressure.”

For Carlos, coming to the U.S. and joining his father, already living there, was his best option between death or joining a gang. He spoke with his family, and then his father arranged for and paid for him to travel north. When asked why he came to the U.S., he responded:

“Fleeing the Maras. It was my idea to come ... My dad paid so that they [the coyotes] could bring me. From El Salvador, I went to Guatemala, from Guatemala I took a bus, I got off, took another bus, got off, at night the buses ran... I must’ve taken around twenty buses from Guatemala to Mexico. From Mexico to the United States I went by bus and by taxi. I crossed the border and was walking when they detained me, they took me to Immigration, they interviewed me, I explained my case, why I came... I was at the center for minors for about half a month. I played there, they had classes, and from there I went with my dad. The trip took around three months. ... I was in a migration center, but not the Court. I understood the rules: I shouldn’t miss school, I shouldn’t work... mostly that... In the center for minors they treated me well. In the migration center, they speak very angrily to you. I felt nervous because they spoke to me very angrily.”

Overall, youth understood that they were under strict watch while their cases were being processed, whether or not they saw their lawyer frequently. For Carlos, age 15, he had to attend school, not work, and stay out of trouble – anything that he did, he was told could be used against him in immigration proceedings. Carlos said the lawyer, “didn’t help us that much. .... I don’t know anything regarding the decision on my case.”
Diana

Diana’s story is emblematic of stressors that many like her face. The words of Diana, 16, El Salvador, echoed those of Carlos about confidence in the lawyers and courtrooms that they had to deal with.

“No, we go to the court, and then, they don’t tell us anything. The lawyer said that they weren’t going to give us anything, that / I mean, we didn’t have hope/faith that they would give us, I don’t know, a permit [to stay].”

She explained why she wanted to leave El Salvador – she was only 13 when she left.

“I came from El Salvador because I wanted to study more. I want to be a doctor. Where I was living then, the schools aren’t great. Well, they don’t teach a lot of things, like math, or things like that. They only taught us math twice a week, for 30 minutes. Same with science. So, my parents wanted me to come here to study, and I also wanted to study, but where I lived, I couldn’t study what I wanted to study.”

She felt more able to attain those goals in the U.S. than she did in El Salvador. She continued:

“Here I think when I’m 22, or when I’m no longer a minor, I’ll be going to university. I want to study. And where I used to live was very dangerous, and there are no opportunities to pursue higher education. Most people in my country only study up to high school and stop there. It is very rare that someone makes it to university.”

Her father helped the family, but where she lived, she had to go far to get anything more than necessities or higher education. Diana spoke about her experience crossing the border and being kept in Customs and Border Protection (CBP) custody:

“We were in a house, and then a man told us that he was going to leave us in a forest. There was a forest, and you could hear a river. And we were on a rock with some other men, who were also with the man who brought us. And you could hear animal noises, and they were very scary. We were scared. It was around 5 in the morning, and we were there for around two hours and the man who was supposed to guide us across the river never came, but then he arrived. We passed the river once, but that was what we were going to walk along in the desert. Then we came back and did another loop because the man was mistaken, and he said that we were going to pass through there to Mexico. So, then we came back to go through the United States, and the man was mistaken again. So, then we came back to Mexico, and then the next time we crossed it was where cotton was being grown, and then we walked a lot, a lot to get to a big, black gate where there was an immigration van waiting and they detained us. They asked us our names, and they loaded us in their car, and took us to a little house where there were only around 15 girls there. They gave me a blanket, around, well it must’ve already been nighttime by then. They took us to shower, because our clothes were all [dirty], and they gave us [new] clothes. The next day they took us to the detention center.”

Diana described that she struggled in school at first and felt like she did not know any of the course content because she didn’t learn enough of it in El Salvador. She was nervous that there would not be anyone she could relate to in school. But she found that there were a lot of people there to help academically, and she was able to make friends:

“It was very taxing. At first, I did not want to go out. I was afraid of people who I thought did not speak Spanish. I don’t know, I thought they would say go, you aren’t
from here, things like that. And I didn’t want to go to school, I felt sad. But after the first day I went to school, I made friends and then I didn’t even want there to be a weekend. I only wanted to be in school. Because we played. And although some classes/subjects were difficult for me, like math, because let me tell you, in El Salvador, they barely had taught me how to add. I didn’t know how to multiply, I didn’t know how to divide, I didn’t know anything! I only knew how to read, but I didn’t read very well. And here they taught me in Spanish. They are teaching me how to read better. And I am interested in school here. They have a lot of programs to help us, for the students at our school.”

*Samantha*

Samantha, who was 15 and from Honduras, explained how her group was held up near the Guatemala-Mexico border by gangs with firearms threatening to light her groups’ buses on fire, with everyone inside, unless they all paid a fee. She had to sleep in a field for four nights while the coyotes made an arrangement with the gang to let them pass:

“And they went around in cars too, with firearms and all that. They would go in front of cars and wouldn’t let them pass. Supposedly, that post is controlled by them. In which country was this? Guatemala, and I think it was on the border with Mexico. And if you didn’t pay them a certain quantity of money, they wouldn’t let you through. Supposedly, they were going to set the buses on fire because they were locked from the outside. I mean, no one from the inside could open the doors or anything. The others couldn’t open them or anything. How was this problem resolved? I don’t know how they resolved it. They, I think they went back to where they came from. We were left at that sports field, that I told you about. We slept and spent around four days there. In the field? Uh-huh, sleeping in the cold and everything. So, then you were on your way? Uh-huh. You were stopped. Uh-huh. Those people are saying you need to pay and if you don’t… they’ll kill everyone? Yes. Including the bus driver. They made an agreement with them. And they gave them, the people that had to give them money, I believe a week. And if not, well that they’d do away with us. Uh-huh, and I think they were able to get it and afterwards we were let free. And we left.”

As Samantha continued, she recounted that she only got to eat food once a day during the trip and would otherwise drink water. In addition to these intense physical demands, traveling through Mexico was not a safe or secure experience.

Samantha described how she had not seen her mom in years and was very little when she left for the U.S. Because of that, the first year in the U.S. was hard. She felt lonely and missed her grandmother and her sister, who had felt like her mom more than anyone else when she was still living in Honduras. Other youth, including Melissa, age 14, David, age 13, and Sarah, age 18, also reported that one of the more challenging parts of coming to the U.S. was leaving other relatives like their grandmothers.

### 3.2 Self-reported Mental Health

In each mental health yes or no question in our survey, our respondents by-and-large stated that they did not experience “mental health problems” (“problemas de salud mental”) before or after migrating to the United States, with only 3 out of 58 responding “yes” (Table 2). However, many reported having experienced feelings of sadness, worry, and restlessness. About sixty percent of youth reported feeling sad before and after migration. While there was a slight decrease in feelings of sadness post-migration, the change was less than three percent. About one-third of youth reported that they had feelings of anxiety, worry, and restlessness both before and after moving to the United States. Additionally, after immigrating, respondents experienced a decrease in constant stress. This implies that living in their home countries, making the migration journey north to the U.S.,
or both situations put a disproportionate amount of stress on the Central American immigrant youth in our sample. Furthermore, as shown above, many had previous potentially traumatic experiences.

Table 2. Self-reported mental health pre- and post-migration

<table>
<thead>
<tr>
<th>Mental Health Pre- and Post-migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre - Mental Health Problems</td>
</tr>
<tr>
<td>Post - Mental Health Problems</td>
</tr>
<tr>
<td>Pre - Sadness</td>
</tr>
<tr>
<td>Post - Sadness</td>
</tr>
<tr>
<td>Pre - Anxiety/Restlessness/Worry</td>
</tr>
<tr>
<td>Post - Anxiety/Restlessness/Worry</td>
</tr>
<tr>
<td>Pre - Constant Stress</td>
</tr>
<tr>
<td>Post - Constant Stress</td>
</tr>
</tbody>
</table>

Mental health pre- and post-migration is rather stable but according to our interviewees it slightly improved after migration.

3.3. Mental Health Conditions Pre and Post Migration

In the open-ended and follow-up questions, the participants talked more about their sources of worry before and after migration. Table 5 summarizes the types of responses given.

Table 3. Mental Health Worries and Stressors Pre and Post Migration

<table>
<thead>
<tr>
<th>Reasons Before Migration</th>
<th>Reasons After Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant stress</strong></td>
<td></td>
</tr>
<tr>
<td>• Want to see parent</td>
<td>• Indoors (bored)</td>
</tr>
<tr>
<td>• Gang talk</td>
<td>• Work</td>
</tr>
<tr>
<td>• Living alone</td>
<td></td>
</tr>
<tr>
<td>• Planning the trip</td>
<td></td>
</tr>
</tbody>
</table>

| Anxiety                  |                         |
| • Future dreams; the trip| • Missed and worried about family in home country |
| • Violence affecting friends; gangs | • New US president |
| • Needed father          | • Family deportation worries |
| • couldn’t afford school supplies | • Future life |
| • Can’t study around delinquency | • Exploitation at work |
| • Payment to gangs or coyotes | • Bullying |

0% 20% 40% 60% 80% 100%
Sadness

- Leaving friends/family
- Couldn’t get out with gangs
- Lacking things that others had
- Missing parent
- Mother: not knowing her, wanting to meet her
- Death of grandmother
- Death or disappearance of friends
- Alcoholic father

Mental health problems

- Frustration
- Aggression
- Headaches

- Family separation
- Missed friends

3.4. PHQ-9 Modified for Teens

Using the PHQ-9, we were able to examine the severity of depressive symptoms among participants. While 31% of participants reported that they had not struggled with any depressive symptoms within the last two weeks, 79.3% scored between 0 and 4 in the PH8-scale, indicating no or minimal depression, around 20% exhibited symptoms of mild or moderate depression (Table 3). In one of the follow-up questions, not to be used for scoring, respondents were asked if they felt sad or depressed most days in the last year. Contrary to their other answers, 38% of them responded “yes.” We did not ask for suicidal ideation or followed up with a formal diagnosis by a clinician, so the depression scores are on the conservative side.

[Table 4 here]

Table 4. PHQ-8 Scores.

<table>
<thead>
<tr>
<th>Title 1</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No or minimal depression</td>
<td>46</td>
<td>79.3</td>
</tr>
<tr>
<td>Mild depression</td>
<td>8</td>
<td>13.8</td>
</tr>
<tr>
<td>Moderate Depression</td>
<td>4</td>
<td>6.9</td>
</tr>
</tbody>
</table>

3.5. Child PTSD Symptoms Scale

Based on the Child PTSD Symptom Scale, 66.7% of youth showed low symptomatic severity or not enough symptoms to be considered to have moderate to severe PTSD. However, 33.3% of youth did show symptoms that could indicate moderate to severe PTSD when considered by a clinician. Although answers to this assessment should not be used as stand-alone criteria to measure or diagnose PTSD, it does allow researchers to assess individuals preliminarily, monitor present symptoms, and examine whether symptoms indicate a PTSD diagnosis.

[Table 5 around here]

Table 5. Scores from the Child PTSD Symptom Scale
4. Discussion

The youth that participated in the study made it to the border and were placed with a sponsor. Therefore, our sample includes relatively privileged cases in comparison with those who could not make or complete the trip or the ones returned at the border. Because of our partial recruitment through afterschool programs, counselors, and service providers, the participants were more likely to be enrolled in school than the overall Central American youth population in the Washington, D.C. metro area. Coupled with a lower-end N of 58, this makes high-level data analysis difficult with this sample. However, data about immigrant youth is not insignificant. Little is known about recent cohorts of unaccompanied Central American youth, and our survey data and instruments can be used for individual-level analysis. Therefore, our data helps understand a small subset of this larger population.

The fact that our sample was privileged means that there is reason to believe that some of these factors may be worse in the population of unaccompanied Central American youth at large. Many being found through schools and snowball sampling through social services or legal offices means that we do not have the stories of those who do not have the support system of schools, social services, or legal offices – all routes to better one’s life. Other qualitative findings in the study show that schools were instrumental to youth in developing friendships. Coupled with lessening precarity of legal status, social services outreach made the lives of these minors and their families better.

Given the self-reported format of the survey, these results may be underreporting negative mental health outcomes. Vocabulary related to mental health conditions used in the survey may have been unfamiliar to some of our respondents. There are cultural differences in interpretations and stigmas concerning mental health, which might have caused respondents to downplay, exaggerate, or altogether hide information or experiences. Furthermore, youth who had not thought or spoken openly about their feelings, especially those who were younger, may have misinterpreted or struggled to understand survey questions.

Emblematic of possible underreporting, most of our respondents stated that they did not struggle with “mental health problems.” Nonetheless, many reported that they struggled with anxiety, depression, constant stress, or sadness. While these cannot alone necessarily be defined as “mental health problems,” they can be indicative of other mental health issues or disorders. These responses are especially important when considered alongside the finding from the Child PTSD Symptoms Scale that one-third of Central American minors may be struggling with moderate to severe PTSD. This grants us reason to believe that the actual values are much higher for both our sample and the Central American immigrant youth population at large.

An interesting finding was the discrepancy in self-reporting between “Mental Health Problems” and other mental health aspects. Youth may not consider their anxiety, depression, or constant stress as a mental health problem. Our findings related to PTSD also tell us that more of our sample may be experiencing mental health problems and simply not conceptualize these symptoms as part of a larger whole. One potential reason for this discrepancy may be the widespread stigma around mental health around the globe. Additionally, knowing what their feelings mean is not always a clear or easy process for children and adolescents.

Our qualitative survey results also tell us that our sample had many challenges to face and confront, often throughout their lives. These families can often struggle to understand one another after reuniting physically in the U.S., there can remain unsaid tension, recurrent feelings of abandonment, struggles getting to know one another again. Often there are new stepfamilies in addition to the blood relatives of the children, and the

<table>
<thead>
<tr>
<th>Low PTSD Symptoms</th>
<th>38</th>
<th>66.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate to Severe PTSD</td>
<td>19</td>
<td>33.3</td>
</tr>
</tbody>
</table>
dwellings that distress-based immigrants often find themselves in in the U.S. are small, cramped, and offer little privacy or space.

Youth reported that getting used to the relationship with their parents or other sponsors was hard, though it improved over time. Given the nature of family separation, this experience echoes that of many others. Parents often go north when children are very young in order to pay for the child’s schooling, housing, food, and clothes. Children, then, are effectively raised by relatives or friends.

**Traumatic Experiences**

Carlos understood basically what he needed to have his case to stay in the U.S., but he did not feel that his family’s lawyer was helpful. This is relevant because this increases the levels of anxiety since Carlos does not whether he will be allowed to stay with his father in the D.C. area or whether we would be sent back to El Salvador, where he has nowhere safe to stay.

As shown in the findings, one respondent discussed how the gang violence in his home community inhibited his ability to study, move around, or take advantage of opportunities outside of school. Once this respondent was settled in the D.C. area, he said that he felt very safe and that his father kept a close eye on him and his siblings – he felt cared for. He described difficulty in school due to language barriers, but he was able to develop friendships when he found others who were still learning English in his school, as many others did through the study. Importantly, now he can imagine doing more than he could when he was in El Salvador. He described not being able to leave the house in El Salvador, but now he feels he can join a soccer team in the short term, and in the long term, attend university to become a lawyer. By being taken care of by his father, this individual was able to start seeing the possibility of a better life for himself [8]. This underscores the importance of family reunification for mental health and the role that family support plays in youth integration [43]. Many of these experiences can be prevented through public policy that prioritizes the health and safety of youth, whether born in the United States or abroad.

The trauma of witnessing or being surrounded by violence in sending communities, family separation, and a notoriously dangerous journey north can last far longer than is clearly visible. Multiple surveyed youths reported that one or both of their parents were killed by gangs in their sending communities when they were very young, for instance. Other struggles described above can play into different forms of mental strife as well, including but not limited to violence.

The mental health findings in our sample are mixed. While some mental health measures were positive within the sample, others were negative even with the same individual. One minor, Diana, reported that she wanted to come to the U.S. because she knew that the educational opportunities were better, and she was determined to become a doctor and return to El Salvador. However, she also reported that she sometimes felt isolated and sad. She felt as though her dreams may never be achieved, despite the strong support system of faculty and peers at her school. Another interviewee, Samantha, spoke about how she felt safer in the U.S. than in Honduras. But she also experienced the loneliness that Diana described, as well as background feelings of tiredness and not having the energy to go about anything beyond the minimum of everyday life. Her mental strife could stem from the fact that she seldom felt safe in Honduras and that she experienced constant fear for her immediate physical safety on the journey from Honduras to the U.S. As demonstrated here, Diana and Samantha both have experienced complex traumas and subsequent feelings of isolation [3].

Despite having a strong support system available, these feelings of loneliness may be due to prior trauma, such as being left behind when their parents immigrated to the United States. When a child is left behind, they feel abandoned because they are too young to understand the reasons as to why their parents left for the U.S. The parents have attempted to compensate through “teleparenting” and by sending advice, admonitions,
money, clothes, toys from afar. Since children do not understand the parents’ intentions of emigrating, teleparenting may not be sufficient. As a result, children have reported feeling ungrateful for the sacrifices made by their parents. Immigration leaves both the child and the parents sad and uncertain about the future [7].

Children are likely to be safer in the United States than they were in their country of origin. However, preoccupations about documentation status and deportation are still a cause for concern for immigrants’ mental health [8,44]. Immigration status can contribute to anxieties about immigration authorities and being sent back to an unsafe environment in their home countries. Children fear making friends because no one will understand their situation or, worst-case scenario, notify authorities. Their feelings of abandonment, the separation from their parents, and the possibility of being turned over to the authorities are potential contributors to feelings of isolation.

In addition to the feelings of abandonment, in the case of Central American minors who were forcefully separated from their parents at the border, this forced family separation at the border may contribute to the mental health issues that children experience. When children see their parents being torn away at the border by patrol agents, the immigrant judges, or the prison guards, they witness those they love the most being humiliated, taken away, shouted at. The experience of this moment will likely have a profound impact that will last a lifetime because they watched those who made them feel safe, impotent, and taken away from them, leaving them behind. If the parent is removed from the country, it can further lead the child to experience depression, insecurity, and loneliness [45]. Table 3 shows that there are worries both before and after migrating, but the stressors were more before migrating.

Child PTSD Symptoms Scale

While one-third of respondents had moderate to severe depressive symptoms, this assessment is not a diagnosis made by a licensed clinician. Trauma exposure was disproportionately high within our sample, considering that 8% of respondents reported no symptoms of PTSD as assessed by this scale. Those who reported no symptoms may actually have extremely intense symptoms that they cope with by disassociating. A dissociative state is caused by denial and avoidance and is part of the trauma sequelae of PTSD.

PHQ-9

Depression was also found to be disproportionately high within our sample, with routinely more than 20% of respondents on each question stating that they felt a depressive symptom at least some of the time in the last two weeks and, in other categories, much more frequently. In the last year, almost 40% of the respondents answered “yes” to the question, “Have you felt depressed or sad in the past year most days, even when you feel good sometimes?” These results support our key finding that one-third of our sample may be struggling with moderate to severe PTSD, as depression is a common PTSD comorbidity.

Mental Health Determinants

While self-reported mental health measures are not iron-clad ways of understanding an individual’s feelings, there is a clear trend. In each measure, things improved slightly after migration. Being in the U.S. improved mental well-being perceptions for some, but not all. What is also significant is that mental health concerns did not worsen post-migration in any of the scales or questions used. Often, mental health stayed around the same. This makes sense given that immigrating comes with many new challenges and adaptations that immigrants deal with at the same time as processing their past experiences. The clear trend of reductions in each category after migration shows that our sample, in
general, had improved mental health as a result of immigration, notwithstanding new challenges that come with familial and societal integration.

It is also important to understand that these minors often felt like they had little or no opportunities in their sending communities due to local gangs’ power. Not even just not playing a soccer game that day, but the ability to imagine being a mechanic, college student or lawyer could be something that one wants but sees no clear path to when surrounded by gang violence before emigrating.

Leaving the only home an individual has ever known, the notoriously dangerous journey to the United States and the abusive conditions in CBP captivity are also additional causes of PTSD [16]. Political instability resulting in gang violence is also a major driving factor for immigration and contributor to trauma [16].

This paper shows the complex situations faced by immigrant youth after arrival in the U.S. Many immigrants show endurance and ability under dire circumstances and thus under-report stress and mental health concerns [46]. Even if outcomes improved when coming to the U.S., these vignettes support our findings that a third of the respondents may be suffering from PTSD based on the PCL-5 or depression based on the PHQ-9 results. Arriving at the border is the start, not the end, and we should not forget about these children after they settle in the U.S. In line with the literature, we conclude that structural changes that allow for better access to social services, education, healthcare, and employment are needed to improve Central American youth and their family’s mental health outcomes, treat mental health disorders, and prevent further trauma exposure.

[Supplementary Materials: We will provide a copy of the survey instrument.]

Author Contributions: To be added

Funding: Will be reported after acceptance.

Institutional Review Board Statement: IRB approval was obtained. Details after acceptance.

Informed Consent Statement: Verbal inform consent in order protect the confidentiality of respondents applying for asylum and thus facing possible deportation.

Acknowledgments: Coming.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A [Survey instrument, scales, and scale scoring guidelines after review]

References


J.D. Hovey, Acculturative stress, depression, and suicidal ideation among Central American immigrants, Suicide & Life-Threatening Behavior. 30 (2000) 125–39.


