Chapter 10
The Impact of Toxic Stress on Refugee Children: Implications for the Asylum Process

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Introduction

The consequences of the toxic stress experienced by many asylum-seeking children and minors before, during, and after migration can negatively impact their health, including cognitive and mental health, in ways that can interfere with their ability to meet the legal requirements of the process. Toxic stress, defined by the Center on the Developing Child as "prolonged activation of stress response systems in the absence of protective relationships," has become an area of increasing concern regarding children due to the multiple negative and potentially lifelong effects (Shonkoff & Garner, 2012, p. e235). Stressors include those identified in the Adverse Childhood Experiences Scale (ACEs, including various forms of physical, sexual, and emotional abuse as well as neglect, and family dysfunction), in addition to chronic social stressors such as racism, poverty, and community violence (Center on the Developing Child, n.d.). Toxic stress has been identified as an emergent problem immigrant children face even if they initially come to the United States with adult supervision, as many have been separated from their families (First, & Kemper, 2018).

Since approximately 2010, the influx of migrants from Central America and especially the Northern Triangle countries of El Salvador, Honduras, and Guatemala has increased significantly (Congressional Research Services, 2019). The majority of these are families and unaccompanied children. For that reason, this chapter draws its examples from Northern Triangle-origin refugee children, though the

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impact of toxic stress and trauma on refugees is a global phenomenon. We will first begin with a brief overview of the process of seeking asylum in the United States. The chapter then describes the causes and impact of toxic stress in children, including factors specific to migrant children, and concludes with a consideration of the role juvenile forensic experts can play in assisting children with applications for asylum.

Applying for Asylum in the United States

While asylum is a protection that originated centuries ago, modern asylum was born of the rise in people seeking refuge after World War II. In 1952, the fledgling United Nations created the modern legal framework to provide protection for individuals fleeing violence in their native countries. Table 10.1 provides a summary description of the various categories allowable by these laws for entering into the United States. There are five categories of experiences people may face in their home countries that allow for application for asylum in the United States: persecution experienced because of one's race, religion, nationality, membership in a particular social group, or political opinion. If they have been persecuted, or fear being persecuted for one of those reasons, migrants may apply for asylum in the United States once they are within US borders. The Immigration and Nationality Act states that "Any alien who is physically present in the United States or who arrives in the United States (whether or not at a designated port of arrival and including an alien who is brought to the United States after having been interdicted in international or United States waters), irrespective of such alien's status, may apply for asylum" (8 U.S. Code Sec. 1158(a)(1)). In fiscal year 2017, the most recent year statistics are available, the United States received a total of 205,548 asylum applications. In the same year, 26,568 persons were granted asylum (US Department of Homeland Security Office of Immigration Statistics, 2019). The most common countries of origin of those granted asylum were China, El Salvador, Guatemala, and Honduras (Office of Immigration Statistics, March 2019).

Forensic assessments can make a significant difference in the success of these applications; up to 90% of cases featuring skilled assessments may be granted, compared to 30% without (Physicians for Human Rights, n.d.).

EOIR is the immigration court, where removal proceedings take place. UACs may apply for asylum to the USCIS and proceed via interview with an asylum officer unless they are in active removal proceedings and have not yet filed their form (I-589), in which case they apply to the immigration court and the immigration judge decides whether the immigration court or the USCIS has jurisdiction over it. This is very consequential, as the asylum officer (AO) interviews are not adversarial but the court proceedings are.

Table 10.1 Key definitions in modern asylum law

Migrant	A person who has temporarily or permanently crossed an international border, is no longer residing in his or her country of origin or habitual residence, and is not recognized as a refugee. The term includes asylum seekers. (Congressional Research Services).
Unaccompanied alien child ("UAC")	The United States' term for a migrant under the age of 18 who arrives at the U.S. border alone, or whom the United States separates from their family at the U.S. border. [6 U.S.C. Sec. 279(g)(2)].
Refugee	A person who is unable or unwilling to return to his or her country of nationality because of persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion. Persons may apply to the United Nations for refugee status from outside the United States. [8 U.S.C. Sec. 1101(a)(42)(A)].
Asylum	Migrants applying for asylum must prove that they are refugees under the above definition. Migrants may only apply for asylum from within the United States and may apply whether or not they have legal status. [8 U.S.C. Sec. 1158(a)(1), (b)(1)(A)].
Removal	A process authorized by the Immigration and Nationality Act (INA) that denies entry to migrants or seeks to remove migrants who lack legal status from the interior of the United States. (Congressional Research Services; 8 U.S.C. Sec. 1231).
Affirmative application for asylum	An application for asylum filed within 1 year of arrival to the United States (there are some exceptions that extend the window). Applicants file Form I-589, Application for Asylum and for the Withholding of Removal, with the United States Citizenship and Immigration Services (USCIS). [8 U.S.C. Sec. 1158(a)(1)].
Defensive application for asylum	A defensive application for asylum happens when migrants request asylum as a defense against removal from the United States. This process takes place through the Executive Office for Immigration Review (EOIR) because that is where removal proceedings take place.
EOIR (Executive Office for Immigration Review)	This agency, a part of the Department of Justice, adjudicates all immigration cases in the United States through the immigration courts, presided over by Immigration Judges or IJs.
USCIS (U.S. Customs and Immigration Service)	This agency, a part of the Department of Homeland Security, processes immigration and naturalization applications. It hears and decides the asylum cases of most unaccompanied migrant children.

How the Affirmative Asylum Process Works for Adults

Migrants who arrive at the border, whether they present themselves at a Port of Entry or are apprehended by or present themselves to a Border Patrol agent within the United States, may claim asylum by following these basic steps (Congressional Research Services, 2019):

1. Notify the agent or officer of the intent to apply for asylum.
2. Undergo an interview with a USCIS asylum officer to determine whether the migrant has a credible fear of persecution.

3. If the migrant shows a "substantial and realistic possibility of success on the merits," they will be placed in removal proceedings and may pursue an application for asylum and withholding of removal as part of those proceedings.
4. The migrant must then show a "well-founded" fear of persecution to qualify for asylum. This fear must be demonstrated during an interview with an Asylum Officer (AO).
5. If the AO denies the application, the migrant may appeal to the Immigration Court and continue to appeal to the federal appeals court and the US Supreme Court.
6. Accompanied children are generally treated the same way as noncitizen adults and can be subjected to expedited or formal removal proceedings.

How the Asylum Process Works for Unaccompanied Children ("UACs")

The asylum process is very different for migrants who are unaccompanied children or "UACs" (Congressional Research Services, 2019). Below are the steps that guide this process:

1. If the Department of Homeland Security determines that a migrant is a UAC, they must transfer the child to the custody of the Office of Refugee Resettlement ("ORR"), an agency of the Department of Health and Human Services, within 72 h.
2. ORR must then place the UAC "in the least restrictive setting that is in the best interest of the child." Children are generally released to individual sponsors who are parents or close relatives within 60 days.
3. The one-year restriction on asylum applications does not apply to UACs. USCIS officers have initial jurisdiction over all UAC asylum applications, whether they are affirmative or defensive.
4. If the AO rejects the UAC's application, the UAC may appeal to the Immigration Court.

DHS has developed an information form for UACs; Fig. 10.1 provides a picture of its first paragraphs.

It is the immigration judge who decides if a UAC case become adversarial (sent to the immigration court for possible deportation) or not adversarial (sent to the Customs and Immigration Service for asylum claims). This decision has significant impact on how long a child's case will take to be resolved. For those applying for asylum, cases can be completed in 6 months (experienced as a very long time in the mind of an unaccompanied 14-year-old child) or can take years (Cepla, 2019). For those whose cases are sent to immigration court, the situation is dire, with a current median of over 2 years (see Table 10.2). In general, UAC guidelines indicate that they should not be held in detention (before being sent to an "appropriate shelter") for more than 72 h (Hauslohner, June 25, 2019). The sheer number of cases (see Table 10.3) has flooded a system so that the 72 h in detention has become weeks if not months (Executive Office for Immigration Review Adjudication Statistics, April 23, 2019).

INSTRUCTION SHEET FOR AN UNACCOMPANIED ALIEN CHILD IN IMMIGRATION COURT TO SUBMIT A FORM I-589 ASYLUM APPLICATION TO U.S. CITIZENSHIP AND IMMIGRATION SERVICES (USCIS)

You are receiving these instructions from a representative of Immigration and Customs Enforcement (ICE) because you appear to be an unaccompanied alien child (UAC), you are in Immigration Court, and you have indicated your intent to file a Form I-589, Application for Asylum and for Withholding of Removal. This form is not evidence of a previous UAC status determination.

Attachments to this UAC Instruction Sheet:
In addition to these instructions, this packet contains a blank Form I-589 asylum application, Instructions for the Form I-589, and a USCIS Form AR-11 (Alien's Change of Address Card). You may request the List of Free Legal Service Providers from the immigration court.

Fig. 10.1 Information form for UACs (partial)

Table 10.2 Median unaccompanied alien child (UAC) case completion and case pending time

Fiscal year	Current median UAC pending time (Days)	FY 19 median UAC completion time (days)
2019 (second quarter)	725	586

https://www.justice.gov/eoir/page/file/1061551/download

Living in limbo regarding possible deportation or waiting for a decision on an asylum application is difficult for the most resilient adult (Silove, Sinnerbrink, Field & Manicavasagar, 1999). For unaccompanied children, it seems incomprehensibly stressful. Psychologically, it is only marginally less stressful to be "on hold" awaiting decision about being granted asylum as compared to awaiting a decision about deportation. Both instances involve children being held in detainment centers (sometimes in tents, or jail-like conditions) before being shuttled to another facility where they have to wait determination of their fate.

Toxic Stress, Child Traumatic Stress, and Adverse Childhood Experiences (ACEs)

The popular conception of illness subsequent to psychological trauma usually tends toward posttraumatic stress disorder, or PTSD, an illness initially associated with war veterans (Crocq & Crocq, 2000). In reality, stress illness afflicts many people, including children, with serious impacts that can manifest in both the short and the long term (Bucci, Marques, Oh, & Harris, 2016). Complicating the picture is the

Table 10.3 Pending unaccompanied alien child (UAC) cases

Fiscal year	Pending
2008	3201
2009	3284
2010	4025
2011	4372
2012	5581
2013	6907
2014	18,943
2015	31,597
2016	51,437
2017	70,221
2018	83,852
2019 (second quarter)	89,632

https://www.justice.gov/eoir/page/file/1060871/download

fact that for many refugees, arrival in a new country does not mean an end to stress; there are many stressful components to the adjustment process, even if the application for asylum is successful. Although children in general are particularly vulnerable to toxic and traumatic stress and their consequences (Center on the Developing Child, n.d.), this is especially true of migrant children who seek asylum. Part of the reason for that is related to the challenges associated with the uncertainty surrounding the whole migration experience.

Definitions

Toxic Stress

The human body has natural processes enabling it to adapt to and cope with stress (Center on the Developing Child, n.d.). In and of itself, stress is not negative; in fact, a human system must be stressed in order to develop and grow, and many positive life events are also stressful. In its simplest and basic form, it is a condition that propels the individual to respond to a demand from the environment. As the person finds ways to respond in an attempt to minimize possible resulting distress created by the demands, the person is able to grow and develop strategies that are then organized and become part of the person's emotional and behavioral repertoire. Human stress responses are organized as positive, negative or toxic, and tolerable (Center on the Developing Child, n.d.). For example, positive stress encourages a child's body and mind to respond with development and growth. Tolerable stress, although does not require an urgent response, still serves an important intermediary function in understanding a situation that can also become toxic or harmless. Toxic stress, unless buffered, is dangerous to short- and long-term health (Bucci et al., 2016).

These labels do not refer to the stressful event itself, but rather to the human body's response to the event. What is stressful for one person may not be stressful for another. Long-term adverse effects of stress on an individual are not easy to determine as a simple cause-and-effect trajectory because they are influenced by many factors, including genetics, the presence of supportive relationships, and the nature of the stressful experience, including how long it lasts, when it takes place, how intense it is, and where, when, how, and why it happens (Bucci et al., 2016).

Child maltreatment is especially damaging to "executive function," which is responsible for complex reasoning and evaluation of consequences. The negative adaptations characteristic of child abuse and maltreatment victims are a "natural biological reaction to early threats on a person's system" (Cellini, 2004, p. 1), and these abnormal patterns in the brain frequently cause problems with "self-control, memory, emotion, judgement, consequential thinking, and moral reasoning" (p. 3). These aspects of cognition are especially at risk in abused children because damage to the prefrontal cortex is especially prominent in cases of abuse and neglect (p. 1). Since the prefrontal cortex is the "seat of moral development and judgment," damage to this area is likely to affect the child's function in activities requiring judgment and consequential thinking (p. 5). Damage that occurs in childhood and adolescence is particularly significant because that is the period of greatest sensitivity and plasticity for the prefrontal cortex that "extend[s] well into the adolescent period" (Petersen, Joseph, & Feit, 2014, p. 120), and until the mid-20s, according to some findings (Johnson, Blum & Giedd, 2009; Sowell, Thompson, Tessner & Toga, 2001).

The skill set under "executive functioning" is quite extensive and includes higher-order cognitive processes like "holding information in working memory, inhibiting impulses, planning, sustaining attention amid distraction, and flexibly shifting attention to achieve goals" (Petersen et al., 2014, p. 128). It also governs the ability to stay on task and to make complicated decisions with long-term consequences. Maltreated children are at risk for deficits in these essential functions, which are often evidenced by intellectual impairment, decreased IQ, difficulty controlling impulses, and an inability to maintain attention (Petersen et al., 2014).

The reason why toxic stress is especially impactful to children is because "a maladaptive response to stress during childhood…plays an important role in the pathway from early adversity to disease" (Bucci et al., 2016, p. 404). As the American Academy of Pediatrics recently noted in responding to newly developing immigration policies, "fear and stress, particularly prolonged exposure to serious stress – known as toxic stress – can harm the developing brain and negatively impact short- and long-term health" (Stein, 2017). When normal stress becomes chronic and pronounced, it can cause a "dysregulation of the physiologic stress response [that] plays a critical role in the development of negative health outcomes" (Bucci et al., 2016, p. 407). If a child is exposed to severe and/or prolonged trauma without adequate buffering factors, the trauma "can cause lasting changes to the stress response regulation" (p. 415). If the body loses the ability to return to homeostasis, instead remaining in perpetual hyperarousal, chronic stress can damage children's bodies and brains.

Child Traumatic Stress

About one in every four children will experience a traumatic event before they turn 16 (National Child Traumatic Stress Network, 2005). Child traumatic stress is a term that references toxic stress but is specific to the experience of children. Child traumatic stress refers to the experience of those children who are exposed to one or more traumatic events (an intense event that threatens or causes harm to his or her emotional and physical well-being) and experience persistent symptoms that affect their lives after the event has ended or abated (National Child Traumatic Stress Network, 2005). Some experts characterize traumatic events by a subjective feeling that one's life or the lives of one's primary caretakers are threatened. Events experienced as traumatic can span a broad range, from exposure to a natural disaster to events like war or terrorism to personal experiences like separation from a parent, being the victim of violence, serious injury, abuse, or medical procedures.

Children experience specific symptoms when they are having a traumatic experience, including increased heart rate, sweating, agitation, hyper-alertness and vigilance, "butterflies," and emotional upset (National Child Traumatic Stress Network, 2005). As with positive and tolerable stress, if these feelings are transitory, they do little or no harm (Understanding the effects of maltreatment on brain development, 2015). In the end, child traumatic stress can significantly and negatively impact short- and long-term behavioral, emotional, mental, and physical health, especially when a child's difficult experiences are not buffered by a consistent, safe, close relationship with an adult caregiver.

Adverse Childhood Experiences (ACEs)

Research into links between childhood stress and adult health made great strides with the publication of the Adverse Childhood Experiences, (ACEs) study in 1997 (Adverse Childhood Experiences, 2019). There were ten original ACEs categories to assess traumatic experience in children: emotional, physical, and sexual abuse; mother treated violently; household substance abuse; mental illness in the household; parental separation or divorce; incarcerated household member; and emotional and physical neglect. In the original study, 15.2% of women and 9.2% of men reported four or more ACEs before the age of 18 (total percent: 12.5%). As the number of ACEs rises, the risk of disease increases, with four or more ACEs as a critical inflection point for increased risk. Buffington, Dierkhising, and Marsh (2010) explain that exposure to complex trauma is cumulative and highly likely to derail a child's development.

These researchers found that adults who had experienced these ten specific types of childhood adversity were at significantly higher risk of a range of adult diseases, including cancer, chronic obstructive pulmonary disease, depression, obesity, suicide attempts, and others (Adverse Childhood Experiences, 2019). Since then, researchers sought to "assess the impact of numerous, interrelated ACEs on a wide variety of health behaviors and outcomes" (Anda et al., 2006, p. 176). They found—

as others have found in allied studies—that "the effects of multiple forms of abuse and related stressors are cumulative and affect a wide variety of outcomes" (Anda et al., 2006, p. 176).

Further research on the impact of ACEs on children has demonstrated that ACEs have short-term as well as long-term impact. Especially in cases of long-term maltreatment and trauma, the impacts of adverse experiences are not isolated, and children do not simply "get over" them (Cellini, 2004, p. 3). Rather, a "dose–response" effect causes multiple forms and instances of abuse to amplify the negative impact that each can have on a child's mental and physical health (Anda et al., 2006, pp. 174, 176).

As we stated earlier, sustained activation of the stress response system without a return to homeostasis can do significant damage to a developing child. Specifically, there is significant evidence that severe child maltreatment (physical, sexual, or emotional abuse as well as neglect) alters brain development and damages cognition, emotional regulation, and moral reasoning (National Institute of Justice, 2016). The scientific research demonstrates that it is not enough to consider particular impacts of child maltreatment in isolation. Rather, different types of early adversity can interact with and reinforce each other in powerfully damaging ways (Finkelhor, Turner, Hamby & Omrod, 2011) that can render traumatized children even *less* capable than developmentally normal children of understanding their rights and speaking for themselves (MacArthur Foundation, 2015).

In part, child traumatic stress has such a significant impact because the brains of children are highly plastic and develop in response to both positive and negative external stimuli. Centuries of evolution have trained the brain to develop in response to its environment, and the most important feature of neurons in the brain is that they "change in response to external signals" (Perry, Pollard, Blakely, Baker, & Vigilante, 1995, p. 274). But when an infant or child is maltreated, the brain "will adapt to a negative environment just as readily as it will adapt to a positive one" (Child Information Gateway, 2015). Such adaptations "can cause permanent, lifelong neurological damage and have a significant negative impact on the developing brain" (Cellini, 2004, p. 10). So while exposure to good experiences benefits the brain, exposure to bad experiences—like severe maltreatment and abuse—can damage the brain (Petersen, et al., 2014).

Although there is strong evidence that severe maltreatment and complex trauma can, and often do, cause temporary or permanent physical brain damage, there is no research on the impact of ACEs on unaccompanied migrant children in this context (Estefan, Ports, & Hipp, 2017, p. 5). There is, however, abundant research on the impact of trauma on refugee children (Gadeberg, Montgomery, Frederiksen, & Norredam, 2017) that can still be helpful to forensic professionals to consider when assessing this population. Given the consistency of evidence demonstrating the link between child traumatic stress and adult health outcomes from studies spanning many countries, professionals working with these children within the asylum system can apply scientific knowledge about child traumatic stress to their practice in order to better serve their clients and the process.

Clinical evaluation of detained mothers and children performed by a team of mental and behavioral health specialists at the South Texas Family Residential Center in Dilley, Texas; at the Greyhound Bus Station in San Antonio; and at Hospitality House, a shelter in San Antonio, from July 22 to July 24, 2015, revealed symptoms indicating widespread trauma experiences before and during detention. Quantitative and qualitative data collection methods were used, including refugee narratives—much like those that an asylum attorney would collect—providing details of conditions in the refugees' native countries, including community violence and violence against children, and conditions experienced during the journey from home (O'Connor, Thomas-Duckwitz & Nuñez-Mchiri, 2015).

Application: What Does It Mean for Juvenile Asylum Clients?

Juvenile asylum applicants from war- and violence-torn countries run a high risk of complex trauma (repeated chronic traumatic events) from events they experienced in their home countries, on the often-perilous journey to the United States, and upon arrival, including apprehension and detention in centers not built for people their age (Fazel & Stein, 2003). The term "complex trauma" references a child's exposure to multiple traumatic events and the "wide-ranging, long-term effects of this exposure," including impacts that can interfere with participation in legal process, such as dissociation and damage to cognition. The immigration processing system, including credible fear interviews, court hearings, and other proceedings, can retraumatize them and are also not designed for people their age. Cognitively, behaviorally, and emotionally, these vulnerable clients can be at a significant disadvantage when it comes to their eligibility to remain in the United States. But, as the American Academy of Pediatrics has noted, appropriate care can contribute to winning credible asylum cases—an important factor for forensic professionals to bear in mind (Linton, Griffin & Shapiro, 2017).

Dangers Faced in the Journey, Especially by Minors Traveling Alone

Many of the child asylum seekers arriving at our southern border from the Central American countries of El Salvador, Honduras, and Guatemala encounter many dangers and risks on the journey from home. Many dangers are exacerbated at the hands of both criminals and authorities when children travel alone. They are likely to be victims of kidnapping, be held for ransom, and be victims of sexual violence, particularly at "crossing points" during the migration to our border (Estefan et al., 2017, p. 4). Other unaccompanied children have reported suffering violence and exploitation at the hands of immigration authorities at multiple national borders along the way (Estefan et al., 2017).

Toxic Stress Risk Factors for Migrant and Refugee Children

Conditions Causing Children and Their Families to Flee Their Home Countries

Most people are heavily impacted by witnessing and experiencing violence and terrorism, but children are uniquely vulnerable to damage from trauma that is highly impactful and difficult to heal. Children are "more vulnerable than adults to the traumatic events, chaos, and disruptions experienced in disasters," and the results can be "serious and persistent even for preschool children" (Williams, 2007, p. 264). Children experience a wide range of feelings and exhibit a broad variety of behaviors in response to war and terrorism. While terrorism may not involve mass casualties, it is a form of mass violence "because of the destructive psychological effects on large numbers of people, including children" (p. 266). Examples include loneliness, disrupted sleep and nightmares, anger, tantrums, reenactment or reliving of distressing experiences, fear of being alone, fear of death, emotional withdrawal, somatic symptoms, and truncated moral development (Williams, 2007).

Exposure to violence is likely the strongest contributor to the "risk of subsequent psychological disturbances" among displaced and refugee children (Reed, Fazel, Jones, Panter-Brick, & Stein, 2012, p. 250). Direct exposure to threat, the cumulative number of violent events, and the duration of exposure "all consistently increase[] the odds of mental health symptoms," whether a child has been the victim of actual or threatened violence or witnessed violence to other people (Reed et al., 2012, p. 257). Thus, the simple fact of trauma exposure does not tell the whole story; both "dose" and co-occurrence of multiple traumas play a role in the damage done to children. Further, the stresses of war and political violence tend to co-occur with "forced displacement; traumatic loss; bereavement or separation; exposure to community violence; and exposure to domestic violence" (Betancourt et al., 2012, p. 682). These combined traumas compound the damage done to children in the midst of key developmental stages in their neurobiology. While the impacts of trauma can be limited to the short term, "negative developmental effects appear more likely if children experience repeated or repetitive 'process' trauma or live in unpredictable climates of fear" (Williams, 2007, p. 274). Posttraumatic stress disorder is more likely to affect children who have been a witness to or victim of violence, have been exposed to shelling or heavy combat, and have lost loved ones.

Many children and minors coming to the United States from El Salvador, Honduras, and Guatemala are trying to escape community and interpersonal violence that their governments are inadequate to prevent or remedy. In one study of unaccompanied minors by the United Nations High Commission for Refugees, children aged 12–17 most often reported exposure to community violence, organized crime, child maltreatment, and interpersonal violence in their homes, and these children most often reported violence as a "primary driver of migration" (Estefan, et al., 2017, p. 3). Data confirm their fears: UNICEF reports that as of 2014, El Salvador and Guatemala had the highest and second-highest rates of homicide among

children aged 0–19 in the world. Honduras is one of the most violent countries in the world due to gang violence, and in 2012 it had the highest homicide rate in the world (Estefan et al., 2017).

Exposure to intrapersonal and community violence is a significant and known factor for child traumatic stress and attendant health impacts, including executive and cognitive function harm, damage to concentration, anxiety, depression, and attention-based disorders. The very harms that refugee children and youth are attempting to flee can damage their ability to later present a cogent and convincing case to the American immigration system.

Impact of Separating Children from Their Parents

According to Jack Shonkoff from Harvard's Center on the Developing Child, "forcibly separating children from their parents is like setting a house on fire. Prolonging that separation is like preventing the first responders from doing their job" (Committee on Energy and Commerce Subcommittee on Oversight and Investigations, February 7, 2019, p. 4). And yet, in 2017 and 2018, United States immigration officials separated untold thousands (the United States "has faced challenges in identifying separated children" US Department of Health & Human Services, 2019) of children from their parents at the border. Parents were taken into custody, so they could be prosecuted for illegal entry and potentially deported. Regardless of age, children—some as young as infants—were taken into custody as "unaccompanied alien children" by the Department of Homeland Security and transferred to the custody of the Office of Refugee Resettlement, part of Health and Human Services. From there, some were released to sponsors within the United States; some were reunited with their parents after a period of time sometimes spanning months; and some remained in detention for an indefinite period of time.

Juvenile asylum seekers who have been separated from their parents are at extremely high risk of trauma, putting them at greatly increased risk of lifelong developmental consequences including generalized anxiety, developmental delay, and chronic physical illness. Separation from parents is most likely to lead to depression, and enforced separation from parents increases the likelihood of poor health in old age by a factor of 3.6. According to the President of the American Academy of Pediatrics, "highly stressful experiences, like family separation, can cause irreparable harm, disrupting a child's brain architecture and affecting his or her short- and long-term health. This type of prolonged exposure to serious stress—known as toxic stress—can carry lifelong consequences for children" (Kraft, 2018). Similarly, the American Psychological Association stated that "the longer that children and parents are separated, the greater the reported symptoms of anxiety and depression for the children. Negative outcomes for children include psychological distress, academic difficulties and disruptions in their development" (Daniel, 2018). The toxic stress referenced here can disrupt developing brain structures that regulate hormone activity in response to environmental stimuli, causing long-term emotional

and behavioral pathology and stress-related disease. These effects of separation on children's psychological and emotional well-being often persist for a lifetime. Traumatic separation can also interfere with the development of later healthy attachments and may negatively affect children's capacity to sustain close interpersonal relationships in their lives. Traumatic separation can create general low self-esteem and distrust of others.

Fear of separation can also contribute to trauma. A Board of Immigration Appeals Accredited Representative employed at the family detention center in Dilley, Texas reported the impact of threatened separation in a 2015 declaration. At the ICE holding facilities, women and children report being forcibly separated from other family members without explanation; in the meantime, they report, they are constantly threatened with deportation and loss of their children if they do not comply with immigration officials' and deportation officers' orders (O'Connor et al. 2015). The "terror and existential fear" reported by these women in response to the threat of separation from their children is not only toxic to mothers, but to their children as well.

Conditions in Detention that Harm Children's Health

The current standards of care for migrant children in US custody are minimal, and experts have recognized that they do not meet best practices standards set by the medical profession. As a result, children held in detention are at high risk of experiencing trauma and compounding the stressful conditions they may have previously experienced.

When minors are apprehended at the border, whether as part of a family unit or not, they are held in Customs and Border Patrol processing centers (see Table 10.1). Federal law requires that unaccompanied children be moved to Office of Refugee Resettlement (ORR) custody within 72 h (United States Government Accountability Office, 2015). Dr. Linton of the American Academy of Pediatrics (AAP) testified to "egregious conditions in many of the centers, including lack of bedding (e.g., sleeping on cement floors), open toilets, no bathing facilities, constant light exposure, confiscation of belongings, insufficient food and water, and lack of legal counsel, and a history of extremely cold temperatures" (Oversight of the Customs and Border Protection's response to the smuggling of persons at the Southern border. Committee on the Judiciary, 2019, p. 2). There are further reports of children held longer than 72 h, denied medical care, separated from their families, and maltreated (Linton et al., 2017). In 2015, a Board of Immigration Appeals Accredited Representative working at the South Texas Residential Family Center in Dilley, Texas filed a sworn declaration recording his client's descriptions of the conditions of confinement in these processing centers. The declaration states that when received in Dilley from ICE holding facilities, the vast majority of clients suffer from fevers, coughing, headaches, and fatigue. Clients report being held in either "iceboxes" or "kennels" while in ICE custody. "Iceboxes" or "hieleras" are "secure facilities that are held at

frigid indoor temperatures that shock the body of young children and their mothers into sickness"—without blankets or medical attention, and with only ham sandwiches to eat. "Kennels" are "warehouse-like facilities subdivided by wire fences, so crowded that some children must sleep while standing" (O'Connor et al., 2015).

Unaccompanied children go from CBP centers to ORR shelters. These shelters range in size, type, and level of security. In fiscal year 2018, the average length of stay in ORR facilities was 60 days ("Facts and Data," n.d.). Children who are with their family units either undergo expedited return to their country of origin or go to family residential centers or the family units are released into the community. Family residential centers are administered by Immigration and Customs Enforcement (ICE). In 2015, a federal court found that these centers violated a 1997 settlement agreement that required children to be held in the "least restrictive setting." The American Academy of Pediatrics notes that "despite this order, children continue to be detained, and even with shorter lengths of stay, some were still found to suffer traumatic effects" (Linton, et al., 2017, p. 5). Further, AAP found discrepancies between the standards ICE claims to follow and the actual conditions in the centers, including "inadequate or inappropriate immunizations, delayed medical care, inadequate education services, and limited mental health services" (p. 5).

The bare fact of detention does significant harm to children; "several studies of detained child migrants and asylum seekers have documented extensive mental health issues, including depression, anxiety, and post-traumatic stress disorder, and developmental delays for very young children" (Estefan et al., 2017, p. 4). As noted, the American Academy of Pediatrics has found that Department of Homeland Security detention facilities are categorically unsafe for children; further, the AAP has recognized the potential harm of detaining children in Office of Refugee Resettlement facilities, and has found that family detention centers run by ICE regularly keep children longer than legally permitted; it has called for "longitudinal evaluation of the health consequences of detention of immigrant children in the United States" (Linton, et al., 2017, p. 1). In January 2019, lawyers representing migrant children housed in ORR facilities as part of a decades-long class action suit notified the federal court and the Justice Department's Office of Immigration Litigation that more than a dozen of these facilities are operating without licenses and committing other violations of court orders as well (Kates, 2019).

Beyond the dangers inherent in the basic conditions of detention, migrant children face significant potential harm from other causes. One of the most important is forced administration of medication without parental consent or court order. While against the law, this practice has frequently taken place in detention centers, as documented in active litigation of a court case regarding detained migrant child welfare that has been ongoing for 34 years. In July 2018, the federal court ordered the federal government to stop administering psychotropic medication to children absent court order or parental consent (*Flores v. Sessions,* 2018). The court's order, while specific, applies only to the Shiloh Residential Treatment Center in Texas. As recently as October 2018, lawyers claimed that the government was still administering drugs to children without consent or court order, despite the court's July order (Morel, 2018).

The risk of sexual abuse of migrant children does not end once they reach US custody. Sexual abuse, whether by adults or fellow juvenile migrants, is another widespread danger in detention. According to Health and Human Services (HHS) records, thousands of unaccompanied children have reported sexual abuse and sexual harassment while in detention centers—at least 1000 reports to HHS each year since 2015 (Deutch, 2019). Allegations ranged from watching children shower to fondling, kissing, and raping them. Despite the frequency of reporting to HHS, though, in each year, far fewer allegations were reported out to the Department of Justice (DOJ)—in each of the last two fiscal years, only 49 reports were made to DOJ (Deutch, 2019). From March 2018 to July 2018, the period during which the family separation policy resulted in mass separations, ORR received a record-high 859 complaints, 342 of which were referred to DOJ (Haag, 2019). And according to data from the Office of the Inspector General of the Department of Homeland Security and ICE itself, thousands of migrants have claimed sexual abuse while in ICE custody ("While in ICE custody, thousands of migrants reported sexual abuse," 2018). These reports are not limited to children, but they do reveal that the risk of sexual abuse is present in both DHS and HHS facilities.

The Role of the Forensic Psychology Expert

While the US asylum process is not well understood by citizens or immigrants alike (and is frequently modified), attorneys are not currently provided in these cases (and there is nothing to suggest that this will be changing anytime soon). When an asylum seeker is fortunate enough to have an attorney (often through a not-for-profit legal agency), it is not certain that a forensic psychologist, psychiatrist, or social worker will be provided and/or available. Some forensic experts will take pro bono or "low bono" (very low pay) cases because there are no or few funds budgeted for these services and personal or professional ethics motivate their engagement. When there are some financial resources earmarked for these much-needed experts, they seldom cover usual fees for forensic assessments. Additionally, an assessment is only the beginning. Collateral information and records must be reviewed, literature research is often needed, reports must be written and edited, and, when needed, the expert will have to testify. One barrier for some experts is the amount of time and energy required for this type of work. Another barrier is the form of testimony. While some courts will allow telephone testimony, it is much less effective than an in-person hearing. However, with the backlog of cases, hearings are frequently held months (or longer) after the assessment is completed and cases are frequently adjourned. Many experts have attended immigration hearings multiple times on the same case before actually testifying (adding to the ripple effect of the backlog and delay of completion of cases). Country experts (so-called because they are experts in the country where the seeker came from and may be returned to) are more readily available, but are limited in that they cannot speak to the specific physical and mental health needs of the applicant. Having both is important for conveying, as much

as possible, the effects of the applicant remaining in their home country or being sent back to their home country. In addition, there is the often-present need for an interpreter, even when the client speaks some English. Many psychological and legal nuances are lost on clients who have a low level of English proficiency needed for their daily life. For children, and many adults as well, the level of English skills is important. While testing a client to get a formal reading level is not always feasible, experts can evaluate the reading level of the documents the client is expected to comprehend. Finding competent experts for adults is daunting, and for children it is almost impossible. Inasmuch as every decision has consequences, these legal judgments come with psycho-legal sequalae, often traumatic in nature, no matter the legal outcome. Having an expert not only increases the chances of an appropriate outcome, but in many cases can help mitigate re-traumatization from the process.

Conclusion

Migrant children fleeing violence and danger in their countries of origin experience a multitude of traumas before departing from their homes, on their way to the United States, and in detention once arrived. As people whose brains and bodies are uniquely sensitive to toxic stress and complex trauma, children applying for asylum face special difficulties. Yet most of these children do not have access to a forensic expert who can examine them and provide the asylum officer or immigration court with an affidavit in support of the asylum application that lays out the evidence of trauma history and expert opinion on its impacts. Interviewing and assessing children for a history of trauma is not straightforward. Specific techniques should be followed to ensure that the child both feels safe and is not unintentionally prompted or encouraged to report trauma or trauma symptoms (Aldridge & Wood, 1998; Cronch, Viljoen, & Hansen, 2005; Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007; Lyon, 2014; Wilson & Powell, 2001). Experts are most helpful in American immigration process when they provide sufficient information about the sequelae of toxic stress in these asylum-seeking individuals, including the neurophysiological, biological, and psychological range of experiences that can produce it. The comprehensiveness of this forensic assessment is likely to offer the best opportunity for success to asylum seekers.

In light of the extensive research on the effect of ACEs and toxic stress on children seeking asylum, it is critical to introduce this evidence in asylum hearings. There are several ways to increase awareness of the critical role of toxic stress to the attention of immigration courts. First, the use of forensic experts providing high-quality assessments can significantly boost an applicant's chances at being granted asylum. For example, 90% of outcomes in cases involving participation of a volunteer trained in the Physicians for Human Rights Asylum Program are positive, relative to a national average of barely 30%. Research has outlined the most important elements of a successful assessment, including documentation of the evaluation process and all sources of evidence; corroborative evidence unique to the applicant;

description of the psychological consequences of persecution, including the impact of PTSD on the applicant's memory; description and documentation of physical evidence, where possible; and provision of new evidence that supplements prior accounts (Scruggs, Guetterman, Meyer, VanArtsdalen, & Heisler, 2016). Significant training resources ranging from online webinars to multiday workshops are available to assist forensic experts in preparing for this work, including the extensive program run by Physicians for Human Rights, which includes access to volunteer opportunities.

Questions/Activities for Further Exploration

1. Why are forensic examinations of applicants so important to the asylum process? At what stage of the proceedings can an assessment be done, and why might the timing matter?
2. Why are unaccompanied children uniquely vulnerable to the chaos and stress of migration and asylum proceedings? What are some differences between the way a forensic professional would assess an adult and an unaccompanied child?
3. Describe the impact of trauma and toxic stress on cognition and memory. Why is this important to understand in the case of asylum seekers?
4. You are a forensic professional volunteering in an asylum case. Your client is an unaccompanied child who fled El Salvador and passed through Guatemala and Mexico on the way to the United States. The child traveled with a coyote—a person paid to get groups of people to the United States border—and a group of people of a range of ages.

   (a) What are the possible red flags you see?
   (b) What considerations are most important in examining the child?
   (c) How would you proceed? Explain, step-by-step.

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