Current Psychiatry Reports
https://doi.org/10.1007/s11920-024-01566-5

REVIEW

Traumatic Stress in Children and Youth Crossing the U.S. Mexico Border

Sachin Nair[1] · **Pamela K. McPherson**[1] · **Andres J. Pumariega**[2]

Accepted: 10 November 2024
© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2024

Abstract

Purpose of the Review We review the literature and examine the impact of traumatic stress experienced by children and youth crossing the US-Mexico Border and discuss the psychological effects of trauma incurred in this population, observing various traumatic stressors and their implications on both short and long-term mental health outcomes. Additionally, we discuss existing interventions and treatment approaches while also emphasizing the need for greater awareness, new interventions, and further research.

Recent Findings Over the past several decades, there has been a significant increase in the number of undocumented youth crossing the US-Mexico border into the United States and these individuals experience various traumatic stressors throughout the pre-migration, migration, and post-migration phases. Research on these stressors and their impact on mental health, however, remain limited and access to appropriate mental health care and interventions continues to be inadequate.

Summary It is crucial to understand the impact of trauma experienced by youth crossing the US-Mexico border, as it significantly influences their mental health outcomes. Additional research and targeted mental health interventions are necessary to alleviate the disparities in care experienced by these children. Further research is needed to improve awareness and understanding of the problem, develop targeted and effective interventions, and improve overall outcomes.

Keywords Unaccompanied minors · Trauma · Pre-migration · Migration · Post-migration · Mental health

Introduction

Over two million persons attempted to cross the US-Mexico Border without necessary documentation in 2022, with a trend toward an increasing number of families [1]. A "border encounter" is a term used by the U.S. Customs and Border Protection to describe various interactions between undocumented immigrants and U.S. border officials while at the U.S.-Mexico border. The number of such border crossings has been increasing since the 1980s with peaks in 2014 and again in 2021 and 2023 [2, 3]. The patterns of migration have changed since the 1980s and even in the past 15 years, especially for youth. For example, Mexican children accounted for 83% of unaccompanied child apprehensions in 2009 whereas in the first eight months of the fiscal year of 2023, they accounted for 20% [3]. The predominant unaccompanied minors according to the US Department of Health and Human Services in the fiscal year of 2023 were from Guatemala, followed by Honduras, and El Salvador – northern countries of Central America known as the Northern Triangle [4–6].

The reasons for crossing are rooted in war, crime, gang violence, and various other factors making the United States a desirable destination [7]. It is also important to note the vast majority of minors that cross the border are unaccompanied. For example, in 2023 there were a total of 2,535 accompanied minors encounters as compared to 137, 275 unaccompanied minors [2]. Thus, over 98% of minors that were involved in encounters were unaccompanied children and therefore will largely be pertinent to this discussion.

✉ Pamela K. McPherson
pam.mcpherson@lsuhs.edu

[1] Department of Psychiatry and Behavioral Medicine, Louisiana State University Health Shreveport, Shreveport, LA, USA

[2] University of Florida College of Medicine, Gainesville, FL, USA

Published online: 30 November 2024

Additionally, the majority of unaccompanied minors are from the northern triangle, whereas the majority of accompanied minors are from Mexico [2]. This is important to understand since unaccompanied minors will have a different impact of their stressors and travel experiences on their lives and mental health as compared to accompanied minors.

The first wave of child border refugees coming across the U.S. Mexico border from Central America was during the 1980's, and their level of traumatization was documented in small studies such as that by Arroyo and Eth [8]. However, the trajectory of some of this cohort was later documented by juvenile justice authorities, who found them to have adopted gang identifications in urban areas, particularly that of Mara Salvatrucha (MS 13) [9, 10]. Many of those youth were deported back to Central America in the early 2000's, where they constituted even more organized gangs who engaged in criminal and violent activities. This has further intensified internal conflict in Central America, likely additionally contributing more recently to driving more minors to leave their country and emigrate to the United States.

Recently, the crisis of unaccompanied minors along the US-Mexico border has been a major focus of work on immigration trauma [11]. These minors and others illegally attempting to cross the US-Mexico border have potentially experienced trauma prior to their journey, during their journey, as well as after their journey. At each stage, the stressors and situations faced are different and the stressors are grouped accordingly into pre-migration, migration, and post-migration depending on which stage the stressor is present. One would conclude that the overall effect of these stressors would be cumulative in the severity of mental health and conditions like PTSD, depression, and anxiety.

Pre-migration Stressors and Accompanying Effects on Mental Health

Pre-migration stressors are difficulties that are experienced before attempting to cross the U.S.-Mexico border. These include stressors or problems that occur prior to immigration causing previous traumatic experiences such as war, torture, terrorism, famine, and natural disasters [12]. These stressors create untenable living situations that ultimately lead individuals to migrate to seek a better life elsewhere.

Keller et al. [13] studied pre-migration stressors in adults crossing the border to observe the causes of migration beforehand. Although participants consisted of 234 adults, the adults were housed in a church that primarily served families and women with families and children who were awaiting a court hearing after being apprehended by Customs and Border Patrol. These families were from Nicaragua, Guatemala, and Honduras, the countries from which most of the unaccompanied minors originate. The study reported that threats of violence were the most common reason for migration of adults and families on the move. These findings underscore the role of violence as a critical factor in the decision to migrate. Donato and Perez [14], in a child centered study of Mexican migration using event histories and multivariate models, found close links between violence in Mexico and unauthorized solo child migration, while previous parental emigration, economic situations, and legal contexts played secondary roles. Ciacca and John [15] identified violence, abuse in the home, deprivation, and extreme poverty as factors for unaccompanied minors to leave their homes prior to migration. These factors are known as push factors, factors that act as internal drivers of migration. They also identified family reunification as a reason for unaccompanied minors to try and travel to the United States. This is known as a pull factor as it is an external force outside of the country of origin that leads to migration. They also found that most unaccompanied minors reported if circumstances required them to retrace their path to the United States, then they would [15]. This demonstrates their high level of desperation and willingness to endure the hardships of the journey, again reflecting the difficulties of their situation beforehand.

Cleary et al. [16] examined the trauma at different stages of migration in a sample of 104 Central American youth who were aged 12 to 17 years old. In this sample, 66% reported experiencing trauma. Pre-migration trauma was noted to be higher than migration and post-migration trauma combined. Of those experiencing a traumatic event, 59% had experienced pre-migration trauma, 20% reported a trauma during migration, and 18% after entering the United States. Again, this underscores the contribution of trauma experienced prior to migration as an important factor contributing to migration. Additionally, this study noted a significant correlation between trauma occurring pre-migration and later development of anxiety disorders, and between migration and post-migration trauma with PTSD, highlighting the importance of understanding the impact of trauma at different stages of migration. Kinzie et al. [17] observed 131 traumatized refugee children in a specialty clinic in Oregon. Of note, not all were from Central America and Mexico. These children had experienced prior war-trauma (21%) as well as previous domestic violence (28%). In these children, it was noticed that in the group that experienced war-trauma before migration, 63% had PTSD and in the group that experienced domestic violence prior to migration, 25% had PTSD. However, when comparing the refugee clinic population to the community clinic, the prevalence of depression and PTSD were comparable in children experiencing similar traumatic events [17]. Sidamon-Eristoff et al. [18] interviewed 84 children and families who were detained while attempting to cross the US-Mexico Border and noted that 97.4% of children experienced at least one pre-migration traumatic event.

They noted that PTSD symptom severity was most strongly predicted by pre-migration trauma and the duration of parent–child separation.

Migration Stressors and Accompanying Effects on Mental Health

During a child's journey to the United States, there are a myriad of problems that can be encountered, and the additive stress can impact mental health as well as overall health. The actual travel up north can sometimes be over 1,000 miles and travel can be strenuous occurring by foot, bus, car, or even atop freight trains [19]. Not to mention the potential strain and physical injuries that can take place such as falling from walls, traveling through rivers, the desert, and across bridges [20]. Lumpkin et al. [21] reviewed newspaper reports demonstrating the problems with illegal immigrants being overcrowded in vehicles and smuggled across the border, noting fatalities and injuries. Children were among those who experienced serious injuries and deaths. Koleski et al. [22] observed border-crossing related undocumented immigrant emergency department visits in Arizona, noting that 18% of the visits identified from those who crossed the border were under 18.

The potential for human trafficking is a particular concern for minors as many may be especially vulnerable due to prior pre-migration trauma and therefore can have a higher likelihood of subsequent issues with trust, development of healthy relationships, and adverse experiences in the future [23–25]. An estimated 75–80% of newly arrived unaccompanied minors travel with coyotes or smugglers who sometimes demand more money when unexpected hardships are encountered and may introduce forced labor or prostitution as a financial incentive [26]. Stinchcomb and Hershberg [27] note that approximately eighty percent of Central American women and girls are sexually assaulted on the migration through Mexico. In fact, they note that many women and girls take contraceptives prior to their journey as they have anticipated sexual violence as a cost of migration.

Cleary et al. [16], as noted earlier, studied 104 Central American youth ages 12 to 17 years old, looking at each stage of migration and observing whether trauma occurred and how it impacted mental health. In that study, twenty percent of those who had reported a traumatic event had at least experienced a traumatic event during migration. During migration, experiencing and witnessing assault were the most common traumas experienced in this population. There was noted to be significant correlations between exposure to trauma during migration and PTSD as well as depression [16].

Detention Centers and Accompanying Effects on Mental Health

In addition to the pre-migration stressors and migration stressors and how they can impact mental health of children, trauma may also occur when children are apprehended and detained. The detention process has long been under scrutiny and can be traumatizing for minors, whether accompanied or unaccompanied. In fact, the *Report of the ICE Advisory Committee on Family Residential* Centers [28] recommended:

> DHS's immigration enforcement practices should operationalize the presumption that detention is generally neither appropriate nor necessary for families – and that detention or the separation of families for purposes of immigration enforcement or management are never in the best interest of children. DHS should discontinue the general use of family detention.

When children are detained after entering the United States, they are initially held by the Department of Homeland Security (DHS) in processing centers managed by Customs and Border Protection [28]. If the adult accompanying the child cannot prove they are the child's biological parent or legal guardian, then they are separated, and the child is treated as unaccompanied [29]. This is done with the intention of preventing trafficking and inappropriate guardianship but could be another loss from a trusted adult for the minor.

Following processing after being detained, unaccompanied children are transferred to shelters or other facilities run by the Office of Refugee Resettlement (ORR) under the U.S. Department of Health and Human Services (HHS). Many are eventually released to community sponsors—such as parents, adult relatives, or non-relatives—while their immigration cases proceed. Children detained with a verified parent or guardian may either be sent back to their home countries through expedited removal procedures, housed in Immigration and Customs Enforcement (ICE) family residential centers, or released into the community to await their immigration hearings [29].

The unaccompanied minors should not be detained for more than 72 h according to Federal law [30]. Studies have noted numerous instances where this policy was not followed [31, 32]. Sridhar et al. [32] completed a retrospective chart review demonstrating 88% of the reviewed minors were held for more than 20 days while 8% of the minors were held for more than 90 days. Additionally, 30% of the minors detained were under 5 years of age.

Between April 2018 to June 2018, a subgroup of minors was detained in an enforced family separation policy, publicly described as a "zero tolerance" illegal immigration policy with goals for creating stricter legislation. This policy ultimately led to forced separation of children, including

infants, from their accompanying parents or guardians as they entered the United States. Even families legally seeking asylum at official border crossings were sometimes affected. While the adults were prosecuted, detained in federal jails, or deported, the children were placed under the care of the US Department of Health and Human Services with little or no documentation of parent contact information [33]. This policy led to an increased risk for damaged attachment relationships as well as trauma and toxic stress [34]. Not only were the conditions poor, but additionally it was reported that immigration authorities failed to provide any explanations regarding families that were being separated as well as where they were being sent and future possibilities of reunification. After June 2018, the US removed this policy due to concerns about its effects, however, detention center conditions still remain poor [28, 33].

There is evidence that suggests staying in detention centers is associated with negative outcomes and PTSD [35]. The environment of family detention facilities leaves children particularly vulnerable to both short-term and long-term physical and mental health issues [36]. Minors who manage to avoid family separation still face prolonged detention in immigration facilities that can pose significant risks. Research indicates that extended periods in detention can lead to increased rates of depression, anxiety, and PTSD among both children and their parents [37].

Minors, both unaccompanied and accompanied, may experience detention and separation from family. They are housed in detention facilities designed for adults and ones that are not ideal for children. Leaving the facility and being placed in the community or having a prolonged stay in the facility comes with its own set of challenges. The American Academy of Pediatrics has repeatedly emphasized that no amount of detention is safe for children [4].

The inability of families to be able to migrate as a family unit often have significant adverse impacts on children left behind in their homeland while parents go forth and migrate to the United States. Dreby [38] found that children whose parents migrated without them experienced both short- and long-term separations, with similar impact as separations resulting from deportation, creating economic and emotional hardship due to feelings of uncertainty, leaving them vulnerable for traumatization, and often leading to resentment among children even post-reunification.

Post-Migration Stressors and Effects of Separation of Children on Mental Health

The impact of migration stressors on the youth persists long after they are released from detention or reunited with their family. Studies have shown that the trauma of family separation and detention continues to affect children's mental health, leading to attachment difficulties and ongoing symptoms of depression and anxiety. These challenges underscore the need for comprehensive mental health assessments that consider the full range of trauma experiences, including those encountered during migration, to provide appropriate support for these vulnerable children [39]. After migration, youth often face prolonged stays in detention centers, unstable living conditions, and the challenges of adjusting and acculturation. These experiences, combined with daily stressors and various traumatic events are linked to negative mental health outcomes. Cardoso [40] conducted a study using a convenience sample of Central American immigrant children and youth, revealing that approximately 60% of unaccompanied migrant youth met the criteria for PTSD, 30% had a depressive disorder, and 30% reported experiencing suicidal ideation within the previous year. MacLean et al. [41, 42] observed immigrant children who had experienced forced separation from their parents and they suggest that these children may be at a higher risk of developing mental health disorders than the general U.S population as they demonstrated higher rates of emotional distress and problem behaviors. They noted that children who had been previously separated from their mothers exhibited significant emotional problems (49%) in contrast to 29% among those who were not separated [42]. Interestingly, emotional distress scores did not vary based the length of separation unlike the findings of Sidamon-Eristoff et al. [18]. Regardless, separation from family appears to exacerbate the emotional trauma incurred on minors.

Other post migration scenarios that can adversely affect undocumented child immigrants are those associated with parental deportation or deportation of the child or youth resulting from immigration enforcement. There are no systematic studies of the adverse impact of immigration raids on undocumented children or the US. born children of undocumented parents. However, Capps et al. [43] outline the significant adverse mental health consequences of parental detention resulting from immigration raids, including unexpected loss of at least one parent, having to reside with relatives while remaining in the U.S., disruption of normal developmental activities such as schooling, and uncertain separation from the detained or deported parent possibly for years. Though they did not use systematic sampling or assessment tools, the authors report symptoms of acute stress, depression, and anxiety as an immediate result. Dreby [44] interviewed ninety-one parents and 110 children in 80 Mexican immigrant households affected by family deportation. Using an injury pyramid derived from public health professionals, the author outlined a "deportation pyramid" that depicts the burden of deportation on children. The top of the pyramid includes instances with the most severe consequences on children (families in which a deportation has led to permanent family dissolution), but she found that enforcement policies had the greatest impact

on children at the bottom of the pyramid (lesser or temporary family disruptions). Regardless of legal status or their family members' involvement with immigration authorities, children in these households describe continued fear about their family stability and confusion over the impact legality has on their lives.

Overall, there is significant need for mental health care to address the needs of minors, both unaccompanied and accompanied, coming across the U.S. Mexico border. It is important to accommodate these needs with the appropriate resources and interventions in order to promote healthy development and success.

Studies on Interventions and Programs

Once the children are released from detention facilities and placement is completed by the Office of Refugee Resettlement (ORR), they are sent to live with family members, relatives, or sponsor families. The child is placed in the least restrictive setting with the child's best interest and safety considered [45]. Social support, acculturation, and education are crucial for successful settlement of minors [46, 47]. The ORR are required to aid with school enrollment, legal, medical, and mental health services [48].

Many unaccompanied minors are provided with post release services by ORR. Most will receive these services for approximately 90 days. Of course, providing these services effectively may require more than 90 days [49]. Schools provide an avenue where school-based programs can provide interventions. The McKinney-Vento Act requires educational systems that receive federal funding to support the educational needs of migrant children including tangible resources such as tutoring, free school supplies and after school programs. Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), Cognitive Behavioral Intervention for Trauma in Schools (CBITS), and Mental Health for Immigrants Program (MHIP) are effective interventions in the treatment of PTSD, anxiety, and depression in refugee minors. Social workers and therapists in school are in a unique situation to provide these services [50]. School-based Trauma-Focused Cognitive Behavioral Therapy [51] and Cognitive Behavioral Intervention for Trauma in Schools [52] have both been adapted for use with Latino immigrant children. The rationale is to have easier access for these children and therefore these therapies are incorporated in school settings.

Another potential avenue for healing is family-based interventions that can help by developing a family narrative, identifying strengths, setting goals, and teaching self-management strategies to reduce stress and trauma. Education on adjustment and acculturation, positive parenting skills, and social skills training are also crucial. Peer-led support groups, arts, music, and sports programs have shown success in reducing social isolation and supporting community healing. Incorporating cultural values and beliefs into treatment, involving family or community members while maintaining confidentiality, and ensuring access to healthcare are essential steps in supporting the mental health of migrant youth. Mindfulness based CBT was modified to incorporate spirituality and religious belief to treat unaccompanied migrant Latin children to help them understand trauma related cognitions and stress. Analysis revealed improvement of PTSD symptoms [53]. These interventions can be provided in community mental health or wrap around programs.

However, barriers to accessing mental health care persist. Youth without legal status often find mental health services inaccessible, and poverty and lack of support further exacerbate these challenges. Although therapy options like trauma-informed CBT and EMDR are available for youth with PTSD, they are not always accessible to migrant youth. The experience of detention and interactions with Border Patrol officers, who are not trained in mental health interventions, adds to the trauma. Additionally, the constantly changing laws surrounding immigration contribute to the ongoing stress and uncertainty. Addressing these barriers is critical to providing effective support for the mental health of migrant youth. Effective interventions for migrant youth should include a foundation in the practices of Trauma-informed Care for all who interact with immigrating youth [54, 55].

In an attempt to address the many health, developmental, and human service needs of families with children detained by ICE, the *Report of the ICE Advisory Committee on Family Residential Centers* [28] presented service guidelines for family detention facilities. The Advisory Committee placed forth over 200 recommendations on legal, educational, health and mental health services for detained parents and children if such detention centers were maintained. The guidelines outlined a systematic process of assessment for health and mental health needs, using evidence-based tools for primary care providers in these facilities to identify mental health needs, including symptoms of PTSD and histories of trauma, with psychiatric tele-consultation for further assessment. They also outlined the provision of trauma-focused therapies by licensed and trained masters' level therapists, and the training of detention facility clinical and correctional staff in trauma informed care and culturally/linguistically informed care to guide their interactions with children and families. Additionally, it recommended mental health crisis protocols, including established clinical relationships with off-site facilities with the capacity of more intensive treatment if needed, including hospitalization. Such care was to be complemented with case management to ensure that children and parents received needed follow-up services and treatment in their destination communities. Unfortunately, these guidelines have yet to be fully implemented, even with the previous and current administration having resumed the use of family detention centers [28].

It is important to note that there are service models used with other child and family refugee populations that have established evidence. Project SHIFA is a school-based mental health promotion program for immigrant Somali youth and families based in a middle school within Boston Public Schools, sponsored by Boston Children's Hospital Center for Refugee Trauma and Resilience and initially funded by the Robert Woods Johnson Foundation. It is structured with a broad community outreach component to address cultural and linguistic barriers, stigma, and access barriers, a school-based group intervention program that uses many principles from CBITS, and an intensive trauma focused services component. This program demonstrated strong outcomes as well as high levels of community acceptance and engagement [56, 57]. Unfortunately, there have not been any similar projects deployed to address traumatization in children and youth coming across the southern border.

Conclusion

Despite the magnitude and the large number of minors crossing the border and being detained, there has been very limited research on both short and long-term mental health outcomes as well as interventions and treatment, and relatively few efforts to systematically deliver needed mental health services to address the high rates of traumatization. The information thus far has been from retrospective and cross-sectional studies that point to the systemically inadequate assessment and treatment of unaccompanied and accompanied children's mental health. Retrospective chart reviews rely on documentation that tends to be incomplete in many cases. The dearth of efforts in both research and services supports the denial of the significance of this ongoing refugee crisis in the southern border of the United States. More efforts have been devoted to study refugee crises abroad in other parts of the world. Some of this is explained by the socio-political conflict and xenophobia associated with this group of refugees, who largely come from non-European nations. Unfortunately, this neglect can result in extensive negative mental health consequences from traumatization for many children now living in our nation.

As a nation and as physicians, we have both moral and ethical responsibilities to take action and therefore it is critical that further research into the mental health effects of trauma experienced by these children. Providing effective intervention must be prioritized, along with the recognition that this intervention is unlikely to be completed in the 90 days offered by the ORR. Failing to address this crisis causes children to suffer unnecessarily. Trauma-informed mental health care will help foster healing and promote resilience, ultimately leading to a greater success and future for these children and our country.

Key References

- Sidamon-Eristoff AE, Cohodes EM, Gee DG, Peña CJ. Trauma exposure and mental health outcomes among Central American and Mexican children held in immigration detention at the United States-Mexico border. *Dev Psychobiol*. 2022;64(1):e22227. https://doi.org/10.1002/dev.22227

  Study investigating various traumatic stressors and experiences including pre-migration and migration trauma, detention in holding centers, and parent–child separation on the subsequent development and severity of PTSD symptoms in children

- Cleary SD, Snead R, Dietz-Chavez D, Rivera I, Edberg MC. Immigrant Trauma and Mental Health Outcomes Among Latino Youth. *J Immigr Minor Health*. 2018;20(5):1053–1059. https://doi.org/10.1007/s10903-017–0673-6

  Study investigating the relationships between traumatic experiences and stressors encountered before, during, and after migration, and their impact on mental health outcomes, including depression, anxiety, and PTSD in children

- Sridhar S, Digidiki V, Ratner L, Kunichoff D, Gartland MG. Child Migrants in Family Detention in the US: Addressing Fragmented Care. *Children (Basel)*. 2024;11(8):944. Published 2024 Aug 5. https://doi.org/10.3390/children11080944

  A retrospective review of medical records for children residing in a detention facility demonstrating substandard living conditions, limited access to proper nutrition and healthcare, as well as clinical documentation errors and deficiencies in the delivery of appropriate quality health care

- MacLean SA, Agyeman PO, Walther J, Singer EK, Baranowski KA, Katz CL. Characterization of the mental health of immigrant children separated from their mothers at the U.S.-Mexico border. *Psychiatry Res*. 2020;286:112,555. https://doi.org/10.1016/j.psychres.2019.112555

  A cross-sectional study highlighting the impact of forced separation of immigrant children from their par-

ents, showing how it can lead to increased mental health and behavioral issues, as well as an increased risk of developing future mental health disorders

- Pumariega AJ, Jo Y, Beck B, Rahmani M. Trauma and US Minority Children and Youth. *Curr Psychiatry Rep*. 2022;24(4):285–295. https://doi.org/10.1007/s11920-022–01336-1

Comprehensive review highlighting the prevalence of risk factors, traumatic stressors, and traumatic experiences, and their impact on the mental health of minority youth in the United States

Author Contribution S.N, P.M, and A.P all wrote, contributed, and reviewed the main manuscript text. S.N served as first author, P.M as secondary author, and A.P as senior author.

Funding The authors received no funding or financial support for the research, authorship, and publication of this article.

Data Availability No datasets were generated or analysed during the current study.

Declarations

Conflict of Interest The authors declare no competing interests.

References

1. Congressional Research Service. U.S. Border Patrol Encounters at the Southwest Border: Fact Sheet. Published May 16, 2023. Accessed July 5, 2024. https://crsreports.congress.gov/product/pdf/R/R47556
2. U.S. Customs and Border Protection. Southwest Land Border Encounters. Published April 12, 2024. Accessed August 3, 2024. https://www.cbp.gov/newsroom/stats/southwest-land-border-encounters
3. Gramlich J. Migrant encounters at the U.S.-Mexico border hit a record high at the end of 2023. Pew Research Center. Published February 15, 2024. Accessed August 6, 2024. https://www.pewresearch.org/short-reads/2024/02/15/migrant-encounters-at-the-us-mexico-border-hit-a-record-high-at-the-end-of-2023/
4. Linton JM, Griffin M, Shapiro AJ. COUNCIL ON COMMUNITY PEDIATRICS Detention of Immigrant Children. Pediatrics. 2017;139(5):e20170483. https://doi.org/10.1542/peds.2017-0483.
5. Rodriguez N, Urrutia-Rojas X, Gonzalez LR. Unaccompanied minors from the Northern Central American countries in the migrant stream: social differentials and institutional contexts. J Ethn Migr Stud. 2019;45(2):218–34. https://doi.org/10.1080/1369183x.2017.1404257.
6. Facts and Data Sheet. Office of Refugee Resettlement | ACF. Published 2018. Accessed July 15, 2024. https://www.acf.hhs.gov/orr/about/ucs/facts-and-data
7. Cardoso JB, Brabeck K, Stinchcomb D, et al. Integration of Unaccompanied Migrant Youth in the United States: A Call for Research. J Ethn Migr Stud. 2019;45(2):273–92. https://doi.org/10.1080/1369183X.2017.1404261.
8. Arroyo W, Eth S. Children traumatized by Central American warfare. In: Eth S, Pynoos RS, editors. Posttraumatic Stress Disorder in Children. Washington, DC: American Psychiatric Press; 1985. p. 103–10.
9. MIRA. Deportation feeds a cycle of violence in Central America. Feminisms and Democracy. Published March 14, 2006. Accessed September 15, 2024. https://www.americas.org/3152/
10. Nydegger LA, Quinn K, Walsh JL, Pacella-LaBarbara ML, Dickson-Gomez J. Polytraumatization, Mental Health, and Delinquency Among Adolescent Gang Members. J Trauma Stress. 2019;32(6):890–8. https://doi.org/10.1002/jts.22473.
11. Pumariega AJ, Jo Y, Beck B, Rahmani M. Trauma and US Minority Children and Youth. Curr Psychiatry Rep. 2022;24(4):285–95. https://doi.org/10.1007/s11920-022-01336-1.
12. Pumariega AJ, Rothe E, Pumariega JB. Mental health of immigrants and refugees. Community Ment Health J. 2005;41(5):581–97. https://doi.org/10.1007/s10597-005-6363-1.
13. Keller A, Joscelyne A, Granski M, Rosenfeld B. Pre-migration trauma exposure and mental health functioning among Central American migrants arriving at the US border. PLoS One. 2017;12(1). https://doi.org/10.1371/journal.pone.0168692
14 Donato KM, Perez SL. Crossing the Mexico-US border: illegality and children's migration to the United States. RSF The Russell Sage Foundation J Soc Sci. 2017;3(4):116–35. https://doi.org/10.7758/rsf.2017.3.4.07.
15. Ciaccia KA, John RM. Unaccompanied immigrant minors: where to begin. J Pediatr Health Care. 2016;30(3):231–40. https://doi.org/10.1016/j.pedhc.2015.12.009.
16. Cleary SD, Snead R, Dietz-Chavez D, Rivera I, Edberg MC. Immigrant Trauma and Mental Health Outcomes Among Latino Youth. J Immigr Minor Health. 2018;20(5):1053–9. https://doi.org/10.1007/s10903-017-0673-6.
17. Kinzie JD, Cheng K, Tsai J, Riley C. Traumatized refugee children: the case for individualized diagnosis and treatment. J Nerv Ment Dis. 2006;194(7):534–7. https://doi.org/10.1097/01.nmd.0000224946.93376.51.
18. Sidamon-Eristoff AE, Cohodes EM, Gee DG, Peña CJ. Trauma exposure and mental health outcomes among Central American and Mexican children held in immigration detention at the United States-Mexico border. Dev Psychobiol. 2022;64(1):e22227. https://doi.org/10.1002/dev.22227.
19. Ataiants J, Cohen C, Riley AH, Tellez Lieberman J, Reidy MC, Chilton M. Unaccompanied Children at the United States Border, a Human Rights Crisis that can be Addressed with Policy Change. J Immigr Minor Health. 2018;20(4):1000–10. https://doi.org/10.1007/s10903-017-0577-5.
20. Keller BA, Skubic J, Betancourt-Garcia M, et al. Understanding the burden of traumatic injuries at the United States-Mexico border: a scoping review of the literature. J Trauma Acute Care Surg. 2023;95(2):276–84. https://doi.org/10.1097/TA.0000000000003920.
21. Lumpkin MF, Judkins D, Porter JM, Latifi R, Williams MD. Overcrowded motor vehicle trauma from the smuggling of illegal immigrants in the desert of the Southwest. Am Surg. 2004;70(12):1078–82.
22. Koleski J, Aldulaimi S, Moran E. From Dehydration to Fractures: Medical Issues Faced by People Crossing the United States: Mexico Border. J Immigr Minor Health. 2019;21(5):1181–4. https://doi.org/10.1007/s10903-018-0827-1.
23. Ballard ED, Van Eck K, Musci RJ, et al. Latent classes of childhood trauma exposure predict the development of behavioral health outcomes in adolescence and young adulthood. Psychol

Med. 2015;45(15):3305–16. https://doi.org/10.1017/S0033291715001300.
24. Copeland WE, Shanahan L, Hinesley J, et al. Association of Childhood Trauma Exposure With Adult Psychiatric Disorders and Functional Outcomes [published correction appears in JAMA Netw Open. 2020 May 1;3(5):e207276. https://doi.org/10.1001/jamanetworkopen.2020.7276]. *JAMA Netw Open*. 2018;1(7):e184493. Published 2018 Nov 2. https://doi.org/10.1001/jamanetworkopen.2018.4493
25. Rogers CJ, Forster M, Grigsby TJ, Albers L, Morales C, Unger JB. The impact of childhood trauma on substance use trajectories from adolescence to adulthood: Findings from a longitudinal Hispanic cohort study. Child Abuse Negl. 2021;120:105200. https://doi.org/10.1016/j.chiabu.2021.105200.
26. Kandel WA, Bruno A, Meyer PJ, Seelke CR, Taft-Morales M, Wasem RE. Unaccompanied alien children: potential factors contributing to recent immigration. *Congressional Research Service, CRS Report R43628.* Published July 3, 2013. Accessed August 5, 2024. http://www.fas.org/sgp/crs/homesec/R43628.pdf
27. Stinchcomb D, Hershberg E. Unaccompanied migrant children from Central America: context, causes, and responses. SSRN Electron J. Published online 2014https://doi.org/10.2139/ssrn.2524001
28. U.S. Department of Homeland Security, Immigration and Customs Enforcement. Report of the ICE Advisory Committee on Family Residential Centers. Washington, DC: U.S. Department of Homeland Security; 2016. https://www.ice.gov/sites/default/files/documents/Report/2016/acfrc-report-final-102016.pdf. Accessed September 9, 2024.
29. Rafieifar M, Potocky M, Huang H, Beaulaurier RL, Bruan Lorenzini S. Experiences of Undocumented Parents Reuniting with Children Who Entered the United States as Unaccompanied Minors. Int J Environ Res Public Health. 2023;20(5):4496. Published 2023 Mar 3. https://doi.org/10.3390/ijerph20054496
30. Workie MG, Grow K, Heredia S, Monin K, Essey. Strengthening services for unaccompanied children in U.S. communities. Migration Policy Institute. Published June 6, 2021. Accessed August 10, 2024. https://www.migrationpolicy.org/research/services-unaccompanied-children-us-communities
31. Podkul J, Katz R, Kelsey J. Detention and treatment of unaccompanied migrant children at the US-Mexico border. In: Childhood and Migration in Central and North America: Causes, Policies, Practices and Challenges. San Francisco and Buenos Aires: University of California Hastings College of the Law and National University of Lanús; 2015:357–382.
32. Sridhar S, Digidiki V, Ratner L, Kunichoff D, Gartland MG. Child Migrants in Family Detention in the US: Addressing Fragmented Care. Children (Basel). 2024;11(8):944. Published 2024 Aug 5. https://doi.org/10.3390/children11080944
33. Miller A, Hess JM, Bybee D, Goodkind JR. Understanding the mental health consequences of family separation for refugees: Implications for policy and practice. Am J Orthopsychiatry. 2018;88(1):26–37. https://doi.org/10.1037/ort0000272.
34. Wood LCN. Impact of punitive immigration policies, parent-child separation and child detention on the mental health and development of children. BMJ Paediatr Open. 2018;2(1). https://doi.org/10.1136/bmjpo-2018-000338
35. Bamford J, Fletcher M, Leavey G. Mental Health Outcomes of Unaccompanied Refugee Minors: a Rapid Review of Recent Research. Curr Psychiatry Rep. 2021;23(8):46. Published 2021 Jul 1. https://doi.org/10.1007/s11920-021-01262-8
36. Allen S, McPherson P. By electronic mail re: protected whistleblower disclosure experts. *Whistleblower Network News.* March 8, 2023. Accessed August 12, 2024. https://whistleblower.org/wp-content/uploads/2023/03/2023.03.08-Full-Allen-McPherson-letter-to-Biden-Admin-re-Resuming-Family-Detention-with-cover.pdf
37. Hampton K, Raker E, Habbach H, Camaj Deda L, Heisler M, Mishori R. The psychological effects of forced family separation on asylum-seeking children and parents at the US-Mexico border: A qualitative analysis of medico-legal documents. PLoS One. 2021;16(11):e0259576. Published 2021 Nov 24. https://doi.org/10.1371/journal.pone.0259576
38. Dreby J. US immigration policy and family separation: The consequences for children's well-being. Soc Sci Med. 2015;132:245–51.
39. Song SJ. Mental health of unaccompanied children: effects of U.S. immigration policies. BJPsych Open. 2021;7(6):e200. Published 2021 Nov 2. https://doi.org/10.1192/bjo.2021.1016
40. Berger Cardoso J. Trauma and substance use in unaccompanied migrant youth in Texas. National Hispanic and Latino Addiction Technology Center Network; 2017. Houston, TX.
41. MacLean SA, Agyeman PO, Walther J, Singer EK, Baranowski KA, Katz CL. Characterization of the mental health of immigrant children separated from their mothers at the US-Mexico border. Psychiatry Res. 2020;286:112555. https://doi.org/10.1016/j.psychres.2019.112555.
42. MacLean SA, Agyeman PO, Walther J, Singer EK, Baranowski KA, Katz CL. Mental health of children held at a United States immigration detention center. Soc Sci Med. 2019;230:303–8. https://doi.org/10.1016/j.socscimed.2019.04.013.
43. Capps R, Castañeda R, Chaudry A, Santos R. Paying the price: the impact of immigration raids on America's children. *Urban Institute and National Council of La Raza.* Published 2013. Accessed September 15, 2024. https://www.urban.org/sites/default/files/publication/46811/411566-Paying-the-Price-The-Impact-of-Immigration-Raids-on-America-s-Children.PDF
44. Dreby J. The burden of deportation on children in Mexican immigrant families. J Marriage Fam. 2012;74(4):829–45. https://doi.org/10.1111/j.1741-3737.2012.00989.x.
45. Hasson RG III, Díaz-Valdés A, Corbett C. Primary needs for unaccompanied children receiving post-release services in the United States. Providence, RI: Providence College; 2020. Available from: https://social-work.providence.edu/researchspotlight-hasson/
46. Oppedal B, Idsoe T. The role of social support in the acculturation and mental health of unaccompanied minor asylum seekers. Scand J Psychol. 2015;56(2):203–11. https://doi.org/10.1111/sjop.12194.
47. Crea TM, Hasson RG III, Evans K, Berger Cardoso J, Underwood D. Moving forward: educational outcomes for Unaccompanied Refugee Minors (URM) exiting foster care in the United States. J Refugee Stud. 2018;31(2):240–56.
48. Grace BL, Roth BJ. Post-release: linking unaccompanied immigrant children to family and community. Columbia, SC: University of South Carolina; 2015
49. Evans K, Londoño T. Post-release services for unaccompanied children: current gaps and needed improvements. Research brief. Published 2022. Accessed July 28, 2024. https://cimmcw.org/wp-content/uploads/Post-Release-Services-for-UC_Research-Brief_Final.pdf
50. Franco D. Trauma Without Borders: The Necessity for School-Based Interventions in Treating Unaccompanied Refugee Minors. Child Adolesc Social Work J. 2018;35(6):551–65. https://doi.org/10.1007/s10560-018-0552-6.
51. Cohen J, Mannarino AP. Disseminating and Implementing Trauma-focused CBT in community settings. Trauma Violence Abuse. 2008;9(4):214–26. https://doi.org/10.1177/1524838008324336.
52. Kataoka SH, Stein BD, Jaycox LH, et al. A school-based mental health program for traumatized Latino immigrant children. J Am Acad Child Adolesc Psychiatry. 2003;42(3):311–8. https://doi.org/10.1097/00004583-200303000-00011.

53. Fortuna LR, Martinez W, Porche MV. Integrating Spirituality and Religious Beliefs in a Mindfulness Based Cognitive Behavioral Therapy for PTSD with Latinx Unaccompanied Immigrant Children. J Child Adolesc Trauma. 2023;16(3):481–494. Published 2023 Apr 21. https://doi.org/10.1007/s40653-023-00541-1
54. Quecan C. Supporting Central American immigrant youth: a culturally responsive, trauma-informed guide [doctoral dissertation]. California State University, Sacramento; 2020. https://scholars.csus.edu/esploro/outputs/doctoral/Supporting-Central-American-immigrant-youth-a/99257831101501671#file-0
55. Delgado JR, Diaz LD, LaHuffman-Jackson R, Quion N, Walts K. Community-Based Trauma-Informed Care Following Immigrant Family Reunification: A Narrative Review. Acad Pediatr. 2021;21(4):600–4. https://doi.org/10.1016/j.acap.2021.02.005.
56. Ellis B, Miller A, Baldwin H, Abdi B. New directions in refugee youth mental health services: overcoming barriers to engagement. J Child Adolesc Trauma. 2011;4(1):69–85. https://doi.org/10.1080/19361521.2011.545047.
57. Ellis BH, Miller AB, Abdi S, Barrett C, Blood EA, Betancourt TS. Multi-tier mental health program for refugee youth. J Consult Clin Psychol. 2013;81(1):129–40. https://doi.org/10.1037/a0029844.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.