

ADDRESSING THE DIFFERENCE IN RATES OF TRAUMA AMONG YOUTH  
INVOLVED WITH IN-HOME SERVICES COMPARED TO FOSTER CARE

by

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## ABSTRACT

JENNIFER LAURA COOPER. Addressing the difference in rates of trauma among youth involved with In-Home Services versus foster care through local Departments of Social Services. (Under the direction of DR. SHARON G. PORTWOOD)

Childhood trauma has long-term effects on the physical and mental health of its victims. Given that the focus of the public health field is to create the healthiest communities possible, determining interventions to combat the effects of childhood trauma is of the utmost importance. Children who are involved with the child welfare system are at heightened risk for childhood trauma and the resulting impacts on their health. These system-involved children include both those who receive intervention services in their home and those who come into foster care. Research has not conclusively determined if, or how, these two “intervention groups” differ in regard to either traumatic experiences or trauma symptoms, information that can inform how best to allocate funding and other system resources (i.e., worker time, transportation, insurance) to screen for trauma, to make referrals for mental health assessments, and to ensure appropriate treatment for the children in care. Because policies vary dramatically from state to state, examining these groups in North Carolina serves as an important initial step in developing appropriate policies to keep the State’s most vulnerable population healthy. To that end, this study examined and compared potentially traumatic events and trauma symptoms among children ( $n = 1,210$ ) involved in the child welfare system in three local Departments of Social Services. Secondary data from an initiative to build trauma-informed child welfare agencies and communities were analyzed, revealing that there are high rates of potentially traumatic events ( $M = 3.51$ ;  $SD = 2.52$ ) and trauma

symptoms ( $M = 4.18$ ;  $SD = 4.43$ ) among both groups of system-involved youth (i.e., foster care, in-home services). In order to ensure appropriate allocation of resources, additional analyses were conducted to compare those children receiving foster care with those assigned to in-home services. More youth in foster care experienced potentially traumatic events (97.6%) and trauma symptoms (82.5%) than did those in in-home services (88.3% and 71.4%, respectively). There were statistically significant findings regarding higher prevalence of potentially traumatic events ( $X^2 [2, N = 1,210] = 23.31, p < .001$ ) and trauma symptoms ( $X^2 [1, N = 1,184] = 14.67, p = .001$ ) for those in foster care than those in in-home services. Even though the number of potentially traumatic events varied by less than one event between the foster care and in-home intervention groups, there was a statistically significant finding ( $t (1,179) = 6.76, p < .000$ ) that those in foster care experienced more potentially traumatic events than did those in in-home services. It is imperative to note that the rates are substantial for both groups regarding potentially traumatic events and trauma symptoms. Given those substantial rates, trauma responsive processes should be available for youth in both groups. These standardized processes should include screening for trauma, referring for a trauma-informed and evidence-based mental health assessment, and ensuring that treatment recommendations are followed, as well as providing appropriate the aforementioned resources, in order to ensure the long term health and well-being of system-involved youth given the pervasive trauma seen within this population.

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## LIST OF ABBREVIATIONS

ACE	adverse childhood experience
BRFSS	Behavioral Risk Factor Surveillance System
CCFP	Center for Child and Family Policy
CDC	Centers for Disease Control and Prevention
CPS	child protective services
DHHS	Department of Health and Human Services
DSS	Department of Social Services
MRS	Multiple Response System
PFE	Partnering for Excellence
PTE	potentially traumatic event
PTSD	Post-Traumatic Stress Disorder
TST	Project Broadcast Trauma Screening Tool

## CHAPTER 1: INTRODUCTION

Healthy People 2020 prioritizes the need to address obesity, physical activity, suicide, adolescent mental health, and alcohol, drug, and tobacco use (Centers for Disease Control and Prevention [CDC] 2019a). In 2016, the leading causes of death in the United States included heart disease, cancer, accidents, and intentional self-harm (suicide) (CDC, 2019b). Notably, all the aforementioned conditions and/or behaviors are linked to traumatic experiences in childhood (Felitti, et al., 1998; Anda & Brown, 2010). Among those experiences recognized as traumatic are abuse, neglect, household dysfunction, exposure to bullying, organized violence, peer-to-peer violence, and community violence (Anda, Butchart, Felitti, & Brown, 2010). By appropriately treating these traumatic experiences, victims, particularly those with the added vulnerability of being involved in the child welfare system, can lead healthier lives (Magruder, Kassam-Adams, Thoresen, & Olf, 2016), thus advancing the goals of public health.

The child protection services (CPS) system in the United States aims to keep children safe from abuse and neglect and to support families so they can care for their children (Child Welfare Information Gateway, 2013). When a local CPS agency determines that a child is unable to remain safe in his or her home, the child enters foster care. In 2018, about 440,000 children in the United States lived in foster care on any given day (U.S. Department of Health and Human Services [DHHS], 2019). Although the goal of CPS is to secure the home environment and for children to return home quickly, many children remain in the system for years. Problems within the system are significant and are manifested in the high turnover rate of social workers; notably, the average tenure of social workers in CPS is only two years (Melamed & Myers, 2006). Among these systemic issues, CPS struggles with its funding

which is patched together through various federal, state, and local funds (i.e., Social Security, Temporary Assistance for Needy Families, Medicaid, Children's Health Insurance Plan). At a broad level, CPS is tasked with the contradictory and confusing roles of both helping families and investigating them, which frequently creates conflicts for staff, as well as the families they served. Moreover, poverty and child neglect are so intermingled that social workers and policy makers struggle to differentiate between the two, knowing that CPS does not have the support to have a significant impact on the poverty that frequently drives child neglect. While the federal government provides policy, funding, and oversight to child welfare agencies, these agencies are managed at the state level (Child Welfare Information Gateway, 2013). Accordingly, it is necessary to look at states individually in order to inform policy and practice.

The actions of caregivers and their ability to ensure the safety of the child in their home dictates the type of child welfare services a family will receive. For example, in the State of North Carolina, in which the current study was conducted, if parents are currently able to provide a safe environment, the child will remain in the home, and the family will receive In-Home Services. If the caregiver cannot provide a safe environment, the child welfare agency must, by law, take custody of the youth and the family will receive Permanency Planning (i.e. foster care) services (NC Department of Social Services [DSS], 2017).

Youth involved in CPS are especially vulnerable to experiencing childhood adversities compared to those who are not system-involved (Stambaugh et al., 2013). These adversities have been conceptualized in various ways, including the frameworks of Adverse Childhood Experiences (ACEs), childhood maltreatment, and trauma. As Figure 1 denotes, these three

frameworks share some commonalities, but are not synonymous. For example, parental divorce is included as an ACE and can be a traumatic event; however, divorce is not considered to be child maltreatment. Immigration trauma and natural disasters may constitute trauma, but they are not recognized as either ACEs or child maltreatment. Nonetheless, given the clear overlap between child maltreatment, traumatic events and ACEs, it seems likely that the experiences of many child welfare-involved youth will reflect two or more of these forms of adversities. While the ACEs construct is used in multiple disciplines, within the field of child welfare, child maltreatment remains the operative term; child maltreatment is defined as an act or a failure to act by a caregiver that leads to death, serious physical or emotional harm, sexual abuse or exploitation, or imminent risk (Child Abuse Prevention and Treatment Act of 1974).

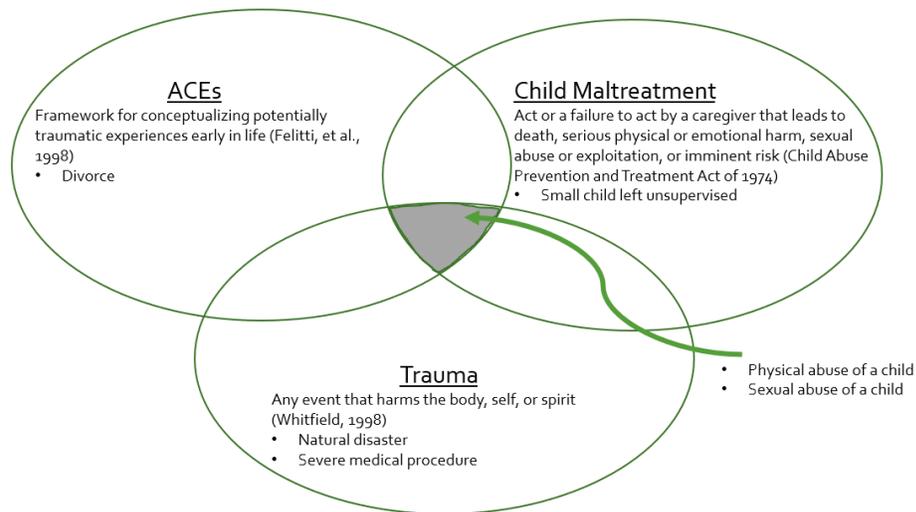


Figure 1. The intersection between ACEs, trauma, and child maltreatment.

Over the past two decades, the construct of Adverse Childhood Experiences (ACEs) has emerged as a prominent framework for conceptualizing potentially traumatic experiences early in life. ACEs include ten categories of events that an individual may experience prior to his or her 18<sup>th</sup> birthday: physical abuse, physical neglect, emotional abuse, emotional neglect,

sexual abuse, living in the home with a family member who has a substance use disorder, living in the home with a family member who has a mental illness, divorce of parents, having a violently treated mother, and having a family member who was incarcerated (Felitti et al., 1998). In the United States, 61.5% of adults have experienced at least one ACE (CDC, 2019c). Additional childhood traumatic experiences that are not expressly listed as ACEs include, but are not limited to, serious accident/medical procedure, exposure to severe bullying, traumatic death of a loved one, homelessness, human trafficking, and exposure to community violence (Sullivan et al., 2013).

Since what has come to be known as “The ACEs Study” (Felitti, et al., 1998), researchers have amassed a large body of data evidencing the high prevalence and long-term impacts of adversity in childhood. Trauma been shown to have not only an impact on the health of those affected, but also a communitywide impact, decreasing social support networks, limiting available physical and mental health care, and lowering productivity. Individuals who are racial or ethnic minorities, who are not heterosexual or cisgender, or who live in a lower socioeconomic community, are more likely to experience trauma (Magruder, Kassam-Adams, Thoresen, & Olf, 2016), and thus face far greater risk of the negative individual and social health consequence of childhood trauma. Further, childhood adversities have a significant impact on the economy. For example, when assessing the lifetime costs of child maltreatment, including short- and long-term healthcare, lost productivity, child welfare, special education, and criminal justice, the cost per victim of nonfatal child maltreatment has been estimated at \$210,012; the cost per victim of fatal maltreatment is \$1,272,900 (Fang, Brown, Florence, & Mercy, 2011). Based on the annual rate of 579,00 nonfatal incidences and 1,740 fatal incidences of child maltreatment in the United States annually, total costs are in

the range of \$124 billion. Factoring in inflation, the total lifetime costs associated with childhood maltreatment for new victims in 2017 was \$121 billion for 674,000 nonfatal cases and 1,720 fatal cases of childhood maltreatment (U.S. DHHS, 2017).

While research indicating multiple negative impacts due to traumatic events is well known (e.g., panic reactions, anxiety, sleep disturbances, psychiatric problems, substance use disorders, obesity, and chronic health issues [Anda et al., 2006; Copeland et al., 2018; Dube et al., 2006; Felitti et al, 1998; Anda & Brown, 2010]), research comparing the traumatic experiences of those child welfare-involved youth who remain in their home and those who are placed in foster care is contradictory as it relates to previous adversities experienced, trauma related behaviors, and service utilization (Conn et al., 2015; Pinto & Maria, 2013; Kolko et al., 2010; Mennen, Brensilver, & Trickett, 2010; Berget et al., 2009) . The North Carolina policy that the type of child welfare services provided (e.g., in-home services, foster care) is dependent on the parent's current ability to ensure safety - without regard to the type of adversity experienced by the child - suggests that children in both intervention groups will be similar in regard to their history of adverse experiences. However, because youth in foster care are eligible for Medicaid (Child Welfare Information Gateway, 2015) and have stable caregivers (i.e., licensed foster parents, kinship caregivers, or group home staff), they have a greater opportunity than those remaining in their homes to receive services to address trauma. Accordingly, research that provides insight into the experiences of children placed in child welfare is necessary to ensure trauma-informed policy and practice.

In response to this need, the current study examined whether there are differences in the trauma experiences of system-involved youth who received In-Home Services and those who received Permanency Planning (i.e., foster care) services, in the State of North Carolina.

More specifically, this study tested the hypothesis that there is no difference in the prevalence of potentially traumatic events between those in Permanency Planning and those in In-Home Services. The study further tested the hypothesis that there is no difference in the number of potentially traumatic events experienced between the two groups. Related to trauma symptoms, this study hypothesized that children in Permanency Planning are more likely to experience trauma symptoms than those in In-Home Services. Finally, the study tested the hypothesis that youth in Permanency Planning experience a higher number of trauma symptoms than their counterparts receiving In-Home Services.

## CHAPTER 2: LITERATURE REVIEW

Childhood trauma, including those events considered Adverse Childhood Experiences (ACEs), has been shown to correlate with both health risk factors (e.g., considering oneself to be an alcoholic, use of illicit drugs, use of injected drugs) and health problems (e.g., heart disease, cancer, stroke, diabetes) (Felitti et al., 1998). In addition to lasting health concerns, trauma can impact a victim's future behavior. Those trauma symptoms can be internalizing or externalizing. Internalizing symptoms include intrusive thoughts, distressing dreams, recurrent thoughts, distorted cognitions, and avoidance of distressing memories among others. Externalizing symptoms may include irritable behavior, verbal or physical aggression to people or things, self-destructive behavior, and sleep disturbance (American Psychiatric Association, 2013). A victim can be diagnosed with Post Traumatic Stress Disorder (PTSD) if he or she has symptoms of intrusion (e.g., nightmares or flashbacks); avoidance of trauma-related thoughts, feelings or reminders, negative alterations in cognitions and mood (e.g., negative affect, feeling isolated); an alteration in arousal and reactivity (e.g., hypervigilance, difficulty sleeping); symptoms lasting for more than one month following the event; and the symptoms leading to an impairment in functioning or distress (American Psychiatric Association, 2013).

A review of the literature on both ACEs and childhood trauma reveals significant health-related concerns for both adults and children. This literature also demonstrates that children who are involved with the child welfare system have an increased likelihood of exposure to ACEs and childhood trauma. However, not all youth who are involved in child welfare receive the same intervention services, and previous research has not determined how

participants in varying interventions differ in regard to childhood trauma. This knowledge is necessary to ensure that the interventions are appropriately trauma-informed.

## 2.1 Health Risks Associated with ACES

The long-term impacts of childhood abuse, neglect, and household dysfunction were brought to the forefront of preventative medicine in 1998, through the ACEs Study (Felitti, et al., 1998). This study included 9,508 participants who were contacted through their primary care clinic and surveyed regarding their childhood experiences of psychological abuse, physical abuse, sexual abuse, living in the home with a family member with a substance use disorder or mental illness, a violently treated mother, or an incarcerated family member. An individual's ACE score was calculated by totaling the number of adversities (i.e., physical abuse, sexual abuse, a violently treated mother) experienced. The researchers then assessed the relationship between these ACEs and ten risk factors associated with the leading causes of mortality in the United States (i.e., being current smoker, severe obesity, no leisure-time physical activity, two or more weeks of depressed mood in the past year, attempted suicide, considering oneself to be an alcoholic, having ever used illicit drugs, having ever injected drugs, having had 50 or more intercourse partners, and having ever had a sexually transmitted disease). Results demonstrated that ACEs are associated with a positive dose dependent response to those risk factors, meaning that an increase in the number of ACEs experienced is associated with an increased likelihood of experiencing the leading causes of mortality. An increase in ACEs was also correlated with an increased rate of ischemic heart disease, cancer, stroke, chronic bronchitis or emphysema, and diabetes. Notably, ACEs were not uncommon, with 52% of participants having experienced one or more ACEs, and 6.2% having experienced four or more (Felitti et al., 1998).

In the ACEs Study, Felitti et al. (1998) also found a correlation between ACEs and physical health; an increased number of ACEs was associated with an increased likelihood of negative physical health. Having experienced four or more ACEs was correlated with an increase in heart disease (OR = 2.2, 95% CI: 1.3, 3.7), stroke (OR = 2.4, 95% CI: 1.3, 4.3), and cancer (OR = 1.6, 95% CI: 1.0, 2.5), all of which are among the top ten leading causes of death in the United States (CDC, 2019b). Overall, there is a population attributable risk of 33.7% between ACEs and fair or poor health (Anda & Brown, 2010); this indicates that 33.7% of those with fair or poor health have that poor health due to the ACEs they have experienced.

The health impact of ACEs is not limited to physical health; the more ACEs a person has, the higher the likelihood that he or she will have poor mental health. There is a population attributable risk of 61.4% between ACEs and missing 14 or more days of work/activity in a month due to mental illness; this indicates that 61.4% of those who have missed 14 or more days of work/activity in a month have missed those days due to ACEs (Anda & Brown, 2010). Suicide, the tenth leading cause of death in the United States, is significantly impacted by ACEs (OR = 12.2, 95% CI: 8.5, 17.5) (CDC, 2019b; Felitti et al., 1998). Other mental health concerns shown to be associated with ACEs include depressed mood, anxiety, and oppositional disorders (Copeland et al., 2018).

In addition to physical and mental health concerns, ACEs are correlated with risky behaviors such as substance use, specifically including the use of tobacco, alcohol, and illicit drugs (Felitti et al., 1998). The CDC considers tobacco use to be the single most preventable cause of disease and death in the United States, with 443,000 people dying annually from tobacco-related illnesses (CDC, 2019a). Those with four or more ACEs are more than twice

as likely to smoke (OR= 2.2, 95% CI = 1.7, 2.9) (Felitti et al, 2019). There is also a strong correlation between self-diagnosed alcoholism and ACEs (OR = 7.4, 95% CI: 5.4, 10.2). Finally, those who have four or more ACEs are nearly five times more likely to abuse illicit drugs and more than ten times likely to inject drugs than are those who have not experienced any ACEs (Felitti, et al., 1998).

As noted, national data from the original ACEs Study (Felitti et al., 1998) demonstrated that just over half of respondents had experienced adverse experiences in their childhood. However, given that child welfare systems are administered by state government and not federal government, local data are necessary to inform a local response. In order to assist states in collecting local data, the CDC created questions from the ACEs Study that states could voluntarily add to their Behavioral Risk Factor Surveillance System (BRFSS) (Austin & Herrick, 2014). North Carolina adopted the BRFSS in 1987 and uses this telephone survey to collect state level data regarding health risk behaviors, chronic disorders, and the use of preventative services among adults. The BRFSS categories include eight ACE categories (i.e., physical abuse; sexual abuse; emotional abuse; a household member who was depressed mentally ill, or suicidal; an incarcerated household member; violence between adults in the household; parental divorce or separation) and three response levels (no ACEs, low ACEs [one or two], and high ACEs [three to eight]). In the 2012 North Carolina BRFSS, 42.4% of adults reported no ACEs; 35.6% were in the low ACEs group; and 21.9% were in the high ACEs group. Unsurprisingly, the correlations between the high ACEs group and the health risks of smoking, heavy drinking, binge drinking, obesity, and HIV risk were statistically significant. All categories of perceived poor health (i.e., overall, poor physical health half of the days, poor mental health half of the days, activity limitation half of the days)

were also statistically associated with an ACE score of three or more. Finally, there were significant associations between the high ACEs group and the chronic conditions of current asthma, chronic obstructive pulmonary disease (COPD), depressive disorder, and disability. Overall, these data demonstrate that the findings of the original ACEs Study and supplementary national studies are generalizable to the population in North Carolina.

## 2.2 Health Impact of ACEs in Childhood

Not only does research demonstrate that adult health is impacted by ACEs, but the existing literature also demonstrates that ACEs significantly impact child and adolescent health (Dube et al., 2006; Flaherty et al., 2006). Each ACE that a child has increases the likelihood of his or her having a chronic medical condition (OR = 1.21, 95% CI: 1.21, 1.40) (Kerker et al., 2015). Flaherty et al. (2006) found that even one adverse experience nearly doubled the risk of overall poor health (OR = 1.89, 95% CI: 1.02-3.48). Four or more adversities almost tripled the likelihood of having an illness requiring medical attention (OR = 2.83, 95% CI: 1.10-7.31). Among teenagers, the likelihood of somatic complaints for those with two or more adverse experiences is nine-fold (2 ACEs- OR = 8.91, 95% CI: 1.15-68.83; 3 or more ACEs- OR = 9.25, 95% CI: 1.25-68.23) (Flaherty et al., 2013). Childhood trauma can also be linked to specific health concerns, including asthma, an increased risk for infection, disturbed sleep, and cognitive delays (Oh et al., 2018). Four or more childhood adversities have been linked to twice the likelihood of a child's being overweight or obese (Harris, 2018).

In addition to physical health symptoms, childhood adversity impacts the mental health of children. A national phone survey of 31,060 participants between the ages of 6 and 11 found that children were more likely to experience depression or anxiety if they had

experienced ACEs (Zare et al., 2018). This nationally representative sample showed an increase in anxiety or depression when the family experienced economic hardship (OR = 3.25, 95% CI = 2.26, 4.68); the child lived with a parent who died (OR = 1.75, CI 95% = 1.13, 2.70); the child was a victim of or witnessed violence in his or her neighborhood (OR = 2.23, CI 95%: 1.63, 3.04); the child lived with someone who was mentally ill, suicidal, or depressed (OR = 2.84, 95% CI: 2.05, 3.94); or the child was judged unfairly due to his/her racial or ethnic group (OR = 1.80, 95% CI: 1.17, 2.78). At a pediatric facility in California, youth with four or more adversities were 32.6 times as likely to have been diagnosed with a learning disorder compared to those without childhood adversities (Harris, 2018).

In addition to ACEs increasing mental health concerns in youth, there is a positive correlation between ACEs and initiation of alcohol use (Dube et al., 2006). The odds ratios vary from 1.7 (95% CI: 1.0, 2.1) for one ACE to 3.2 (95% CI: 2.5, 4.1) for four or more ACEs. Among those ACEs studied, substance abuse in the home is the strongest predictor for adolescent alcohol use (OR = 2.14, 95% CI: 2.0, 3.0).

### 2.3 ACEs in the Child Welfare System

Given the overlap between the frameworks of ACEs and child maltreatment, it stands to reason that child welfare system-involved youth experience ACEs. The National Survey of Child and Adolescent Well-Being (NASCW II) data included 5,873 children who had been referred to CPS due to maltreatment across 30 states. Almost all (99%) of those children had experienced at least one ACE. A large majority (93%) had experienced two or more ACEs. This prevalence is drastically higher than that of the general population, in which only 38% of the population has experienced two or more ACEs (Stambaugh et al., 2013). Kerker et al. (2015) examined ACEs for child-welfare involved youth who were under seven years of age

and found that the general trends held true for younger children; even among younger children, the mean number of ACEs was 3.6.

The most common ACEs experienced by those referred for child welfare services are physical neglect (30.3%), domestic violence of a primary caregiver (26.7%), and physical abuse (21.9%) (Garcia et al., 2017). In a supplemental examination of potentially traumatic events not included in the original ACEs Study, more than one third of children (33.5%) had been hospitalized, more than a quarter (26.9%) had been exposed community violence, and more than a fifth (21.6%) had experienced poverty. Griffin et al. (2011) examined events not included in the original ACEs study among a sample of Illinois youth and found that neglect was most commonly experienced (46.12%), followed by family violence (29.25%) and traumatic grief and separation (25.49%).

Clinical problems, both internalizing and externalizing, were also common among those youth referred to child welfare services (Garcia et al., 2017). More than a quarter (27.6%) experienced clinically significant problems; externalizing behaviors (e.g., irritable behavior) were more common than were internalizing behaviors (e.g., intrusive thoughts), at 25.6% compared to 20.4%. However, Griffin et al. (2011) found that internalizing symptoms, such as depression (16.68%) and attachment issues (15.60%), were more common than were externalizing symptoms, such as anger control (14.53%) and impulse/attention concerns (12.50%). Garcia et al.'s finding that each additional ACE increases the likelihood of behavioral concerns in child welfare-involved youth (OR = 1.32, 95% CI: 1.14, 1.53) was substantiated by Griffin et al. (IRR=1.342).

It is well-documented that youth who have been in foster care experience more trauma than do children in the general population. For example, Turney and Wildeman (2017) found

that while almost 76% of children in foster care had experienced at least one ACE, that figure dropped to 33% for children who had not experienced foster care. Children who had been in foster care experienced an average of 2.47 ACEs compared to their peers, who experienced an average of 0.62 ACEs. Moreover, a higher percentage of foster care children had experienced each individual ACE category (i.e., parent divorce or separation [45.5% v. 19.6%], parental death [11.5% v. 2.8%], parental incarceration [40.1% v. 6.4%], parental abuse [34.2% v. 6.9%], violence exposure [31.1% v. 8.2%], household member mental illness [33.7% v. 8.2%], household member substance abuse [53.8% v. 9.9%]). The increased likelihood that a child who had been in foster care would experience an ACE ranged from 341% (parental divorce or separation) to 1,062% (household member with substance abuse).

As youth in foster care age, they have higher rates of suicide attempts, depression, and psychosis than do youth who have not experienced foster care (Vinnerljung, Hiern, & Lindblad, 2006). Overall, foster care youth experience a 7.5 increase in odds for psychiatric hospitalization compared to the general youth population (95% CI= 6.3, 9.0). This is, in part, due to the adversity foster care youth experienced as children, sometimes due to the mental health and/or substance use needs of their parents (e.g. parental alcohol abuse, parental abuse of illicit drugs, or parental psychiatric disorder) and the amount of time spent in foster care.

In summary, there is clear evidence that youth involved with the child welfare system are more likely to experience trauma than are their non-system involved peers. However, research specific to the child welfare population has tended to focus on the system as a whole or on the foster care system in particular. Considerably less research has examined youth involved in other services available through child welfare, including in-home services.

## 2.4 In-Home and Out of Home Interventions

Information on which youth are best served by a specific intervention (i.e., in-home services or foster care), as well as the outcomes associated with particular interventions, is necessary to ensure that youth within the child welfare system receive the best care possible. When investigating trauma and its impact on children who remain in their home compared to those who are placed in foster care, researchers have examined the number of adversities, traumatic stress, behaviors, and mental health service utilization. Overall, the findings from these studies are not conclusive.

In examining the number of adversities children experienced, Conn et al. (2015) found that 23% of those system-involved youth who remained in the home had high ACE scores (i.e., three or more of the eight ACEs included), compared to the 14% of youth in foster care with a high ACE score. In contrast, Pinto & Maria (2013) found that domestic violence was more common among system-involved youth in foster care (40%) than those youth served in their home (28%); Conn et al. found the opposite (i.e., 20% for foster care and 41% for those in their home). Pinto & Maria found that parental mental illness was also higher for those in foster care (37%) compared to those in their home (22%); Conn et al. again found the opposite (14% for foster care and 20% for those in their home). Physical abuse was more prevalent for those in foster care (35%) compared to those in their home (14%) based on Pinto & Maria's findings, but Conn's team found rates of 23% for foster care and 31% for those in their home. Lastly, Pinto & Maria found parental criminal activity to be higher among those in foster care (27%) compared to those in their home (18%), while Conn et al. found the same rate among the two groups. Interestingly, both datasets indicated that parental drug use is higher for those in foster care (61% according Pinto & Maria and 21% according to Conn et al.) compared to

those who remained in their home (58% according to Pinto & Maria and 9% according to Conn et al.).

There is a relatively large body of research comparing internalizing behaviors between system-involved youth who remained in their home and those placed in foster care. Kolko et al. (2010) found that foster children between the ages of 8-11 did not show higher levels of traumatic stress than did those who remained in their home (OR=.55, 95% CI=.22, 1.39). However, there was less traumatic stress among adolescents who remained in their home (OR=.39, 95% CI= .16, .93) than those placed in foster care. Other studies did not find any statistically significant difference in traumatic stress between youth in foster care and those remaining in their home (Mennen, Brensilver, & Trickett, 2010). Controlling for family and child psychosocial risk factors (i.e., drug or alcohol abuse by caregiver, impaired parenting skills, domestic violence, poverty) eradicated these results. Berger et al. (2009) also found a statistically significant difference in internalizing behaviors between youth in foster care and those who remained in their home; however, consideration of youth and family history eliminated the significance of this difference.

The research on externalizing behaviors has likewise been inconclusive. While some researchers (e.g., Mennen, Brensilver, & Trickett, 2010) have found no difference between youth in foster care and those who remain in their home, others (e.g., Berger et al., 2009) have found differences, the significance of which was nonetheless eliminated upon considering family and child history. Notably, in one study, researchers found that out-of-home placement decreased externalizing and risk behaviors, even when accounting for psychosocial histories (Pinto & Maia, 2013).

Illicit drug use, which can be an externalizing trauma behavior, has frequently been the focus of research. Casaneuva et al. (2014) used the first cohort of the National Survey of Adolescent Well-Being, a national sample of child welfare-involved youth, to examine 1,104 child welfare-involved youth from 36 states. Illicit drug use rates differed between youth placed outside the home and those who remained in their home. More youth remaining in the home had never been drug users (41.0%) compared to those who had been placed outside the home (28.6%), while more youth outside the home were regular substance users (22.5%) than were those who remained in the home (14.0%). Overall, however, the rates of substance dependence between those who remained in the home and those placed in foster care were similar (5.4% compared to 5.9%).

Two groups of researchers used the NSCAW II to examine mental health treatment utilization 18 months after collecting baseline data from system-involved youth who were in foster care and those who were placed inside the home. Horwitz et al., (2012) found that children who were placed outside their home, regardless of age, were two to four times more likely than their non-system-involved peers to utilize mental health services (95% CIs: [1.07, 31.16], [1.44, 6.46], [1.11, 6.83], [1.10, 13.31]), while those who remained in the home were no more likely to utilize mental health services than were non-system-involved youth (95% CIs: [.56, 1.69], [.83, 2.92], [.65, 2.62], [.22, 2.92]). However, when type of foster care placement was considered, a substantial variation between those in relative foster care, non-relative foster care, and group care residential treatment was observed (i.e. 48.1%, 78.9%, 100%, respectively). This finding evidences a wide range of mental health service utilization among those who are in foster care. Conn et al. (2015) also found that mental health services were much more likely to be utilized by those placed in foster care than by those who stayed

in their home (34% compared to 15%). However, these findings do not suggest that either foster care or in-home intervention is better at treating mental health needs than the other when examining the intervention at 18 months (OR = 2.14, 95% CI:.71, 6.39). While those in foster care are more likely to receive mental health services compared to those receiving in-home services, the data do not demonstrate an improvement in the mental health of either group Figure 2 provides a summary of findings across studies.

	More prevalent in in-home intervention group	More prevalent in foster care intervention group	No difference in prevalence
High ACEs Score	X		
Domestic Violence	X	X	
Parental Mental Illness	X	X	
Physical Abuse	X	X	
Parental Criminal Activity	X	X	
Parental Drug Use		XX	
Clinically Elevated Internalizing Behaviors	X		XX
Clinically Elevated Externalizing Behaviors	X		XX
Utilize Mental Health Services		XX	

Figure 2. Intervention comparison of risks, behaviors, and service utilization. Each “X” represents the findings of one study that compared the risks, behaviors, and service utilization of those receiving in-home and foster care services (Conn et al., 2015; Pinto & Maria, 2013; Kolko et al., 2010; Mennen, Brensilver, & Trickett, 2010; Berger et al., 2009).

## 2.5 Conclusions and Questions

Research has demonstrated that adversities in childhood are positively correlated with negative health outcomes and risky behaviors. Data have also shown that children who are

involved in the child welfare system experience more trauma than do those who are not system-involved, a finding that is not surprising, given that many forms of childhood trauma constitute legitimate and common reasons for referral to the child welfare system (e.g., mother treated violently, physical or sexual abuse, physical neglect, substance abuse by parent, and domestic violence) (U.S. DHHS, 2017). However, research involving closer examination of child-welfare involved youth has been inconclusive in regard to whether there are any differences between youth receiving in-home interventions and those receiving out-of-home interventions (e.g., foster care) in regard to the amount of adversity experienced prior to child welfare involvement, the child's clinical needs (related to internalizing and externalizing behaviors), and changes in those clinical needs over time. Such information is essential to inform how best to assess and to treat trauma, as well as how to allocate limited resources to child welfare-involved youth, knowing that untreated trauma has long term costs to individuals and communities (Magruder et al., 2017; Fang et al., 2012). It follows that if children have the same needs, regardless of the service group to which they are directed (e.g., foster care and in-home services), they should have equal access to trauma screening, assessment, and treatment.

## CHAPTER 3: HYPOTHESES

This study examined potentially traumatic events and trauma symptoms among child welfare system-involved youth in North Carolina who were directed to either In-Home Services or Permanency Planning. While research in the field has demonstrated that youth involved in the child welfare system have more traumatic experiences than do those not involved in child welfare (Conn et al., 2015; Garcia et al., 2017; Pinto & Maia, 2013), there has not been a consensus regarding rates of traumatic experiences or trauma symptoms across these two intervention (i.e., service) groups. Accordingly, the first objective of this study was to compare the prevalence of potentially traumatic experiences for (1) those youth receiving In-Home Services and (2) those assigned to Permanency Planning (i.e., foster care). The second objective was to compare the prevalence of trauma symptoms for these same groups. The following research questions were addressed:

- 1) Is there a difference in the prevalence of potentially traumatic events among children in In-Home Services compared to children in Permanency Planning?

It was hypothesized that there is no significant difference between the numbers of children in In-Home Services compared to Permanency Planning who have experienced at least one potentially traumatic event.

- 2) Is there a difference in the number of potentially traumatic events experienced by children in In-Home Services compared to children in Permanency Planning?

It was hypothesized that there is no significant difference in the number of potentially traumatic events experienced by children in In-Home Services and Permanency Planning.

- 3) Is there a difference in the prevalence of trauma symptoms for children in In-Home Services compared to children in Permanency Planning?

It was hypothesized that children in Permanency Planning are more likely to have experienced at least one trauma symptom compared to children assigned to In-Home Services.

- 4) Is there a difference in the in number of trauma symptoms experienced by children in In-Home Services compared to children in Permanency Planning?

It was hypothesized that children in Permanency Planning report more trauma symptoms than do children in In-Home Services.

## CHAPTER 4: METHODS

### 4.1: Study Design

This study used a cross-sectional design, relying on secondary data obtained from the Benchmarks' Partnering for Excellence (PFE) initiative. Benchmarks, a non-profit association of 90 behavioral health provider agencies, has led this initiative since 2012. Partnering for Excellence aims to redesign the way the child welfare and behavioral health systems interact in order to improve the quality of services provided to clients ages 5 to 21. Through PFE, participating agencies implemented trauma screening of youth assigned to In-Home Services and Permanency Planning, using the Project Broadcast Trauma Screening Tool (TST) (see Appendix B). Since its launch, PFE has screened 1,419 number of children using the TST across three different North Carolina counties.

### 4.2: Data Collection

Partnering for Excellence is operational in three counties in North Carolina: Rowan, Cleveland, and Davidson. Rowan County Department of Social Services (DSS) began screening youth in 2014, Cleveland County DSS began in 2016, and Davidson County DSS began in 2017. Each county has protocols that are used to train staff on how to complete the tool, as well as when and how to engage the family in completing the tool. When starting an intervention, the social worker reviews a brochure about trauma, its effects, and the PFE program with the birth parents and/or current caregivers (see Appendix A). The legal guardian(s) (i.e., the birth parents/caregiver for youth assigned to In-Home Services and the birth parent and social worker for youth in Permanency Planning) then determines if he or she would like for the child to participate in the process. The birth family is not penalized for choosing not to participate (i.e., their refusal is not treated as a failure to follow through on the

agreed upon family plan developed through child welfare). After obtaining parent and/or legal guardian consent, the social worker completes the screening tool for children who are five years of age and older. Completing the tool entails asking the parent/caregiver if the child has ever experienced 16 potentially traumatic events or currently displays 28 trauma symptoms. For children ages six years and older, the social worker asks the child four additional questions (i.e., involving the experience of physical abuse, domestic violence, sexual abuse, and any other potentially traumatic event). The social worker can add potentially traumatic events and trauma symptoms to the form based on the case file. The form takes approximately five minutes to complete.

In connection with this study, the researcher requested a de-identified dataset from Benchmarks to include all youth who had received a trauma screen from the start of Partnering for Excellence through February 28, 2019 for Rowan County DSS, Cleveland County DSS, and Davidson County DSS. That dataset included demographic data on the youth (e.g., including age, sex, and race) along with the outcomes of the TST including service intervention, PTEs, and trauma symptoms reported.

#### 4.3: Study Population

##### 4.3.a: Demographic Information

Rowan, Cleveland, and Davidson counties are located in the Piedmont region of North Carolina. Upon being approached by Benchmarks, the DSS agencies in the three counties agreed to participate in the project, in partnership with their local behavioral health Managed Care Organization.

Rowan and Davidson Counties are considered primarily urban (populations 141,000 and 167,000, respectively), while Cleveland County is considered to be rural (population

about 98,000). The counties range from 76% white (Cleveland County) to 86% white (Davidson County), with ranges from 10% African American (Davidson County) to 21% African American (Cleveland County) and from 4% Hispanic (Cleveland County) to 9% Hispanic (Rowan County). Cleveland County has the lowest median income of the three counties, at \$40,000, and Rowan County has the highest, at \$47,000. Relative to the totality of North Carolina, these three counties have more white residents, fewer African American and Hispanic residents, and lower median incomes; however, the counties are demographically similar to nearby counties (United States Census Bureau, 2019).

The University of North Carolina at Chapel Hill maintains DSS data for the State of North Carolina in their data management system (Duncan et al., 2019); this system consolidates the information entered into the database for each county. The 2016-2017 fiscal year is the last year for which information for the counties conducting trauma screens is available. In fiscal year 2016-2017, 3,062 children were investigated due to reports of abuse or neglect. The population of child-welfare involved youth across Davidson, Cleveland, and Rowan Counties is 71.3% ( $n = 2,182$ ) white, 24.5% ( $n = 750$ ) African-American, 0.1% ( $n = 2$ ) American Indian or Alaskan, and 4.2% ( $n = 128$ ) other races. Notably, the white population is underrepresented in these three counties' child welfare systems while the African American population is overrepresented. The population is mostly non-Hispanic (92.5%;  $n = 2,832$ ). The Hispanic population is slightly overrepresented in Cleveland County DSS and Davidson County DSS, but is underrepresented in Rowan County DSS. There are slightly more males (51.6%;  $n = 1,579$ ) than females (48.3%;  $n = 1,483$ ) among the three DSS agencies. Most children are younger; 52.2% ( $n = 1,579$ ) are ages birth to five, 33.0% ( $n = 1,009$ ) are ages six

and 12, and 14.2% ( $n = 434$ ) are older than age 13. No age was known for 0.7% ( $n = 21$ ) of the three-county system-involved youth.

#### 4.3.b: Child Welfare Definitions

All of the youth eligible for inclusion in this study were brought to the attention of the child welfare system so the system could determine if child maltreatment took place. In order to determine if child maltreatment has occurred, child welfare agencies in North Carolina use the North Carolina Juvenile Code (North Carolina [NC] General Statute §7B-101, 2018). This statute defines an abused juvenile as any person under age 18 whose parent, guardian, or caretaker:

- a) Inflicts or allows to be inflicted upon the juvenile a serious physical injury by other than accidental means; or
- b) Creates or allows to be created a substantial risk of serious physical injury to the juvenile by other than accidental means; or
- c) Uses or allows to be used upon the juvenile cruel or grossly inappropriate procedures or cruel or grossly inappropriate devices to modify behavior; or
- d) Commits, permits, or encourages the commission of a violation of the following laws by, with, or upon the juvenile; first or second degree rape; first or second degree sexual offense; sexual act by a custodian; crime against nature; incest; preparation of obscene photographs, slides, or motion pictures of the juvenile; employing or permitting the juvenile to assist in a violation of the obscenity laws; dissemination of obscene material to the juvenile; displaying or dissemination material harmful to the juvenile; first and second degree sexual exploitation of the juvenile;

promoting the prostitution of the juvenile; and taking indecent liberties with the juvenile; or

- e) Create or allows to be created serious emotional damage to the juvenile; or
- f) Encourages, directs, or approves of delinquent acts involving moral turpitude committed by the juvenile.

North Carolina statutory law defines a neglected juvenile as one who does not receive proper care, supervision or discipline from his or her parent, guardian, or caretaker; who has been abandoned, not provided medical care, or not provided necessary remedial care; who lives in an environment injurious to the juvenile's welfare; or has been placed for care or adoption in violation of the law (Juvenile Code, NC G.S. §7B-101, 2018).

The North Carolina Department of Social Services (NC DSS) manages child protective services (CPS) in the State (NC DSS, 2017). NC DSS utilizes a Multiple Response System (MRS), which aims to ensure a more family-centered approach to assessing potential child maltreatment. Through MRS, North Carolina families are assigned to either an investigative assessment or a family assessment. Figure 2 outlines the pathway of MRS. Investigative assessments are assigned to those reports that include abuse, a sibling fatality, a child already in custody (e.g., foster care), a life-threatening issue, abandonment, an infant who was corporally punished, or a child exposed to a methamphetamine lab. The family assessment track is used for all other reports, including domestic violence in the home, inadequate supervision, or corporal punishment that leaves bruises. In 2017, the most recent year for which figures were available, 7,700 reports were referred for an investigative

assessment, and 114,052 reports were referred for a family assessment in North Carolina (U.S. DHHS, 2017).

Potential findings from an investigative assessment are either “Substantiated,” indicating that the facts of the case meet law or policy requirements for the allegation or risk of maltreatment, or “Unsubstantiated,” indicating that sufficient evidence is not available to support the claim. Potential findings from a family assessment include “Services needed,” in which the safety risk is deemed to be so high that involuntary services must be provided to the family; “Services recommended,” indicating that there is not a risk for safety or future harm, but linking services would be helpful; “Services provided,” meaning that the risk was high enough at one point to merit involuntary services, but is no longer at that level; and “Services not recommended,” indicating that there is not a risk for future harm, and there are no other non-safety related needs (NC DSS, 2017). The determination of a finding, in both the investigative and the family assessment track, closes the assessment phase.

After the assessment phase, a finding of “Unsubstantiated,” “Services recommended,” “Services provided,” or “Services not recommended” can lead to closure of the case (NC DSS, 2017). However, if the finding was “Substantiated” or “Services needed,” the case is transferred to either In-Home Services or Permanency Planning (colloquially called “foster care”). It is important to note that Permanency Planning is not a reference to a placement (e.g., kinship home, foster home, group home), but rather a court decision that the State should have custody of the child.

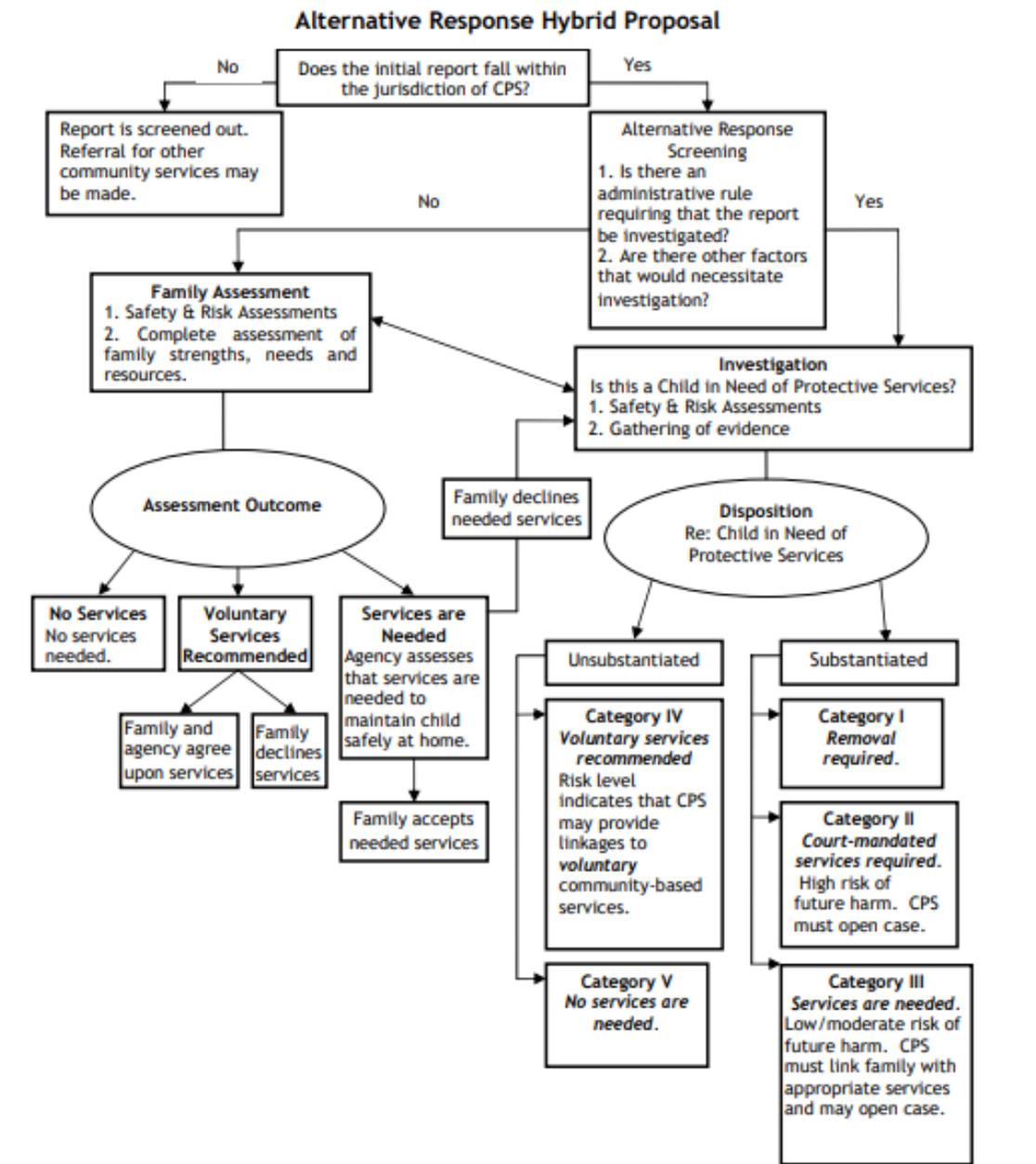


Figure 3. Example of a Multiple Response System child welfare pathway (The National Center for Adoption Law and Policy and The American Bar Association Center on Children and the Law, 2018).

Importantly, the level of intervention that the child welfare agency delivers is not dependent on the specific adversity experienced by the child, but on the response of the parents. Regardless of the event that precipitates referral to child welfare, In-Home Services

are designed to ensure the safety of the youth in the home, while assisting the parent in increasing appropriate parenting skills. Through In-Home Services, the DSS social worker conducts a needs assessment, identifies resources, makes appropriate referrals, and delivers services through a partnership model. The goal is to ensure child safety, while maintaining the youth in the home. If it is instead determined that a youth cannot be safely maintained in his or her home, DSS petitions the court to take custody, and the family then receives Permanency Planning services. Permanency Planning constitutes temporary substitute care for those youth whose parents or caretakers are unable or unwilling to provide protection and care. For example, a child may not be able to be safely maintained in his or her home when sexual abuse continues to occur, or parents are unable to provide supervision due to an impairing substance use disorder. However, if the parents were able to ensure the child's safety after the sexual abuse, he or she may be able to stay in the home. This means that the same adversity, sexual abuse, has led to two different child welfare interventions. Given that youth in Permanency Planning are more likely to receive mental health services than are those who stay in the home (Horwitz et al., 2012), there may be other differences in the resources children receive even when the adversity they experienced was exactly the same

#### 4.3.c: Potentially Eligible Trauma Screenings

The number of children eligible to receive a trauma screening across the three participating counties, and thus potentially eligible to be included in these analyses, can be determined by assessing the number of reports received by the local child welfare agency. Since Rowan County was the first agency to start using trauma screens, this study included 4 years and 1 month of trauma screens from Rowan County Department of Social Services (DSS). Annually, Rowan County DSS receives 1,145 reports. Of those cases, 37 cases are

“Substantiated” for abuse, neglect, or dependency, while 232 are “Unsubstantiated.” An additional 409 cases are either “Services recommended” or “Services needed,” while 467 are either “Services provided, no longer needed” or “Services not recommended.”

“Substantiated,” “Services recommended,” and “Services needed” findings, which are eligible to continue to In-Home Services or Permanency Planning, comprised 446 cases (Duncan et al., 2019).

The dataset for this study included two years and five months of screens from Cleveland County DSS. Cleveland County DSS receives 970 reports annually. Of those, 118 are “Substantiated” for abuse, neglect, or dependency while 425 are “Unsubstantiated.” Additionally, 34 cases are “Services recommended” or “Services needed,” while 394 are “Services provided, no longer needed” or “Services not recommended.” Therefore, 152 cases are eligible for In-Home Services or Permanency Planning (Duncan et al., 2019).

Finally, Davidson County DSS began screening children in 2017, such that this study included 1 year and 8 months of screens for Davidson County. Annually, Davidson DSS receives 947 or 948 cases (discrepancies exist in reported data). Of those cases, 43 are “Substantiated” for abuse, neglect, or dependency, while 90 are “Unsubstantiated.” Additionally, 299 cases are “Services recommended” or “Services needed,” while 516 are either “Services provided, no longer needed” or “Services not recommended.” Therefore, Davidson County DSS has 342 cases that are eligible for In-Home Services or Permanency Planning (Duncan et al., 2019).

Based on these figures an estimated, 940 children annually across Davidson, Cleveland, and Rowan Counties may be screened for trauma. This group includes youth who have findings of “Substantiated,” “Services needed,” and “Services recommended.” Youth

may not receive the intervention due to worker error or the legal guardian's declining the service.

#### 4.4: Measurement Issues

In 2011, the Administration for Children and Families funded Project Broadcast, an initiative to create a trauma-informed child welfare system. A group of North Carolina partners (i.e., NC DSS, Center for Child and Family Health [a community-based mental health provider], University of North Carolina at Chapel Hill) led the project. As part of this initiative, the partners created the Project Broadcast Trauma Screening Tool (TST), which combined several other tools to examine exposure to potentially traumatic events (PTEs) and symptoms. The TST provided information on both the dependent variables (i.e., PTEs and trauma symptoms) and the independent variable (i.e., service intervention) in this study.

A family's assigned social worker completes the TST by asking the parent/caregiver the questions. The social worker may also use the case file to complete the questions. There are four additional questions about PTEs that children ages six years and older answer. Youth are "screened positive" when there is an indication of at least one PTE and one symptom. The tool was originally designed for youth from birth through 18 years of age, but it can now be completed for young adults up to the age of 21 (Lang et al., 2017).

The TST also includes a field for child welfare intervention (Sullivan et al., 2013), indicating, as a binary variable, that the youth is involved with either In-Home Services or Permanency Planning. Notably, the child welfare intervention field describes the service that the family is currently receiving; it does not reflect any previous services. The TST also includes the information reported by the parent/caregiver and/or the social worker regarding the PTEs and trauma symptoms. The TST includes 16 PTEs (i.e., physical, sexual, and

emotional maltreatment, exposure to varying forms of violence or substance abuse, loss of loved ones due to death or incarceration, natural disasters, human trafficking) along with an option for “other.” Trauma symptoms include externalizing behaviors, specific moods and emotions, relational and attachment difficulties, and concerns regarding childcare or school (Sullivan et al., 2013).

The TST has both strengths and weaknesses. A strength is that it is short- only one page - and thus can be completed in about five minutes. The form is also very easy to fill out; the social worker need only check boxes about events that have occurred or symptoms that are present. An additional strength is that the tool is flexible; a caregiver or a social worker can confirm the PTEs and symptoms. Definitive knowledge that the PTE occurred is not required; rather, the wording indicates “know or suspect,” which is more lenient than the stringent legal requirements to which DSS is typically held. A negative aspect of this flexibility is that the most accurate information is not always obtained. If a caregiver does not disclose PTEs or symptoms, and a social worker is not aware of them, then the tool will not produce accurate information. While the tool has not been independently tested for reliability or validity, it was derived from several other tools in common usage. These tools include the National Childhood Traumatic Stress Network’s Core Clinical Characteristics Trauma Detail Form and the Child Trauma Assessment Center screening tool (Lang et al., 2017). The TST is a comprehensive tool that has been used across North Carolina with more than 14,000 children (Preisler & Stewart, 2018).

#### 4.5: Data Analysis Plan

All data were analyzed using SPSS (IBM, 2017). Descriptive analyses documented the prevalence and mean number of PTEs and trauma symptoms for both groups of children (i.e.

children receiving In-Home Services, children receiving Permanency Planning). Further analyses addressed the four research questions as outlined below.

- 1) Is there a difference in the prevalence of potentially traumatic events among children in In-Home Services compared to children in Permanency Planning?

To test the hypothesis that there was no difference in the prevalence of PTEs for children in In-Home Services compared to children in Permanency Planning, chi-square analysis compared the percentage of youth in In-Home Services who had one or more PTEs with the percentage of youth in Permanency Planning who had at least one PTE.

- 2) Is there a difference in the number of potentially traumatic events experienced by children in In-Home Services compared to children in Permanency Planning?

To test the hypothesis that there was no significant difference between children in In-Home Services and children in Permanency Planning regarding the number of PTEs experienced, an independent groups t-test compared the mean number of PTEs for the two groups was conducted. The significance level was set at 0.05.

- 3) Is there a difference in the prevalence of trauma symptoms for children in In-Home Services compared to children in Permanency Planning?

To test the hypothesis that trauma symptoms are more prevalent among children in In-Home Services compared to children in Permanency Planning, a chi-square analysis was conducted to compare the percentage of youth in In-Home Services with one or more trauma symptoms to the corresponding percentage of youth in Permanency Planning.

4) Is there a difference in the number of trauma symptoms experienced by children in In-Home Services compared to children in Permanency Planning?

To test the hypothesis that children in Permanency Planning experience more trauma symptoms than do children in In-Home Services, an independent groups two-sample t-test was used to compare the mean number of trauma symptoms for the two groups.

## CHAPTER 5: ETHICAL ISSUES/HUMAN SUBJECT PROTECTION

The researcher submitted a request to analyze secondary data to the University of North Carolina at Charlotte Internal Review Board. The Office of Research Compliance determined that this research does not constitute human subject research as defined by federal regulations, since it relied on de-identified secondary data, and therefore did not pose a threat to the participants, and the Internal Review Board granted an exemption for this study.

Benchmarks, the proprietor of the data, then provided the researcher with a deidentified dataset for analysis.

## CHAPTER 6: RESULTS

### 6.1 Descriptive Statistics

The dataset used for analysis included information on 1,419 children, ages 5 to 21, who received either In-Home Services or Permanency Planning from a DSS agency participating in the Partnering for Excellence initiative conducted by Benchmarks. All of these youth had a finding of “Substantiated”, “In Need of Services”, or “Services Recommended,” meaning an assessment was completed by the DSS agency, and it was determined that continued monitoring was necessary to ensure safety. Among the individuals for whom data were available, 199 youth (14.03%) were not screened with the Project Broadcast Trauma Screening Tool (TST) because a caregiver declined the intervention (1.55%;  $n = 22$ ), the worker failed to screen the youth (3.88%;  $n = 55$ ), the child was placed outside the county (2.82%;  $n = 40$ ), or another (i.e., “other”) situation prevented DSS staff from completing the TST (2.40%;  $n = 34$ ). The absence of any scores in the data set for an additional 48 youth (3.39%) indicated that a trauma screen had not been completed for these children. Finally, no child welfare intervention (i.e., Permanency Planning, In-Home Services) was indicated for 9 (0.6%) youth, who were also excluded from the analyses. In sum, a total of 1,210 trauma screens comprised the final dataset for analysis.

Detailed demographic data for the final sample are shown in Table 1. These data revealed that 630 (52.1%) of the child “participants” were female and 573 (47.4%) were male; data were missing for 7 participants (0.6%). The sample was overwhelmingly Caucasian (68.6%;  $n = 830$ ), but also included African Americans (16.8%;  $n = 203$ ), bi-racial and multi-racial youth (2.1%;  $n = 25$ ), Hispanics (2.6%;  $n = 32$ ), and “other” ethnicities (1.9%;  $n = 23$ ); race or ethnicity data were missing for 97 (8.0%) participants. A range of ages were

represented; 104 participants (8.6%) were five-years old; 734 (60.7%) were between ages six and twelve; 350 (28.9%) were between ages 13 and 17, and 4 (0.3%) were between ages 18 and 19; age data were missing for 21 (1.7%) participants. Most participants were from Rowan County (58.5%;  $n = 708$ ), with 239 (19.8%) from Cleveland County and 263 (21.7%) from Davidson County. About one quarter (24.5%;  $n = 297$ ) of the sample were receiving Permanency Planning services; the remainder were receiving In Home Services (75.5%;  $n = 913$ ).

Overall, the demographics of the two intervention groups (i.e., Permanency Planning, In-Home Services) were similar. There were no substantive differences in sex percentages between the In-Home Services (females: 52.2%;  $n = 477$ ) intervention group and the Permanency Planning group (females: 51.5%;  $n = 51.5\%$ ). Those in Permanency Planning were more likely to be African American (22.3%;  $n = 66$ ) or “other” (4.4%,  $n = 13$ ) than were those in In-Home Services (15.0%,  $n = 137$ ; 1.1%,  $n = 10$ ). Neither of these discrepancies are statistically significant. Furthermore, race was missing for 9.7% ( $n = 89$ ) youth in In-Home Services and only 2.7% ( $n = 8$ ) for Permanency Planning. Therefore, these disparities in race may not be valid. Those in Permanency Planning tended to be older (i.e., 13 years old and above) (33.4%;  $n = 99$ ) than did those in In-Home Services (27.6%;  $n = 252$ ); but this difference was not statistically significant.

Potentially traumatic events and trauma symptoms were prevalent among all youth. Across the two intervention groups, an overwhelming majority (90.6%,  $n = 1,096$ ) of participants had experienced at least one potentially traumatic event (PTE) with an overall mean of 3.51 PTEs ( $SD = 2.52$ ). The number of PTEs reported ranged from 0 to 14, with a maximum possible score of 16 PTEs. Similarly, most children (74.1%,  $n = 897$ ) reported at

least one specific trauma symptom; there was a sample mean of 4.18 symptoms ( $SD = 4.43$ ). The reported number of symptoms ranged from 0 to 25, with 28 trauma symptoms represented on the scale.

## 6.2 Inferential Statistics

To test the four study hypotheses, participants were divided into two groups based on the service they received from DSS (i.e., Permanency Planning or In-Home Services). Permanency Planning included 297 participants and In-Home Services included 913 participants. Either chi square tests or t-tests were performed, as appropriate to the specific research questions.

*Potentially traumatic events.* In order to test the hypothesis that there was no significant difference between the prevalence of experiencing at least one PTE among children in In-Home Services compared to Permanency Planning, chi square testing was performed. Results did not support the hypothesis. Prevalence of at least one PTE was higher for youth in Permanency Planning (97.6%,  $n = 290$ ) than for youth in In-Home Services (88.3%,  $n = 806$ ),  $X^2(2, N=1,210) = 23.31, p < .000$ . However, it is important to note that most, but not all, youth in both the In-Home Services and Permanency Planning had experienced potentially traumatic events.

An independent groups t-test was then conducted to test the hypothesis that there was no significant difference in the number of PTEs experienced by children receiving In-Home Services and those in Permanency Planning. Again, results did not support the hypothesis. Children in Permanency Planning reported significantly more PTEs ( $M = 4.36, SD = 2.54$ ) than did those in In-Home Services ( $M = 3.23, SD = 2.45$ ),  $t(1,179) = 6.76, p < .000$ . However, the number of PTEs experienced by children in both intervention groups varied by

one PTE, with both groups more likely to have experienced PTEs than not. Results of all inferential analyses regarding PTEs are detailed in Table 2.

*Trauma symptoms.* A second chi square test was performed to test the hypothesis that children in Permanency Planning were more likely to have experienced at least one trauma symptom compared to children assigned to In-Home Services. Data supported this hypothesis. Significantly more youth in Permanency Planning (82.5%,  $n = 245$ ) experienced at least one trauma symptom than did youth in In-Home Services (71.4%,  $n = 652$ ),  $X^2(1, N = 1,184) = 14.67, p = .001$ . The number of trauma symptoms experienced by youth receiving Permanency Planning (and included on the TST) ranged from 0-18, while the number of PTEs experienced by youth receiving In-Home Services ranged from 0-25. Notably, a majority of youth (82.5% and 71.4%) in each group had experienced at least one trauma symptom.

A final independent groups t-test was performed to test the hypothesis that children in Permanency Planning experienced more trauma symptoms than do children in In-Home Services. Results did not support this hypothesis. Children in Permanency Planning experienced fewer trauma symptoms ( $M = 3.89, SD = 3.99$ ) than did youth in In-Home Services ( $M = 4.28, SD = 4.57$ ),  $t(1,176) = -1.28, p = .200$ , however, the difference was not statistically significant. All inferential statistics regarding trauma symptoms can be found in Table 3.

## CHAPTER 7: DISCUSSION

Similar to previous studies regarding traumatic events for system-involved youth, participants in this study (i.e., child-welfare involved youth across three North Carolina counties) had a high likelihood of experiencing trauma. This research found that 91% ( $n = 1,096$ ) of system-involved youth had experienced some form of trauma, and 74% ( $n = 897$ ) of youth experience trauma symptoms. These data suggest that in addition to screening for potentially traumatic events (PTEs), it is important to screen for the trauma symptoms that youth may experience. Taken together, the presence of PTEs and trauma symptoms can indicate a need for a referral for a specialized trauma assessment. Given the extensive research showing that trauma has long lasting impacts on the health of those who experience trauma, as well as the community at large, creating appropriate pathways to help system-involved youth overcome their trauma can be aided by public health services such as investigating local health problems, mobilizing community efforts, and creating effective policies.

Understanding the histories of youth who are served in the different interventions/services it offers can assist the child welfare field in determining how to best meet the needs of children. Often, national campaigns focus on children who are in foster care (Permanency Planning) and assisting those youth with many resources available (i.e. mental health treatment, clothing, school support). However, those youth in In-Home Services rarely receive attention. Indeed, many child-serving systems outside of child welfare (e.g., schools, insurance plans, mental health practitioners) are not aware of the In-Home Services program and have no way of knowing when children are involved with this child welfare service intervention. Since more than 90% of children in the current dataset experienced at least one PTE, and research has shown that trauma can have lifelong negative impacts, it follows that

the majority of these youth are at risk for negative health outcomes. When child-serving systems understand this information, they are better able to meet the needs of all system-involved youth.

In regard to between-group differences, this study found that the prevalence rate of PTEs was higher for children in Permanency Planning than those in In-Home Services and that the overall mean of PTEs was higher for children in Permanency Planning than those in In-Home Services. However, the difference between the number of PTEs experienced by youth in In-Home Services and Permanency Planning was one PTE, which, while statistically significant, is not practically significant. This is not surprising given that the child welfare intervention is not driven by the number or type of adversities but by the caregiver's ability to provide a safe environment. Since there is no research that indicates that there is a safe number of PTEs for a child to experience, all children in In-Home Services and Permanency Planning should be screened for traumatic experiences.

The findings of this study were also interesting data in that while the prevalence of trauma symptoms was higher among children in Permanency Planning, children in In-Home Services actually experienced a higher number of trauma symptoms. This is perhaps not surprising given that previous research has not found consistent differences in the behaviors of those children receiving in-home services compared to those receiving foster care. The inconclusive nature of the data, as well as the fact that both intervention groups reported multiple trauma symptoms, points to the need to establish a standardized screening process for all youth involved in In-Home Services or Permanency Planning. This screening process should be accompanied by a standardized referral process so that youth can be assessed by clinicians who are trained in completing trauma assessments. Children should have the same

access to screening and referral regardless of their insurance status, which often drives the mental health services of system-involved youth. (As noted, Medicaid is readily available to youth in foster care.) When youth are involved with child welfare, the system has a responsibility to address the well-being needs of that youth, including the provision of trauma-informed services; when indicated, the appropriate resources (i.e., dedicated social worker time, transportation resources for families to go to appointments) need to be put in place for that pathway to be successful.

Notably, the North Carolina child welfare system is currently undergoing two large transformations (i.e., Family First Prevention Services Act, Rylan’s Law). Considering that federal reviewers deemed the child welfare system in North Carolina to be flawed, as evidenced by the State’s meeting only 1 of the 21 federal standards relating to outcomes (only 2 of the other 24 states reviewed scored as poorly as North Carolina) (US DHHS, 2015; Nebraska Department of Health and Human Services, 2017), this change is much needed. Federally, the Family First Prevention Services Act allows for funding that was previously allocated for children residing in congregate care to be shifted to prevention services, including evidence-based mental health services (Bipartisan Budget Act of 2018). This law sets aside funding that can be used to prevent youth from coming in to foster care by providing them with mental health or substance use services. This new funding could be used to establish a standardized pathway for screening, referring, and assessing the trauma of children who are involved with In-Home Services. It is these children in In-Home Services who do not necessarily have access to Medicaid (and thus mental health treatment), whereas children who receive Permanency Planning services do have to the benefit of Medicaid.

The second reform is Rylan's Law, which requires local county Departments of Social Services to have an increased focus on the well-being (i.e. mental health) of the children in their charge (North Carolina H.B. 630, 2017). This mandate will now be measured by the State, and local DSS agencies could face significant consequences (i.e., loss of funding, State taking over the local DSS agency) if they fail to meet data benchmarks. This new reform brings with it a renewed focus on the well-being of youth in addition to the other mandates of safety and permanency. Ensuring the screening, assessment, and treatment of youth in In-Home Services and Permanency Planning would assist the local DSS agencies with meeting the new mandates in Rylan's Law which require them to focus on child well-being. With both reforms currently underway, North Carolina should seize the opportunity to change its policy to include a more formalized process of screening, assessing, and treatment for trauma for system-involved youth.

Overall, this study demonstrates that the majority child welfare involved youth, regardless of their assigned service track, have trauma histories (90.6%,  $n = 1,096$ ) and express trauma symptoms (74.1%,  $n = 897$ ). While there were some statistically significant differences in the rates of potentially traumatic events and trauma symptoms, those differences were minimal and should not be used as a foundation to provide trauma-informed services to as part of only one service track. Given the range of PTEs experienced by both groups, along with the negative long-term impacts of trauma, it follows that children who receive either Permanency Planning or In-Home Services should be screened for trauma. Once a youth has screened positive for trauma, he or she can then be referred to an appropriate, trauma-informed mental health assessment. Previous research, also from North Carolina (Lang et al., 2017), revealed that only 38% of youth who demonstrated trauma on the

TST were referred for a trauma-informed mental health assessment and an additional 18% of those with demonstrated trauma were referred for a general mental health assessment. Lang and colleagues' research demonstrates that without a standardized referral and assessment pathway, only about half of youth who need a mental health assessment are referred to one. Therefore, in addition to screening youth for potential trauma, a standardized referral process that ensures all youth who demonstrate trauma histories are referred for a trauma-informed mental health assessment and have access to the recommended treatment is necessary. Simply screening youth for trauma is not a sufficient intervention to lead to healing. The goal of CPS is to protect children from further harm and to support caregiver capacity to parent their children safely (NC DSS, 2017). Notably, this does not necessarily include treating children for the short or long-term effects of trauma they may have experienced. However, given the strong association between childhood trauma and health risks, along with the likelihood that children involved with CPS have experienced trauma, it is vital that children involved with CPS are appropriately assessed and treated for trauma to improve the likelihood that they become healthy adults.

### 7.1 Strengths

There were several strengths to this study. The number of Project Broadcast Trauma Screening Tools (TST)s available was substantial ( $n = 1,210$ ), and represented screenings conducted from three different County Departments of Social Services, enhancing the generalizability of these results to other counties in North Carolina. While this child-welfare population, demographically, is not representative of the state of North Carolina, these three counties do resemble other rural and suburban counties in North Carolina.

The data regarding the prevalence of trauma and trauma symptoms among youth involved in child welfare would seem to be generalizable to other Departments of Social Services, particularly in areas outside of North Carolina that resemble the three counties (i.e., more rural or suburban, lower median income, and mostly white). The results comparing trauma and trauma symptoms among those who receive In-Home Services and Permanency Planning may not be generalizable nationwide as not all child welfare agencies use both specific interventions. However, this research does add to previous research which examined traumatic events and symptoms among those who received in-home services and foster care. The data suggests that child welfare systems need to continue to evaluate interventions (i.e., in the home or foster care) which are delivered to families to better understand the differences, or lack thereof, between the populations served and how to ensure the best outcomes.

While the State of North Carolina has been using the Project Broadcast TST for many years, minimal research has been published. This is the first study which uses the TST to examine differences between youth in Permanency Planning and those in In-Home Services. This data will provide needed information to the State as they seek to improve their child welfare system.

## 7.2 Limitations

There were several limitations to this study. Notable among these were the inherent limitations of using secondary data. For example, the researcher was unable to determine the accuracy of the data, instead relying on social workers' completing the tool correctly and agency staff entering the data into the database correctly. The information reported to the social workers or the way that they recorded the information could be inaccurate.

Other study limitations relate to the way in which the original data were collected, i.e., from a parent/caregiver during a stressful family situation. Social workers ask caregivers to report the traumatic experiences of a child, as well as his or her behaviors. Caregivers may be concerned that responding affirmatively to either set of questions would negatively impact their case with child welfare (e.g., child welfare might have additional evidence of abuse or neglect). For those families involved with In-Home Services, a caregiver may be concerned that disclosure could lead to the removal of a child from his or her home. This group is especially vulnerable to false negatives since parents may be concerned about the negative repercussions of disclosures. For families involved in Permanency Planning, the social worker might be viewed as the person who took their child away, such that the parent/respondent does not trust the social worker.

## CHAPTER 8: CONCLUSION

It has been well established that adversities in childhood have long-term individual negative physical and mental health consequences, along with negative community consequences. It is these negative individual and societal health outcomes which public health seeks to mitigate. The goal of timely treatment is that it combats the long-term consequences of those adversities. Youth who are involved with the child welfare system are more likely to experience adversities compared to the general population. Therefore, these system-involved are at higher risk of long-term negative consequences adversities in childhood. In order to prevent this vulnerable population from experiencing long-term negative consequences, timely screening, assessment, and treatment is needed.

Unfortunately, the number of youth who are involved in the child welfare system is staggering and resources are not readily available; therefore, it is vital to identify those youth who are most in need of services. This study sought to determine which youth were most in need of trauma screening, assessment, and treatment by comparing youth who were receiving Permanency Planning services with those who were receiving In Home Services. While the prevalence of potentially traumatic events and trauma symptoms was higher among those in Permanency Planning than those in In-Home Services, the difference was minimal. Therefore, ensuring a process that includes a simple screening followed by a more thorough trauma-informed mental health assessment is recommended for youth who receive Permanency Planning or In-Home Services.

North Carolina does not currently have a standardized method to screen system-involved youth for trauma or to ensure that those who have experienced trauma are referred for a trauma-informed mental health assessment. This research demonstrates that an

overwhelmingly high percentage of youth in In-Home Services and Permanency Planning suffer from potentially trauma events and trauma symptoms and that offering services to only one of those service interventions is not sufficient. In the future, NC DSS should create policies, and support implementation, to help the local DSS agencies screen youth for trauma and then refer appropriate youth for a trauma-informed mental health assessment. Workers should then ensure that youth are able to receive the treatment that is recommended in that mental health assessment. For youth who are in In-Home Services and may not have insurance, pathways are needed to ensure that all youth who have recommendations for treatment are able to receive it. This may also mean that additional resources are needed to help families with accessing those services by providing linkages and assisting with transportation resources. While the State began the work of creating a trauma-informed child welfare system with Project Broadcast (which developed the trauma tool utilized in this study), that work should continue to ensure that this vulnerable population receives treatment. It is by providing treatment to these system-involved youth that individual outcomes as well as community outcomes will improve.

There are several potential directions for future research. Future research should include more counties throughout North Carolina. While three counties were represented in this study, North Carolina has 100 counties and it would be beneficial to assess needs throughout the State. This research focused on two intervention areas of DSS (i.e., In-Home and Permanency Planning) and made recommendations for screening in both those areas; an additional area for research would be the Child Protective Services intervention, which, in North Carolina, includes the Investigations track and the Family Assessment track. These tracks occur prior to In-Home Services and Permanency Planning. If research indicates that

trauma is prevalent in those services as well, it would be beneficial to screen youth for trauma and make referrals earlier in the process. Finally, this research focused on the screening aspect of the process and did not include study the referral or assessment process. Future research should include exploratory research to determine if youth are being referred for assessments, the outcomes of those assessments, and the success of subsequent treatment on long term outcomes for children and families.

By taking a public health approach to the trauma that is prevalent in the child welfare population, those who have suffered adversities in childhood will be more likely to lead healthy lives. Standardized processes to ensure screening, assessment, and treatment of trauma should be created to help this vulnerable population heal.

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Table 1: Demographics of participants

	<b>Overall</b>	<b>In-Home Services</b>	<b>Permanency Planning</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>N (%)</b>
	<b>N=1,210</b>	<b>N = 913</b>	<b>N = 297</b>
<b>Sex</b>			
Female	630 (52.1%)	477 (52.2%)	153 (51.5%)
Male	573 (47.4%)	429 (47.0%)	144 (48.5%)
Not listed	7 (0.6%)	7 (0.8%)	0 (0.0%)
<b>Race and Ethnicity</b>			
Caucasian	830 (68.6%)	631 (69.1%)	199 (67.2%)
African American	203 (16.8%)	137 (15.0%)	66 (22.3%)
Bi-racial or multi-racial	25 (2.1%)	18 (2.0%)	7 (2.4%)
Hispanic	32 (2.6%)	28 (3.1%)	4 (1.4%)
Other	23 (1.9%)	10 (4.4%)	13 (1.1%)
Not listed	97 (8.0%)	89 (9.7%)	8 (2.7%)
<b>Age</b>			
5 Years Old	104 (8.6%)	80 (8.8%)	24 (8.1%)
6-12 Years Old	734 (60.7%)	561 (61.4%)	173 (58.4%)
13-17 Years Old	350 (28.9%)	249 (27.3%)	38 (33.1%)
18-19 Years Old	4 (0.3%)	3 (0.3%)	1 (0.3%)
Not listed	21 (1.7%)	20 (2.2%)	1 (0.3%)
<b>Location</b>			
Rowan County DSS	708 (58.5%)	552 (60.5%)	156 (52.5%)
Cleveland County DSS	239 (19.8%)	125 (13.7%)	114 (38.4%)
Davidson County DSS	263 (21.7%)	236 (25.8%)	27 (9.1%)
<b>Intervention</b>			
Permanency Planning	297 (24.5%)	---	---
In-Home Services	913 (75.5%)	---	---

Table 2: Prevalence of Potentially Traumatic Events

<b>Intervention</b>	<b>Any PTEs</b>		<b>Mean</b>	<b>Standard Deviation</b>
	<b>Yes n (%)</b>	<b>No n (%)</b>		
Overall	1,096 (90.6%)	83 (6.9%)	3.51	2.52
Permanency Planning	290 (97.6%)*	4 (1.4%)	4.36*	2.54
In-Home Services	806 (88.3%)	79 (8.7%)	3.23	2.45

\* p <.000

Table 3: Prevalence of Trauma Symptoms

<b>Intervention</b>	<b>Any Trauma Symptoms</b>		<b>Mean</b>	<b>Standard Deviation</b>
	<b>Yes n (%)</b>	<b>No n (%)</b>		
Overall	897 (74.1%)	281 (23.2%)	4.18	4.43
Permanency Planning	245 (82.5%)*	48 (16.2%)	3.89	3.99
In-Home Services	652 (71.4%)	233 (25.5%)	4.28	4.57

\* p< .0001

# APPENDIX A: “WHAT IS TRAUMA?” BROCHURE

## Partnering for Excellence

Partnering for Excellence (PFE) is a model to improve the overall care of children served by the child welfare system. The PFE Initiative will ensure that qualifying children between the ages of 5-21 who receive DSS In-Home Services or DSS Foster Care Services:

- Are screened for trauma
- Get timely, trauma-informed assessments from qualified professionals
- Get counseling with a focus on reducing trauma symptoms
- Link caregivers to assessments to support them and help with reunification
- Receive a plan which focuses on all the areas of a child's life like school, behavioral health, and peers
- Have access to a team with social workers, mental health professionals, school staff, and community partners

‘It is very hard to talk about painful things, and often children and parents try to avoid doing this. In fact, they say things like, “let sleeping dogs lie” and wonder if it’s a good thing to bring back memories of sad things. We tell kids and parents that if they had been able to put those memories behind them, children would not be having any problems.

It’s like when you fall off of a bicycle and skin your knee on the sidewalk, and all the germs get into the wound. You have two choices about what to do with that wound. You can leave it alone, not wash it off or put any medicine on it, and hope it gets better all by itself. Sometimes that works fine. But other times, if you do that it will get infected. Infections don’t usually go away by leaving them alone; they get worse and worse.

Your other choice is to wash the wound out real carefully, getting all the dirt and germs out of there. That stings, it hurts at first, but then the pain goes away, and it doesn’t get infected, and can heal quickly... Talking about the traumatic situation or loss is like cleaning a wound. It might be a little painful at first, but it hurts less and less as you go on, and then the wound can heal.’

--Cognitive Behavioral Therapy for Traumatic Bereavement in Children Treatment Manual, Center for Traumatic Stress in Children and Adolescents, Department of psychiatry Allegheny General Hospital, Pittsburgh, PA.

## WHAT IS TRAUMA?

We often think of physical injuries when we think about trauma. Psychological trauma is when someone has an experience that is life-threatening, painful, or stressful. It may also be an event which someone believes is life-threatening. Psychological trauma may include physical injury, but it doesn’t have to. Also, the trauma may not necessarily happen to the person, but they are aware of it. For instance, witnessing or hearing domestic violence even if the child was not physically hurt.

Different people respond to trauma in different ways. Sometimes, people have reactions immediately and sometimes it takes longer. Some people begin to act out and some people respond by becoming quiet. For each person, the response to trauma can look different.

## A TRAUMATIC EXPERIENCE...

Threatens the life or physical wellbeing of the person or someone the person loves

Causes extreme terror, horror, and helplessness

Produces overwhelming physical response such as pounding heart, rapid breathing, trembling, dizziness, and/or loss of bodily functions

## WHAT ARE EXAMPLES OF TRAUMA?

- |                              |                                    |
|------------------------------|------------------------------------|
| Animal attacks               | • Natural disaster/war             |
| Terrorism                    | • Out of home placement            |
| Traumatic death of loved one | • Physical needs not met           |
| Serious accident/illness     | • School violence/extreme bullying |
| Exposure to drugs            | • Family’s trouble with the law    |
| Community violence           | • Homelessness                     |
| Physical abuse               | • Domestic Violence                |
| Sexual abuse                 | • Arrest of caregiver              |

# Understanding Trauma



## A GUIDE FOR PARENTS

Department of Social Services

## WHAT BEHAVIORS MAY HAPPEN AFTER TRAUMA?

- Aggression
- Drug/alcohol use
- Talk of suicide
- Problems sleeping
- Acting without thinking
- Unusually withdrawn
- Very angry
- Very worried
- Animal violence
- Explosive behaviors
- Harming self on purpose
- Problems with eating
- Forgetting
- Physical complaints
- More moody than usual
- Withdrawn or alone a lot

## OUR GOAL

To help children get better and help your family stay together! We know that kids do best when they are able to live with their parents and their parents are able to provide a safe environment. It’s our goal to get kids and parents what they need so that families can stay together, and children can grow up healthy and happy!

## WHAT TRAUMA INFORMED CARE IS NOT ABOUT

This is not about pointing fingers or blaming. We want to be able to get a clear picture of everything that is going on in a youth’s life, build on your child and family’s strengths and then include you in making a plan to help you and your child!

## WHAT TO EXPECT

Your social worker is going to follow up with you by asking you about some of the scary events that your child may have witnessed or been a part of. Your child may be referred for a Trauma Intensive Comprehensive Clinical Assessment (TICCA), if so, your input will be very important so that the clinician can get a clear picture of the child and family.

# APPENDIX B: PROJECT BROADCAST TRAUMA SCREENING TOOL

EFFECTIVE 11/1/15

## Project Broadcast Trauma Screening Tool (Under Age 6) Initial Screen Re-Screen

Date: _____	County Case #: _____	SIS#: _____	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td><td style="width: 5%;"></td> </tr> </table>																
Child Initials _____	SW Initials _____	<input type="checkbox"/> Assess/Invest <input type="checkbox"/> In-Home <input type="checkbox"/> Foster Care <input type="checkbox"/> Other ( _____ )																	

### SECTION 1: QUESTIONS ABOUT POTENTIALLY TRAUMATIC EVENTS

- A. Is the social worker or caregiver aware of or suspect the child has experienced?**
- |  |  |
|--|--|
| <input type="checkbox"/> Physical maltreatment or assault<br><input type="checkbox"/> Sexual maltreatment or assault/rape<br><input type="checkbox"/> Emotional maltreatment<br><input type="checkbox"/> Basic physical needs not met<br><input type="checkbox"/> Serious accident/illness/medical procedure<br><input type="checkbox"/> Exposure to school violence and/or severe bullying<br><input type="checkbox"/> Exposure to domestic violence<br><input type="checkbox"/> Exposure to drug/substance abuse or related activity<br><input type="checkbox"/> Incarceration and/or witnessing arrest of primary caregiver | <input type="checkbox"/> Traumatic death of a loved one<br><input type="checkbox"/> Immigration trauma<br><input type="checkbox"/> Natural disaster/war/terrorism<br><input type="checkbox"/> Multiple separations from/or changes in primary caregiver<br><input type="checkbox"/> Homelessness<br><input type="checkbox"/> Exposure to community violence<br><input type="checkbox"/> Human Trafficking Exposure – circle type(s) Sexual or Work/Labor<br><input type="checkbox"/> Other: _____<br><input type="checkbox"/> None |
|--|--|

### SECTION 2: QUESTIONS FOR SOCIAL WORKER/CAREGIVER (check if occurred within the last six months)

- |   |  |
|---|--|
| <p><b>A. Does the child show any of these behaviors?</b></p> <input type="checkbox"/> Excessive aggression or violence toward property, animals, or others (including bullying)<br><input type="checkbox"/> Preoccupied with violent and/or sexual interests<br><input type="checkbox"/> Explosive behaviors (excessive and prolonged tantrums)<br><input type="checkbox"/> Sleeping problems<br><input type="checkbox"/> Eating problems (refusal, hoarding, stuffing, vomiting, eating nonfood)<br><input type="checkbox"/> Withdrawn and/or excessively shy<br><input type="checkbox"/> Sexual behavior not typical for child's age<br><input type="checkbox"/> Recurring physical complaints with no apparent cause<br><input type="checkbox"/> Disorganized behavioral states (i.e., attention, play)<br><input type="checkbox"/> Bossy and demanding with adults and peers<br><input type="checkbox"/> Regressed behavior (i.e., toileting, play)<br><input type="checkbox"/> Other behavioral concerns: _____<br><input type="checkbox"/> None | <p><b>C. Does the child have problems in childcare/school?</b></p> <input type="checkbox"/> Difficulty with authority<br><input type="checkbox"/> Attention and/or memory problems<br><input type="checkbox"/> Difficulty with following instruction<br><input type="checkbox"/> Difficulty interacting with peers<br><input type="checkbox"/> Frequent calls or notes home about behaviors<br><input type="checkbox"/> Other child care/school concerns: _____<br><input type="checkbox"/> None   |
| <p><b>B. Does the child exhibit the following emotions/moods?</b></p> <input type="checkbox"/> Flat affect and/or withdrawn behavior<br><input type="checkbox"/> Excessive worry<br><input type="checkbox"/> Quick, explosive anger<br><input type="checkbox"/> Chronic sadness and/or doesn't seem to enjoy any activities<br><input type="checkbox"/> Other emotional/mood concerns: _____<br><input type="checkbox"/> None   | <p><b>D. Does the child have relational and/or attachment difficulties?</b></p> <input type="checkbox"/> Lack of eye contact<br><input type="checkbox"/> Sad or empty eyed appearance<br><input type="checkbox"/> Overly friendly with strangers (lack of appropriate stranger anxiety)<br><input type="checkbox"/> Alternates between clinginess and disengagement and/or aggression<br><input type="checkbox"/> Failure to reciprocate (i.e., hugs, smiles, vocalization, play)<br><input type="checkbox"/> Failure to seek comfort when hurt or frightened<br><input type="checkbox"/> Difficulty using words<br><input type="checkbox"/> Difficulty expressing feelings<br><input type="checkbox"/> Other attachment/relational concerns: _____<br><input type="checkbox"/> None |

### SECTION 3: SOCIAL WORKER DECISION AND ACTION TAKEN

- DECISION:**  Yes  No Screened-in for possible trauma exposure (Section 1) and/or symptoms (Section 2)
- REFERRED:** (check one)
- To NC-CTP rostered clinician for trauma-informed mental health assessment
  - To non NC-CTP rostered clinician for trauma-informed mental health assessment
  - Referred to general mental health assessment
  - Other action/assessment not previously listed \_\_\_\_\_
  - No referral at this time - Child in treatment with \_\_\_\_\_
  - No referral at this time because \_\_\_\_\_

**GUIDANCE FOR NEXT STEPS**

▶ If both sections 1 and 2 have any items checked, child should be referred for a trauma-informed mental health assessment.

▶ If only one section has items checked, team should have a case staffing to determine the most appropriate next step.

Funded through the Department of Health and Human Services, Administration for Children and Families, Children's Bureau Grant #90CO1058. Enter data online at <http://tiny.cc/pbscreen>.

DATA ENTRY DATE: \_\_\_\_\_  
 CONFIRMATION #: \_\_\_\_\_

**Project Broadcast Trauma Screening Tool (Age 6-21)**  Initial Screen  Re-Screen

Date: \_\_\_\_\_ County Case #: \_\_\_\_\_ SIS#: \_\_\_\_\_  
 Child \_\_\_\_\_ SW \_\_\_\_\_  
 Initials \_\_\_\_\_ Initials \_\_\_\_\_  Assess/Invest  In-Home  Foster Care  Other (\_\_\_\_\_)

**SECTION 1: QUESTIONS ABOUT POTENTIALLY TRAUMATIC EVENTS**

A. Is the social worker or caregiver aware of or suspect the child has experienced?

- |  |   |
|--|---|
| <input type="checkbox"/> Physical maltreatment or assault                            | <input type="checkbox"/> Traumatic death of a loved one                                   |
| <input type="checkbox"/> Sexual maltreatment or assault/rape                         | <input type="checkbox"/> Immigration trauma   |
| <input type="checkbox"/> Emotional maltreatment                                      | <input type="checkbox"/> Natural disaster/war/terrorism                                   |
| <input type="checkbox"/> Basic physical needs not met                                | <input type="checkbox"/> Multiple separations from/or changes in primary caregiver        |
| <input type="checkbox"/> Serious accident/illness/medical procedure                  | <input type="checkbox"/> Homelessness   |
| <input type="checkbox"/> Exposure to school violence and/or severe bullying          | <input type="checkbox"/> Exposure to community violence                                   |
| <input type="checkbox"/> Exposure to domestic violence                               | <input type="checkbox"/> Human Trafficking Exposure – circle type(s) Sexual or Work/Labor |
| <input type="checkbox"/> Exposure to drug/substance abuse or related activity        | <input type="checkbox"/> Other: _____   |
| <input type="checkbox"/> Incarceration and/or witnessing arrest of primary caregiver | <input type="checkbox"/> None   |

B. TYPICAL SCRIPT TO CHILD: "Sometimes, very scary or upsetting things happen to people. These are times where someone was hurt very badly or killed, or could have been." (if yes below, check applicable item above)

- Yes  No 1. Have you ever been hit, punched, and/or kicked very hard at home (exclude ordinary fights between brothers and sisters)?
- Yes  No 2. Have you ever seen a family member being hit, punched, and/or kicked very hard?
- Yes  No 3. Have you ever had an adult or someone bigger or older than you touch, or try to touch, you in areas that a bathing suit covers, or want you to touch them in those areas?
4. Tell me about any other scary things that have happened that we haven't already talked about.
- Did not answer  Event disclosed in the previous three screening questions  None occurred
- New event (traumatic)  New event (not traumatic: would not fall into any of the categories of 1A)

C. Did the four screening questions in 1B above reveal a scary, dangerous or violent (i.e., potentially traumatic) experience that was **unknown** to you?  Yes  No If yes, did it require a new CPS referral  Yes  No

**SECTION 2: QUESTIONS FOR SOCIAL WORKER/CAREGIVER (check if occurred within the last six months)**

A. Does the child show any of these behaviors?

- Excessive aggression or violence toward property, animals, or others (including bullying)
- Preoccupied with violent and/or sexual interests
- Explosive behaviors (going from 0 to 100 from out of nowhere)
- Sleeping problems
- Eating problems (refusal, hoarding, stuffing, vomiting, eating nonfood)
- Withdrawn and/or excessively shy
- Sexual behavior not typical for child's age
- Recurring physical complaints with no apparent cause
- Mentioned suicide or acted in a potentially life-threatening way
- Deliberately harms self (cutting, burning, etc.)
- Negative, hostile or defiant behavior
- Drug or alcohol use
- Hyperactivity, distractibility, inattention, impulsivity
- Patterns of forgetfulness
- Other behavioral concerns: \_\_\_\_\_
- None

B. Does the child exhibit the following emotions/moods?

- Flat affect and/or withdrawn behavior
- Excessive worry
- Quick, explosive anger
- Chronic sadness and/or doesn't seem to enjoy any activities
- Excessive mood swings
- Tense and/or uptight
- Difficulty expressing feelings
- Other emotional/mood concerns: \_\_\_\_\_
- None

C. Does the child have problems in school?

- Difficulty with authority
- Attention and/or memory problems
- Low grades or academic decline
- Frequent trips to Principal's office and/or suspensions
- Excessive absences from school
- Other school concerns: \_\_\_\_\_
- None

**SECTION 3: SOCIAL WORKER DECISION AND ACTION TAKEN**

DECISION:  Yes  No Screened-in for possible trauma exposure (Section 1) and/or symptoms (Section 2)

- REFERRED: (check one)
- To NC-CTP rostered clinician for trauma-informed mental health assessment
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  - No referral at this time because \_\_\_\_\_

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