

# Developmental Effects of Parent–Child Separation

Anne Bentley Waddoups,<sup>1</sup> Hirokazu Yoshikawa,<sup>2</sup>  
and Kendra Strouf<sup>1</sup>

<sup>1</sup>Global TIES for Children, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

<sup>2</sup>Department of Applied Psychology, New York University, New York, NY 10003, USA;  
email: hiro.yoshikawa@nyu.edu

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## Abstract

Parent–child separation occurs for many reasons, both involuntary and voluntary. We review the effects on children and youth of parent–child separation due to several of the most common reasons that are responsible for the growth in this family circumstance worldwide. These include early institutionalization; war, persecution, and conflict; separation during asylum; trafficking; conscription into armed conflict; and being left behind when parents migrate for economic or other reasons. Overall, the effects of parent–child separation are consistently negative on children’s social-emotional development, well-being, and mental health. They are more severe when the separation is prolonged or accompanied by other forms of deprivation or victimization. Mitigating and protective factors include earlier stable family placement in the case of early institutionalization, parent–child communication and parenting quality, and community support in the host community. We conclude with an evaluation of group, school-based, and community-based interventions for children and youth affected by parent–child separation.

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## INTRODUCTION

The UN High Commissioner for Refugees (UNHCR) estimated that in 2017 there were 68.5 million individuals forcibly displaced around the world due to conflict, war, or disaster, a record number and three million more than in the year before. More than half of these individuals were children under the age of 18 (UNHCR 2019). The total was estimated to include over 25 million forced to flee across country borders and over 40 million displaced internally, within country borders. Of the 25 million refugees, the largest sending countries were Syria, Afghanistan, South Sudan, Myanmar, and Somalia, while the host countries with the largest numbers of refugees were Turkey, Pakistan, Uganda, Lebanon, and Iran.

Beyond forced displacement, international migration is also at an all-time high, with 258 million people estimated to live in a country not of their birth in 2017, compared to 220 million in 2010 and 173 million in 2000 (UN Gen. Assem. 2018). The five countries hosting the largest number of immigrants were (in descending order) the United States, Saudi Arabia, Germany, the Russian Federation, and the United Kingdom. India, Mexico, Russia, China, and Bangladesh were the sending countries with the largest number of emigrants.

Beyond international migration, parent-child separation also occurs in internal migration, for example, when children are left behind when parents migrate (usually in the context of economically motivated migration, e.g., from rural to urban areas for work). Between 33% and 40% of children in rural areas of China, Ecuador, and South Africa have been estimated to be left behind after parental migration. Studies in these contexts consistently show lower levels of positive development in health, nutrition, mental health, and school adjustment among children of migrant parents when compared to children of nonmigrant parents of similar socioeconomic status (Fellmeth et al. 2018).

Within these historic numbers related to displacement and international and internal migration lie countless stories of child separation from homes, communities, and relatives. What are the consequences of these forms of separation? This article focuses on one particularly consequential form of separation due to migration and displacement: parent-child separation. Research on

attachment and social and emotional development, as well as in the field of developmental psychopathology, has been profoundly shaped by studies of parent–child separation or parental loss. Thus, this phenomenon with very recent and specific policy context has a long history in developmental science.

This article reviews the literature on child development in the context of separation from parents, whether due to early institutionalization, forced displacement, or migration. We consider three principal questions: (a) What are the effects of parent–child separation in different contexts and precipitating circumstances? (b) What factors (individual or contextual) may mitigate the effects of different forms of parent–child separation? (c) What kinds of intervention have been shown to mitigate these effects?

We define parent–child separation as longer than routine daily or even weekly separations associated with parental work or other factors. We include research on contexts of displacement both within and across borders due to armed conflict, war, or disaster. We also include research on contexts of parent–child separation due to migration of one generation but not the other (i.e., situations in which children migrate without their parents, as well as those in which parents migrate without their children). We place less emphasis on studies of parent–child separation due to parental death or loss more generally or due to family violence or child maltreatment. That research has been reviewed elsewhere (e.g., Sandler et al. 2010).

The particular impacts of parent–child separation often grow from the circumstances that precipitate the separation in the first place. Separation occurs for many reasons, both involuntary and volitional, including persecution, conflict, war, disaster, and search for work and other opportunities not available in a home country. The following sections address the impacts of these contexts and the factors that may mitigate the effects of that particular contextual experience of parent–child separation.

## PARENT–CHILD SEPARATIONS AND MITIGATING FACTORS

Experiencing persecution, conflict, war, or disaster in childhood has well-documented negative impacts on children’s health, learning, well-being, and educational progress. In the face of these challenges, parents can provide a buffering presence that mitigates the severity of these impacts on their children, providing both physical protection and emotional security (Almqvist & Broberg 1999, Dubow et al. 2012, Reed et al. 2012, Werner 1990). However, in the midst of navigating these dire situations, parents and children may become separated through death, detention, conscription, or flight (Mann 2004). Separation of children and parents in these contexts both removes this important source of mitigating adversity and compounds the stress and trauma that a child experiences, amounting to a potentially devastating developmental and psychological impact (Garbarino & Kostelny 1996, Mann 2004).

Developmental study of the mechanisms that may explain why parent–child separation has negative impacts on children emerged before, during, and after World War II through work by the psychoanalysts and scholars Anna Freud, John Bowlby, Mary Ainsworth, and others. Many children were evacuated from their homes and parents to locations considered more protected from the effects of war. Psychologists Anna Freud and Dorothy Burlingame (1943) documented the experiences of evacuated children to better understand the consequences of physical separation from their mothers and learned that in many cases separation was even more traumatic for children than exposure to the stressors associated with war and frequent air raids. Out of the clinical and empirical work they conducted on children separated from parents through evacuation, parental loss, or migration, major theories of child development emerged. For example, attachment theory developed out of this research to describe the early process of how infants and toddlers form

attachments with their mothers, how sensitive and responsive parenting was key to the formation of secure attachments, and how this process can be disrupted in situations of prolonged (greater than 6 months) separations from mothers before the age of 5, with long-term consequences for deficits in social relationships (e.g., Bowlby 1973). Disruptions in attachment were therefore conceptualized as the key mechanism linking parent–child separation to emotional and behavioral problems. This theory further evolved with the development of assessments such as Mary Ainsworth’s (1967) classic strange situation procedure and hundreds of studies that have led to continued scholarship on the consequences of internalized models of social relationships developed during the first years of life.

Early research on attachment also included the seeds of the concept of resilience. Secure attachment, for example, was found to protect against the vulnerabilities posed by institutionalization, early deprivation such as household income poverty, and other risks experienced during childhood. Classic longitudinal studies of risk, resilience, and the concept of turning points that alter a developmental trajectory became a central basis for the field of developmental psychopathology (Cicchetti 1990; Garmezy & Rutter 1983; Rutter 1987, 1996; Rutter & Rutter 1993). Further study of the effects of early institutionalization on later development documented the role of a larger set of contextual and individual mechanisms, including exposure to peers with problem behaviors, poverty-related factors, and physiological factors such as stress reactivity in children and their caregivers (Gunnar 2001, Rutter 1996).

The available longitudinal studies show clearly that parent–child separations, whether voluntary on the part of parents or involuntary and forced in nature, have negative consequences across cognitive, social-emotional, and mental health domains for children and youth, with evidence of disruptions in adult–child relationships, peer relationships, and physiological processes as mechanisms. Beyond documenting these effects, in this review, we focus on mitigating factors that may lessen the negative effects of parent–child separation.

Garmezy & Rutter’s (1983) and others’ landmark work on resilience and turning points placed mitigating factors in a developmental context. Turning points are experiences in a person’s life that are characterized by two features: “they cause marked changes in context or circumstances, and they create or close off opportunities for achievement, social networks and relationships” (Rutter 1996, p. 613). For example, receiving poor institutional care subsequent to parent–child separation served as a turning point for children adopted in the United Kingdom from orphanages in Romania, a trajectory-shifting factor that negatively impacted the children’s developmental outcomes trajectory (Garmezy & Rutter 1983; Rutter 1987, 1996; Rutter & Rutter 1993). Turning points that shifted trajectories in a more positive direction were also documented among institutionally raised children, such as having supportive and prosocial peers or finding a stable romantic partner in early adulthood (Rutter 1996). In each of the next sections, we first document the known extent of a particular type or consequence of parent–child separation, research on effects on children’s development, and mitigating factors that may represent turning points within the overall risk trajectories that are probabilistically more common among children who experience parent–child separation.

## **TYPES OF PARENT–CHILD SEPARATION, CONSEQUENCES FOR CHILD DEVELOPMENT, AND MITIGATING FACTORS**

### **Children in Institutions**

The use of institutional care for abandoned or orphaned children remains a common practice throughout the world. UNICEF estimates that approximately eight million children worldwide

live in institutions separated from parents (Pinheiro 2006, UNICEF 2015). Children are separated from their parents and placed in institutions for a variety of reasons, including loss of parents by death, abandonment, illness, or disability (child or parent).

Institutional care carries risks for poorer cognitive and social-emotional development, especially for young children. Many institutions have higher child-to-caregiver ratios, low stimulation, high staff turnover, and little opportunity for engagement in relationships with caregivers, all of which have been linked to poorer learning, social, and emotional outcomes (Smyke et al. 2010, Van Ijzendoorn et al. 2011, Vanderwert et al. 2016). In addition, children in some institutions face violence from caregivers and other children (Pinheiro 2006).

Institutional care may vary in quality and can be categorized into three types: (a) institutions with global deprivation of both physical and psychosocial needs, (b) institutions that provide basic nutritional and physical needs but deprive children of stimulation and relationship needs, and (c) institutions that meet nutritional, physical, and stimulation needs but deprive children of stable, long-term relationships with caregivers (Gunnar 2001). High-quality, small-group homes that meet physical, stimulation, and relationship needs can be a fourth type, but the costs associated with this form of care make this a rarity in most countries (Van Ijzendoorn et al. 2011). Even in apparently good-quality institutional care found in a small group home, attachment security can be compromised due to turnover in caregivers (Smyke et al. 2002).

Van Ijzendoorn and colleagues (2011) assembled a profile of care including what most institutions had in common from a comprehensive global review of the studies then available. First, the institutions were characterized by relatively high group sizes even during the infant/toddler years. The typical range in early childhood was 9–16 children per ward, but extreme examples had up to 70. Child-to-caregiver ratios in their review ranged from 8:1 to 31:1. Second, beyond traditional indicators of turnover, staff were often not consistently assigned to the same group and worked long and shifting hours. Third, caregivers received limited training with the focus more often on health and nutrition rather than on responsive caregiving and psychosocial or mental health support. As a result, caregivers were observed to do their duties in a business-like manner with little warmth or sensitivity to individual children's emotional needs.

**Effects.** The impacts on children of these forms of institutionalized care have been reported in a relatively large number of studies. Effects can manifest in higher rates of developmental delays or poorer developmental outcomes (Wade et al. 2019). Outcomes, typically measured in comparison with low-income children from the same country or low-income children in host communities, if the samples have migrated, include poorer brain functioning (Marshall et al. 2004, 2008), smaller brain size (Bauer et al. 2009), lower levels of cognition (Rutter 1998), and elevated social/behavioral problems, specifically disinhibition (Bruce et al. 2009), inattention, hyperactivity, and attachment disruptions (O'Connor & Rutter 2000, Smyke et al. 2010).

One particularly important study, the Bucharest Early Intervention Project (BEIP), has examined the impacts into adolescence of early, poor-quality institutional care as well as placement with foster parents following a severe child protection crisis in Romania at the turn of the twenty-first century. Researchers conducted a series of groundbreaking studies designed to isolate the effects of institutional care itself from other factors and then tracked those effects over time (for example, Zeanah et al. 2017). The project's primary sample was Romanian children abandoned at birth and institutionalized with very-low-quality care. They were randomly assigned to foster care (at different points in the first years of life) in the context of a nascent foster care system. In addition, a normative sample of children living with their birth parents in Bucharest provided a noninstitutionalized comparison group. Institutional care showed large negative associations with physical growth, language, and cognitive, social-emotional, and brain development (Nelson 2007). In a

strange situation attachment study of this sample, institutionalized children were more likely to be categorized as insecurely attached (Smyke et al. 2010).

Negative impacts of early institutionalization can persist over time, even after leaving institutional care. Gunnar et al. (2001) studied the physiological effects of stress on the limbic and neuroendocrine system in three groups: Romanian children living in institutions, children adopted early into Canadian families (under 4 months of age), and Canadian-born children living at home with their birth parents. Six and a half years after adoption, children who lived more than 8 months in Romanian orphanages exhibited higher ambulatory cortisol levels.

In a recent follow-up study of BEIP participants at age 16, early-emerging deficits in problem-solving, attention, spatial planning, and short-term visual attention persisted into adolescence, and the gap in spatial working memory between once-institutionalized and never-institutionalized children widened in comparison to earlier in childhood (Wade et al. 2019). However, some effects lessened over time.

### **Mitigating factors.**

**Foster care placement.** Foster care placement may mitigate some of the dire impacts of very-poor-quality institutional care in specific outcome domains. For example, children who are placed in foster care before 24 months of age are more likely to have secure attachments despite their early time in institutional care (Humphreys et al. 2018, Smyke et al. 2010) and to show cognitive development scores in the normal range (Nelson et al. 2007). Similarly, at 42 and 54 months old, children who had been placed in foster care showed cognitive gains over their peers who remained in orphanages (Nelson et al. 2007). Placement in foster care also improves electroencephalogram measures of brain activity, relative to those who remained in institutional care, at assessments as early as 42 months old, and this improvement persists through recent testing at 12 years old (Vanderwert et al. 2016). These findings indicate that, in instances when children have to be separated from parents, the quality of caregiving matters.

**Time and timing in institutions.** Length of time in an institution appears to be negatively associated with developmental outcomes. In their comparison study of young children adopted from Romania and those adopted from the United Kingdom, O'Connor & Rutter (2000) found that at age 4, the duration of institutional stay was positively related to the number of symptoms of attachment disorder. Cognitive recovery was inversely related to length of stay in institutional care. In another follow-up study tracking children 5 to 11 years after adoption from an orphanage, the sample performed worse on cognitive and language measures compared to nonadopted children, but that performance was inversely related to time spent in institutional care (Loman et al. 2009). Similarly, in a study comparing brief and prolonged institutionalization (Pollak et al. 2010), prolonged residence in orphanages led to higher neuropsychological deficits in memory, attention, and inhibitory control but similar levels to peers in auditory processing, rule acquisition, and planning. Deficits in theory of mind abilities at 11 years old were greater if the child had spent more than 6 months in institutional care (Colvert et al. 2008). Finally, Gunnar and colleagues (2001) studied cortisol differences into middle childhood and found that children who lived more than 8 months in Romanian orphanages still exhibited elevated physiological stress.

Generally, the earlier and younger that children leave institutional care for stable foster care or adoption, the better it is for their outcomes and trajectory. A recent follow-up by the BEIP investigators (Zeanah et al. 2017) estimated the placement ages at which differences between earlier and later placed children became significant. For children placed at or after 15 months old, expressive language and receptive language were negatively impacted into early childhood but not later.

At 18 months of age or after, parasympathetic nervous system reactivity was negatively affected into early adolescence (age 12). Children placed in foster or adoptive care after 20 months of age demonstrated decreased social skills and competence into middle childhood (age 8) and early adolescence (age 12), respectively. When placed at or after 24 months of age, a child's IQ, attachment organization, and security were negatively affected into early childhood. However, in the most recent follow-up into adolescence, those placed before 30 months of age showed growth in their learning and visual-spatial memory such that they were indistinguishable from other children by age 16. Thus, recovery from very early institutionalization can occur, but it may take longer into the lifespan for children placed into stable foster care later during the first years of life.

In summary, research on children in institutional care indicates that parent-child separation in the form of institutional custody should be minimized and avoided, with stable foster care or adoption a preferred arrangement. Duration of institutional care negatively impacts child outcomes in a wide range of domains in the short run and some outcomes into adolescence.

## **Refugees Fleeing War and Persecution**

There are other circumstances, particularly in the lives of refugees, in which separation occurs for other reasons. These include parents separated from children during the asylum process (either during flight or after arrival in the host country), unaccompanied children who flee persecution or war without their parents, and trafficking or conscription of children in the context of conflict or migration. These situations present unique challenges to children's well-being and developmental trajectories.

**Forced separation during asylum.** According to the Convention and Protocol Relating to the Status of Refugees, a refugee is defined as "someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion" (UNHCR 2010, p. 3). Often this fear of persecution means an entire family leaves their home country to find a place of safety and survival in another location. Asylum is the designation of protection in these situations; the host country's asylum process determines whether refugee arrivals will receive this designation and, in some countries, can mean detention.

The UNHCR (2012, p. 9) defines detention as "the deprivation of liberty or confinement in a closed place which an asylum-seeker is not permitted to leave at will, including, though not limited to, prisons or purpose-built detention, closed reception or holding centres or facilities." Detention is not defined by the location (which might include at borders, in facilities, at airports, on islands, in closed refugee camps, or even in one's home) but is defined by "whether an asylum-seeker is being deprived of his or her liberty *de facto* and whether this deprivation is lawful according to international law" (UNHCR 2012, p. 9). Detention is considered an exceptional measure and, according to the UNHCR, can only be justified for a legitimate purpose where public order, safety, or national security are at risk.

**Guidelines.** The United Nations outlines guidelines on detention duration and type. In these cases, the burden is on the host country to show that "detention does not last longer than absolutely necessary, that the overall length of possible detention is limited" (UNHCR 2019, p. 21). In addition, the UN Convention on the Rights of the Child states that detention not be indefinite and that "in all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interest of the child shall be a primary consideration" (UN Gen. Assem. 1989, p. 3).



Regarding children in detention, the United Nations further calls for the prioritization of family unity. The Special Rapporteur on the Human Rights of Migrants (UN Gen. Assem. 2012, pp. 17, 19) calls on host countries to “consider progressively abolishing the administrative detention of migrants. In the meantime, Governments should take measures to ensure respect for the human rights of migrants...ensuring that the legislation does not allow for the detention of unaccompanied children and that detention of children is permitted only as a measure of last resort and only when it is determined to be in the best interests of the child, for the shortest period of time and in conditions that ensure the realization of the rights.”

***Parent–child separation in asylum implementation.*** Despite these conventions and protocols, some countries still separate families in detention. Recent policies in the United States and Australia, for example, have led to fairly routine separation of children from parents, seemingly flouting the international guidelines set forward in the above-mentioned guidelines from the Convention on the Rights of the Child (UN Gen. Assem. 1989) and the Convention and Protocol Relating to the Status of Refugees (UNHCR 2010).

In Australia, according to the immigration policy known as Operation Sovereign Borders (Aust. Hum. Rights Comm. 2014), asylum seekers and refugees who reach Australia by boat are not allowed entry but are sent to processing on Papua New Guinea. Children are rarely but sometimes separated from both parents, and mothers and children are routinely sent to separate detention from fathers.

A recent policy in the United States broadly affected undocumented immigrants, including those fleeing violence or persecution in Latin America. In May 2018, the Trump administration implemented a zero-tolerance policy toward border crossings from Mexico to the United States. Under this policy, the Department of Justice was instructed to prosecute all adult migrants to the Mexico–US border who were apprehended crossing the border illegally, with no exception for asylum seekers or those traveling with minor children. Family apprehensions increased from just over 11,000 in fiscal year 2012 to 99,901 in the first four months of fiscal year 2019. According to the Congressional Research Service (Kandel 2019, p. 2), “since the zero tolerance policy was implemented, up to 3,000 children may have been separated from their parents. In addition, thousands more were separated prior to the public announcement of the policy change.” Within several months, the administration changed its policy and insisted they were no longer separating children from parents. However, in the first data collected on a large scale by an organization outside the government, the Texas Civil Rights Project (Peña & Olivares 2019) interviewed at least 272 adults who had experienced family separation after the supposed cessation of separation and noted that the administration was still separating children from any nonparental family members, including older siblings, grandparents, aunts, and uncles. The Department of Homeland Security does not count those nonparental pairs of family members in its separation statistics (Kandel 2019, Peña & Olivares 2019).

***Effects.*** Research on children detained separately from both parents while awaiting asylum is sparse, possibly because international conventions on refugees and children discourage such separation. Researching the impact of the 2018 zero-tolerance policy, for example, will be additionally challenging given the difficulty the US Department of Homeland Security has had keeping track of the placement of separated children (Off. Insp. General, Dept. Homel. Secur. 2018).

Research on children whose parents have been detained without warning, as in the situation of hundreds of thousands of undocumented immigrant parents in the United States in recent years, is scant but hints at negative effects. Beyond the immediate and large economic effects on families due to decline in household income associated with the detained parent, children were



observed following large workplace raids to show elevated behavior problems as well as depressive symptoms and school absenteeism in a study by Chaudry et al. (2010; for recent reviews of this literature, see Bouza et al. 2018, Yoshikawa et al. 2017).

When the zero-tolerance policy and subsequent parent–child separations were publicized, child development research and professional organizations weighed in (Am. Acad. Pediatr. 2018, Am. Psychol. Assoc. 2018, Bouza et al. 2018). These statements unanimously articulated concerns raised by the policy, summarized the evidence base on the negative effects of parent–child separation, and called for eliminating the exposure of children to events that may retraumatize them. For example, the Society for Research in Child Development’s statement asserted that children depend on their parents to buffer them from the adverse effects of toxic stress associated with traumatic events. Parent–child separation in extreme stress can and will worsen the physical and emotional toll it takes on children. Furthermore, the effects of this stress are impactful at all ages and are cumulative; that is, “children and adolescents who have already faced previous adversity are particularly susceptible to long-term further negative consequences” across the lifespan (Bouza et al. 2018, p. 2).

**Potential mitigating factors.** There are no direct studies of mitigating factors in situations of parent–child separation during the asylum process or when an immigrant parent is detained. However, community-based organizations and policy makers have issued family preparedness guidelines in the United States to help alleviate the negative consequences of parent–child separation among families with undocumented parents. These have included, for example, identifying guardians in the event that a parent is detained (so that, for example, child care or school pick-up can occur) and providing “know your rights” information such as not letting a border and customs agent into one’s home without a warrant (Yoshikawa et al. 2019). Other approaches that have prevented parent–child separation have included churches or other faith-based organizations serving as sanctuary spaces—in the United States, long-standing practice prohibits federal immigration enforcement officials from entering a faith-based organization to expel a particular person. Many mixed-status families in the United States (those with at least one undocumented member, most commonly a parent) report avoiding public places or even taking their children to the pediatrician to reduce the chances of detention and deportation (Cervantes et al. 2018).

**Unaccompanied minors.** Whereas some children are separated from their parents by official state procedures in the process of seeking asylum, other children undertake flight or migration on their own, unaccompanied by a parent or adult family member. Unaccompanied, asylum-seeking children are by legal definition under 18 years of age, are separated from both parents, and are not cared for by an adult who, by law or custom, would have a responsibility to do so (Thomas et al. 2004). Some prefer the term “separated minors” rather than “unaccompanied minors,” emphasizing the distance between child and family and that they may or may not be technically unaccompanied but may in fact be in the company of nonrelated adults such as a trafficker, an agent, or siblings who are minors (Hopkins & Hill 2008).

The number of children who arrive unaccompanied has increased significantly in the past decades. For example, a surge in undocumented migration to the United States starting in the early 1990s accompanied economic crises but also increases in urban violence in Mexico and in Central American countries; part of this rise in migration included a flow of unaccompanied minors (Ngai 2004). There was a 50% increase in the number of detained unaccompanied minors arriving in the United States between 1997 and 2002 (Seugling 2004), and in 2015–2016, there were an estimated five times as many children migrating alone than in 2010–2011 (UNICEF

2017b). An estimated 90% of all children who crossed the Mediterranean to Italy in 2016 were unaccompanied (UNICEF 2017a).

The process of migration, for unaccompanied children, includes stressors at each phase, including premigration, transit, and arrival. Premigration, unaccompanied children are likely to have experienced threats and witnessed or been victims of violence (Lustig et al. 2004). In transit, unaccompanied children are vulnerable to a range of risks, including safety threats, abuse, and attacks (Baily et al. 2011). Upon arrival, unaccompanied children face uncertainty in unfamiliar surroundings without their usual sources of support. They may also experience stressful detention experiences in which conditions and treatment may be poor or prisonlike and unfit for children (Perez Foster 2001, Women's Refug. Comm. 2009).

**Effects.** Most studies assessing the psychological impact of migration on unaccompanied children are qualitative reports by advocacy groups; thus, there are virtually no empirical studies. These reports document high rates of posttraumatic stress disorder (PTSD), anxiety, depression, aggression, and suicidal ideation among unaccompanied children in detention (Bhabha & Schmidt 2007, Women's Refug. Comm. 2009). A few empirical studies of this population have confirmed these qualitative findings (for a full literature review of this research, organized by type of study, see Huemer et al. 2009).

Compared with refugee children who flee with their families, unaccompanied children are at greater risk for trauma and mental illness. Hodes and colleagues (2008) compared 78 unaccompanied asylum-seeking children in the United Kingdom, primarily from the Balkans and Africa, with 35 accompanied refugee children aged 13–18 years. The mean number of traumatic events experienced by unaccompanied minors was 28, more than double the amount for accompanied refugee children, which was 12. Wiese & Burhorst (2007) compared the outcomes of 129 refugees in the Netherlands: 70 refugee children who arrived with families and 59 who arrived unaccompanied. The refugees in the sample came from a range of geographical origins, including Africa (47%), Asia (40%), and eastern Europe (13%). Unaccompanied children were more likely (63%) to have been a victim of four or more traumatic events in their lives (including preflight, during flight, and after arrival) than children and adolescents with families (16%). Unaccompanied children also had a higher occurrence of depressive disorder (46% of unaccompanied compared to 27% of accompanied), borderline personality disorder (22% versus 9%) and psychosis (15% versus 1%) compared with refugee children with families. Sixty-seven percent of unaccompanied refugee girls and 14% of unaccompanied boys had experienced sexual abuse. Although these studies do not address the selection factors that might distinguish those children who travel unaccompanied from those who travel with family members, they nevertheless suggest negative effects of the experience of migrating alone without status.

**Mitigating factors.** A few interview-based studies with unaccompanied refugee children and their postarrival foster parents have suggested some internal and external factors that may buffer the negative effects of the trauma of solo migration and resettlement (Bates et al. 2013, Pena et al. 2018, Rana et al. 2011). For example, a sample of 19 Sudanese youth (17 male and 2 female; average age at resettlement, 15 years) and 20 foster parents reflected on the qualities and supports that made a positive difference in their adjustment and success to their new homes in the United States (Luster et al. 2010). In those interviews, foster parents indicated that their Sudanese children's work ethic, charisma, interpersonal skills, and commitment to education contributed to their children's success, noting that it was these same attributes that contributed to their survival in Sudan. Youth themselves indicated that it was their good choices, hard work, and persistence that led to their successful transition. Other qualitative studies suggest that additional internal mitigating factors

for unaccompanied refugee children include a focus on goals, a high locus of control, intelligence, future orientation, religious faith, seeing their refugee status as an opportunity, resourcefulness, and adaptability (Bates et al. 2013, Pena et al. 2018, Rana et al. 2011).

External factors and relationships may also facilitate successful adaptation of unaccompanied refugee children into their new communities. Sudanese youth attributed their success to the emotional support and advice of their foster parents and the services, housing, money, tutoring, and classes of host agencies (Luster et al. 2010). Refugee youth reported the importance of their peer group for emotional and instrumental support and the school as a central source of community support, activities, and outings (Bates et al. 2013). The psychological presence of the refugee children's parents also remained a source of guidance and resilience as they seek to live how their parents would want them to live and honor the family name (Bates et al. 2013).

## **Child Trafficking and Conscription**

Although most unaccompanied children arriving at the borders of a foreign country are either repatriated back to their country of origin or detained, there is a third group of children hidden to the official procedures of a host country: those who are trafficked or conscripted into military or paramilitary forces, sometimes en route to seeking asylum.

**Child trafficking.** Human trafficking is the “recruitment and movement of people—most often through the use of deception, threat, coercion, or the abuse of vulnerability—for the purposes of exploitation” (Oram et al. 2015, p. 1084). In one global study of 40,000 trafficking cases, 33% of the victims were children (UNODC 2014). The International Labor Organization estimated that in 2012 there were 5.5 million children worldwide who were victims of forced labor (Int. Labor Organ. 2012). Trafficked children are especially vulnerable in the face of such conditions and confront an abundance of challenges to their safety, their development, their health, and even their lives. For those who are trafficked into sexual servitude, HIV/AIDS and other sexually transmitted diseases present a threat to their survival. In addition, access to care for these vulnerable children is especially limited given the secretive and exploitative nature of their situations. These children and youth are likely to be unaware of their rights or of available services (Beyrer 2004, Stanley et al. 2016). While the effects of child trafficking may share similarities with other forms of child abuse and neglect, it is important to recognize the distinct burden of trafficking: the multitude of traumas experienced chronically for long periods of time and typically involving multiple perpetrators (Greenbaum et al. 2018).

The clandestine nature of their plight makes research on trafficked children particularly difficult. As a result, some studies use a historical cohort design, accessing administrative records to better understand the impact of child trafficking. For example, Ottisova and colleagues (2018) searched over 250,000 electronic medical records to identify 51 cases of trafficked children. Using a historical matched cohort design in which the control sample was matched for primary diagnosis, gender, age ( $\pm 1$  year), type of initial care (inpatient or outpatient), and year of most recent service contact, researchers found that child trafficking was associated with higher levels of physical and sexual abuse and longer duration of mental health services.

Mental health disorders are prevalent among trafficked children. In a qualitative study of 29 young people trafficked into the United Kingdom, Stanley and colleagues (2016) reported that, while over half of the young people have been trafficked for sex work ( $n = 15$ ), sexual violence had been experienced by those trafficked both for sex and for domestic and other labor ( $n = 18$ ). In addition, physical violence ( $n = 24$ ), deprivation ( $n = 29$ ), threats to family ( $n = 11$ ), and restrictions of freedom ( $n = 18$ ) were widely experienced. Two-thirds of participants ( $n = 19$ )

interviewed screened positive for high levels of mental health disorders. In a study of 387 child and adolescent survivors of trafficking in Asia who were interviewed within 2 weeks of enrollment in posttrafficking services, participants showed high levels of depression (56%), anxiety (33%), and PTSD (26%) (Kiss et al. 2015). Approximately one-third of participants had experienced physical and/or sexual violence while trafficked. Physical violence was reported by 41% of boys and 19% of girls; sexual violence was reported by 23% of girls and 1% of boys. Furthermore, mental health symptoms were strongly associated with recent self-harm and suicide attempts; 12% of participants had tried to harm or kill themselves in the month before the interview (Kiss et al. 2015).

**Conscription.** Another form of parent–child separation occurs when children are conscripted into military service. Despite widespread condemnation from the international community, the forcible participation of children in combat remains a reality in many ongoing conflicts around the world. Child soldiers are defined as “any person below 18 years of age who is or who has been recruited or used by an armed force or armed group in any capacity, including but not limited to children, boys and girls, used as fighters, cooks, porters, messengers, spies, or for sexual purposes” (UNICEF 2007, p. 7). According to Child Soldiers International’s World Index (Child Soldiers Int. 2018), an online database mapping global child conscription, there remain at least 18 conflicts in the world in which children have participated since 2016. Over the past 4 years, in South Sudan alone, 19,000 children have been recruited by armed forces and armed groups.

**Effects.** Although research on this population is relatively rare, descriptive reports and a few comparative studies have aimed to better understand the impact of conscription on child soldiers. Abducted and conscripted children are more anxious and depressed, more hostile, and less prosocially active than children who were never abducted and never served with the armed forces (MacMullin & Loughry 2004).

PTSD symptoms are rampant among abducted and conscripted children. In one study, 97% of abductees demonstrated clinical levels of PTSD (Derluyn et al. 2004). A cross-sectional cohort study (Kohrt 2008) compared 141 former child soldiers in Nepal with 141 never-conscripted children matched on age, sex, education, and ethnicity. While both groups showed mental health and psychosocial problems, child soldiers fared worse. Former soldier status was significantly associated with depression among girls and PTSD among girls and boys even after controlling for trauma exposure.

Exposure to trauma and the resulting impacts on former child soldiers vary depending on age of abduction, duration of captivity, location of captivity, and military training. In a study analyzing database data of 10,785 former child soldiers in training in Uganda (Vindeogel et al. 2011), 88% witnessed and 76% forcibly participated in war atrocities. Perhaps predictably, a longer duration of captivity was associated with an increased likelihood of witnessing and/or participating in atrocities.

**Mitigating factors.** Resilience in the face of such high stress and trauma depends on the “human adaptive systems embedded in individuals, relationships, families, friends, communities, and cultures” (Masten & Narayan 2012, p. 232). In the realm of relationships, families, friends, and communities, former child soldiers have demonstrated social and psychological resilience when community acceptance is high (Betancourt et al. 2010, Blattman & Annan 2010, MacMullin & Loughry 2004). Betancourt and colleagues (2010) researched postsoldiering adjustment among former child soldiers in Sierra Leone, examining the role of stigma and its relationship between war experiences and psychological adjustment back into the community. Postwar, greater levels of

family acceptance were associated with decreased hostility, and increased community acceptance was associated with adaptive behaviors and attitudes.

## Left-Behind Children

We have examined involuntary parent–child separation, which is often the result of the trauma and chaos associated with war, migration, and conflict. However, another category of parent–child separation bears examination: volitional separation when parents pursue economic or other opportunities not available at home. In these cases, parents typically leave their child(ren) behind with a caregiver, creating a potentially vulnerable global population of left-behind children.

**Effects.** Parents in many regions of the world make the decision to leave behind their children to secure employment elsewhere. Research on these families has been conducted in several countries where the practice is prevalent, including China (Gao et al. 2010, Jingzhong & Lu 2011, Zhou et al. 2015), the Philippines (Asis 2006), Guatemala (Lykes & Sibley 2013), Jamaica (Pottinger 2005, Pottinger et al. 2008), and Haiti, Mexico, and the Dominican Republic (Suárez-Orozco et al. 2011, Valtolina & Colombo 2012). Reviews on left-behind children provide a comprehensive view of these findings (for example, see Valtolina & Colombo 2012), so we only touch on the major themes and findings here. Taken as a body of research, parent–child separation due to economic migration affects children in a range of ways and contexts, including lower school performance, increased conflicts with teachers and peers, anxiety, low self-esteem, depressive tendencies, loneliness, and substance abuse (Valtolina & Colombo 2012).

In a cross-cultural longitudinal study (Suárez-Orozco et al. 2011), researchers used longitudinal immigrant adaptation data of 282 adolescents from China, Central America, the Dominican Republic, Haiti, and Mexico newly arrived in the United States. Three-quarters of the participants reported being separated from at least one parent, and 26% were separated from both parents for extended periods. As a group, children separated from their mothers for 4 years or longer reported significantly higher-level anxiety and depression symptoms than those who were never separated, controlling for developmental level and country of origin.

While the overall risks to development for children left behind appear to be generally similar across cultures, studies in specific country contexts reveal mitigating factors that may moderate those negative effects. For example, children who were left behind in Jamaica, compared with peers living with both parents, showed elevated depression scores and a higher probability of behavioral problems (Crawford-Brown 1997, Elliot-Hart et al. 2006). In a study of left-behind children in Jamaica, Pottinger (2005) compared 27 9- and 10-year-olds who were left behind by their parents with a sample of 27 children matched for age and gender who had not experienced extended separation. Children who were left behind by migrating parents had poorer school performance; increased feelings of abandonment, anger, and loneliness; and more sleep complaints. Gender of the child was not found to be a factor. In terms of mitigating factors, having a supportive family and being able to talk to someone buffered the negative impact on the child.

Economic migration in China mainly involves relocation from rural to urban areas of the country. Although the temporary migration rate is high in China, these disruptions are rarely permanent (Jingzhong & Lu 2011). Research on the impact of such parent–child separations has been mixed. In one study of Chinese rural children left behind by parents (Zhou et al. 2015), researchers found that for nine indicators (including anemia rate, height for age, weight for age, soil-transmitted infection rate, dropout rate, and academic scores), left-behind children performed as well as children living with both parents, although both groups performed poorly. By contrast, Jingzhong & Lu (2011) studied 400 children in 10 rural communities in China and found that

parent migration impacted left-behind children by increasing their workloads and reducing study tutoring, supervision, and parent affection.

**Mitigating factors.** The negative effects of being left behind by migrating parents may be reduced through several factors, primarily through relationships with others or with the missing parents. For example, in a sample of left-behind adolescents, a teacher–student relationship positively predicted self-esteem and negatively predicted depression and problem behaviors (Liu et al. 2015). Compared to a group of children in the same community living with their parents, the association between teacher–student relationship and depression was stronger among the left-behind group. In another study (Zhao et al. 2015), friend companionship for left-behind children was positively associated with their emotional outcomes and moderated the association between father–child cohesion and emotional outcomes among children with two migrating parents. Finally, the parent–child relationship itself may serve to mitigate the negative effects of separation. For example, a higher level of parent–child communication has been associated with a higher level of life satisfaction, school satisfaction, and happiness, but not loneliness level, in one sample of left-behind children (Su et al. 2013). Parent–child cohesion is also positively associated with emotional outcomes for this group (Zhao et al. 2015).

## INTERVENTIONS TO MITIGATE THE NEGATIVE EFFECTS OF SEPARATION

As the documented risks for children and youth are substantial, a variety of programs have been developed to mitigate the harmful effects of parent–child separation. Rather than a systematic review of such interventions, we describe representative evaluations of several types of interventions that have been shown to have positive effects on children and youth separated from their parents and families as caregivers due to circumstances such as conflict, migration, or loss. Interventions to address the negative effects of parent–child separation occur in a range of settings and address various types of outcomes. Characteristics of school-based group, community-based group, and community-level interventions and associated positive outcomes are highlighted, followed by cross-cutting issues and themes across the intervention types. The most clinical approach, therapy provided through dyadic mental health interventions, is excluded from this review due to a lack of controlled interventions with separated or unaccompanied children.

### School-Based Group Interventions

School-based group interventions have been carried out to alleviate the impacts of losing, or being separated from, a caregiver. In India, a school-based intervention targeted Tibetan adolescents living in exile with limited family contact (Yankey & Biswas 2012). This life skills training intervention, carried out with 300 adolescents aged 13–19 years, showed positive social and mental health impacts. Groups of 5 to 11 adolescents were randomly assigned to the intervention or to regular school classes. The intervention group was introduced to 10 life skills and 28 subskills based on World Health Organization recommendations across 30–45 sessions (Yankey & Biswas 2012, p. 519). This program reduced youth reports of stress related to school, leisure, and the future through various skill-based course topics such as creative thinking, critical thinking, effective communication, empathy, and decision making.

Classroom-based interventions can be feasibly implemented by nonspecialized, trained personnel. In Sri Lankan schools, paraprofessionals carried out a psychosocial intervention with children affected by war. This study found that children with lower levels of war-related stressors had larger



improvements in mental health (Tol et al. 2012). This cluster-randomized trial included approximately 400 children aged 9–12 years, 35% of whom had witnessed the death of a family member and others of whom had experienced family separation. Fifteen sessions were carried out over 5 weeks in groups of up to 15 youth. There were no intervention effects on primary outcomes; however, for those with lower levels of war-related stressors at baseline, there were statistically significant reductions in PTSD symptoms, anxiety, and function impairment.

Teachers and students have frequent and consistent classroom interactions, and as such, it is important that teachers are well prepared to identify children in need of mental health services. Ehntholt et al. (2005) carried out a school-based cognitive behavioral therapy (CBT) group intervention in two schools in London for traumatized refugee or asylum-seeking children from countries affected by war. Teachers identified participants based on students' classroom behavior and their disclosure of traumatic events. Children were, on average, aged 12–13 years and from Kosovo, Sierra Leone, Turkey, Afghanistan, and Somalia. Approximately 36% of the control group and 13% of the treatment group arrived unaccompanied. Across the sample, one-third had lost a parent in war, 15% had been separated from both parents, and 44% had experienced separation from one parent. The treatment and control conditions were not randomized; control students were waitlisted, while students receiving the intervention met 1 h per week for 6 weeks with a clinical psychology trainee in classrooms. The intervention reduced overall and intrusive PTSD symptoms and increased improvements in behavior, indicated by a teacher measure.

Writing for Recovery, a classroom-based intervention developed by the Children and War Foundation for bereaved children and youth, was implemented with 61 Afghani adolescents living in Iran (Kalantari et al. 2012). The intervention was carried out in a school for refugees. The participants, on average 14–15 years of age, were randomly assigned to a business-as-usual control or treatment condition. The intervention consisted of two 15-minute sessions implemented on three consecutive days and initially focused on writing self-reflections of trauma or loss experiences, followed gradually by more externally directed writing, such as advice for those who may have gone through similar experiences. Posttest data, collected 1 week postintervention, revealed that Writing for Recovery significantly decreased traumatic grief symptoms, according to a self-report measure.

## Community-Based Group Interventions

Group interventions may be an effective way to target multiple youths who have experienced loss and separation in a single setting, while facilitating social interaction with others facing a similar experience. A culturally adapted, trauma-focused, cognitive behavioral therapy (TF-CBT) intervention in the Democratic Republic of the Congo targeted former child soldiers and male youths affected by war (McMullen et al. 2013). This randomized controlled trial had a sample of 50 youths, aged 13–17, of whom 78% had been abducted or had lived with armed groups, and 48% had experienced the death of a parent. At baseline, nearly half of the sample was living with guardians or host families as the majority did not have family contact or known parents. The 15 TF-CBT sessions were group based, except for two to four individual sessions. Special attention was given to culturally appropriate adaptations of the intervention materials, and the intervention was delivered with Congolese counselors. The intervention was shown to significantly reduce symptoms including posttraumatic stress, distress, depression, and anxiety and to increase prosocial behavior.

Utilizing preexisting community and social services and programming might be an effective way to leverage systems that are already in place to reach those separated from a caregiver. A randomized controlled trial in Germany applied trauma-focused practices in a group setting and found positive results for young refugees (Pfeiffer et al. 2018). The average age of participants



was 17 years, and all were involved with child and adolescent welfare (CAW) agency programs. Of the 99 adolescents in the intervention, some had no family contact (26% of experiment group; 19% of control group) and less than 10% of either group had daily family contact. The remaining adolescents had limited family contact ranging from weekly to several times a year. The intervention (Mein Weg, or My Way) focused on psychoeducation and eliciting trauma narratives. The control group received the usual programs and supports offered by their CAW program. As part of Mein Weg, groups of two to five participants attended 90-minute sessions six times a week. The intervention significantly decreased participants' posttraumatic stress symptoms, as measured by the Child and Adolescent Trauma Screen self-report.

As family members and caregivers can create support systems for children and youth experiencing separation and loss, involving them in community-based group interventions presents a salient approach to programming. Sandler et al. (2010) conducted a 6-year follow-up of an experimental impact evaluation of the Family Bereavement Program. The treatment condition consisted of 12, 2-h sessions each week, four of which were for youths and their caregivers together, and the control condition, which was written material on bereavement. The activities were meant to increase positive coping and decrease negative thoughts and stressors. The program decreased levels of behavioral problems according to a behavior checklist (composite of caregiver and youth reports) and teacher report form. Youths who had lower levels of mental health issues at the beginning also experienced lower levels of mental disorder diagnoses based on self-report and a version of the Diagnostic Interview Schedule for Children.

## Community-Level Interventions

Community-level interventions for youth affected by war or for unaccompanied refugee youth have integrated community members and leaders, as well as utilized a variety of community and/or accessible public spaces, to reach children and youth. In Sierra Leone, Betancourt et al. (2014) examined an alternative education program, the Youth Readiness Intervention, which integrated CBT and interpersonal therapy developed for 15- to 24-year-olds in a randomized controlled trial. Individuals in the sample all had some form of psychological distress and had expressed interest in continuing education. Program outreach, recruitment, and implementation was done at the community level, and the 10–12 intervention sessions at times involved family and community members as a way to foster engagement and to establish a support system. Program recipients improved with regard to emotion regulation and prosocial behavior, as well as educational engagement, like attendance and enrollment, according to a teacher survey (classroom performance scale) and youth report.

Communities may seek to address the negative effects of separation through a collaboration among government agencies, trained staff, and other organizations, such as charities or non-governmental organizations. Across 213 rural villages in southeast China, nearly 1,200 children participated in a whole-community intervention designed specifically for left-behind children (Guan & Deng 2019, p. 1). The community-based intervention, the Children Companion Mothers Program (CCMP), took place over 3 years. As part of the intervention, each participating village had a physical space for children to attend after-school activities; a paid, full-time program employee providing welfare services and program access to children; and a commitment of local governing institutions and authorities to collaboratively solve issues faced by left-behind children, as identified by the village program employee. Participants in this quasi-experimental study ranged in age from 7 to 18 years, and 598 were assigned to the experimental group. Thirty-five percent of children from either the experimental or control group had been left behind by both parents, nearly 30% of each group had been left behind by one parent, and the remaining children were in

intact families. While findings varied by program site, overall, results suggest that this community-level approach may have reduced disparities between left-behind and non-left-behind groups as shown by CCMP participants' levels on various well-being indicators. Specifically, CCMP participants exhibited higher resilience, safety awareness, and communicative competence as well as better academic performance, guardianship, and physical health habits than participants in the control group, according to self-report measures. Additionally, the intervention was shown to be more effective when delivered over a longer period of time.

## Issues Across Intervention Types

Common issues arise across the presented typologies, pointing to directions for future research. Several cited interventions relied on self-reporting measures, perhaps introducing reporting bias (Betancourt et al. 2014, Ehntholt et al. 2005, Guan & Deng 2019, Kalantari et al. 2012, McMullen et al. 2013, Pfeiffer et al. 2018, Sandler et al. 2010). Tol and colleagues (2012) reported their study's main outcome did not have "local criterion validity" (p. 120), and measures used by Ehntholt et al. (2005) contained psychometric properties that were not "established" (p. 246) with the population under study, highlighting a need for more contextualized and locally relevant approaches and research instruments. Mixed-method research from Betancourt and colleagues (2011) in Rwanda incorporated community input via participatory methods in designing and evaluating culturally relevant measures for use with families affected by HIV. This exemplar approach demonstrates how to contextually develop, adapt, and validate mental health measures with a vulnerable population. Future research with children who have experienced separation should aim for a similar strategy. Experimental or strong quasi-experimental designs are absent in many studies (Ehntholt et al. 2005, Pfeiffer et al. 2018), clarifying a need for more controlled evaluation designs to better understand what works, and why, for these populations of children and adolescents.

## CONCLUSION

In this review, we summarized the current evidence base on effects on child and youth development of parent-child separation. We examined the phenomenon across various reasons for separation—institutionalization, war or conflict, and forced or voluntary (on the part of parents or caregivers) migration. The research literature is richer in some areas (i.e., institutionalization or left-behind children) than for others (i.e., separations during asylum or due to parental detention, unaccompanied child migration, or child conscription into war). However, across the available studies, effects of separation were consistently negative. The literature more commonly focuses on well-being and mental health effects, but there is also evidence of decrements in learning, cognition, and brain activity associated with certain kinds of separation. Mitigating or protective factors included timing of alternative placement (with earlier being better in the case of children institutionalized since birth); quality of parent-child communication and parenting; certain aspects of temperament, suggesting the possibility of variations in biological susceptibility; and a few instances of community support in host communities.

We also reviewed the much smaller body of literature on evaluations of programs for children affected by parent-child separation. Several of the evaluations showed that programs targeted to those who have experienced parent-child separation may be most beneficial to those who have fewer personal risk factors at baseline. Research presented by both Tol et al. (2012) and Sandler et al. (2010) demonstrated that lower levels of trauma and stressors were associated with positive outcomes. This might suggest that the integration of various programs bolstering psychosocial well-being and support in existing structures (e.g., school- and community-based programming)

can serve as a protective measure to prepare students for healthier outcomes in adverse, but potentially unavoidable, situations.

Accounts of school-based group, community-based group, and community-level interventions described the presence of support systems of peers and adults, including teachers and caregivers (e.g., Betancourt et al. 2014, Ehntholt et al. 2005, Guan & Deng 2019, McMullen et al. 2013). Building such support systems for children and youth may be achieved through collaboration among educators, including teachers and paraprofessionals, government agencies, and volunteers and community leaders trained to deliver mental health programming. It is important that teachers, and other community members who interact with children, are well equipped to identify those who are suffering from the negative impacts of parent and family separation and are also aware of services available and how to connect children to these services. As such, creation of collaborative networks can serve as a protective factor to mitigate trauma following temporary or sustained parent separation.

The intervention studies reviewed also point to a focus on skill-building (e.g., decision making, problem solving, communication, and relaxation as stress management) as a way to help mitigate the negative effects of parent–child separation. Providing children and youths with useful content explicitly focused on equipping them for their daily life and future (e.g., life skills or alternative education and development of coping strategies) showed a range of positive impacts (e.g., Betancourt et al. 2014, McMullen et al. 2013, Yankey & Biswas 2012).

Our review suggests several future directions for research. First, developmental scientists should examine the nuances of specific policies regarding their effects on children and youth. For example, in the United States, recent policies affecting length of detention of families, not just the zero-tolerance policies described previously, may have consequences for family process and child development. Developmental scientists may need to either collaborate further with immigration policy experts or include in their training programs exploration of the specifics of immigration policy alongside more commonly studied areas of policy such as those related to poverty or education. Second, studies studying migration around the world would benefit from consistently gathering data on patterns of separation—overall duration, number of spells of separation, and the developmental timing of separation episodes. This requires coordinated efforts to develop brief approaches to assessing separation in studies of displaced, refugee, or migration populations that include developmental outcomes. Third, mitigating-factor research could be expanded to include a larger and more up-to-date range of phenomena than have been studied to date. For example, how does frequent video- or social-media-based communication (on phones, for example) potentially mitigate the negative effects of some forms of parent–child separation? Do remittances (sent by parents or by youth) and the support they provide in home countries play a mitigating role, and if so, under what circumstances? How do siblings or other family members play a mitigating role when parent–child separation occurs? Finally, sorely lacking are intervention research and policy analysis that aim to improve family process and child development upon reunion or (perhaps more importantly) strive to prevent parent–child separation in the first place.

Limitations of this review include several contexts of parent–child separation for which space did not allow discussion. These include sending children away for phases of their education (to boarding schools in the same country or to other countries, as in the situation of parachute children; Eng & Han 2019) and sending children back to their parents' country of origin rather than leaving them behind (as has been observed with children of low-income Asian and Latin American immigrants in the United States or Europe; Suárez-Orozco et al. 2011, Yoshikawa 2011).

Despite these limitations, it is clear that parent–child separation comes in many forms and for many reasons. Beyond the direct impacts on well-being and development, the phenomenon places children at risk for a series of associated harms that may derive from the forms of exploitation,

institutionalization, and neglect that are often poor substitutes for primary caregivers and parents. As migrations due to war, conflict, and disaster have increased worldwide, better understanding of the developmental consequences of parent–child separation has become increasingly urgent.

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