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# Adverse Childhood Experiences (ACEs) and Homelessness: A Critical Examination of the Association between Specific ACEs and Sex Trafficking among Homeless Youth in Kentuckiana

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## ABSTRACT

Youth experiencing homelessness have often also been exposed to childhood trauma or adverse childhood experiences (ACEs). Aims: More information is needed to determine the prevalence and impact of ACEs in youth experiencing homelessness who have also been trafficked for sex with the goal of developing services informed by this knowledge. The present study examines ACEs and sex trafficking in a convenience sample of 119 youths experiencing homelessness aged 12 to 25 years old in Kentuckiana—a region of counties within metropolitan Louisville, Kentucky, and Southern Indiana. Participants were asked questions regarding the 10 categories of ACEs as part of an enhanced version of the 60-item Youth Experiences Survey (YES). One hundred percent of the sample reported experiencing at least one ACE. Over two-thirds (69%) reported experiencing four or more ACEs. Approximately 52% of youth who had not been trafficked had experienced five or more ACEs, compared with 70% of trafficked youth. The ACEs most significantly related to sex trafficking were physical neglect, emotional neglect, emotional abuse, domestic abuse, and sexual abuse. Reports of sex trafficking and a higher number of ACEs from this sample of youth were found to be importantly correlated. Programs serving youth experiencing homelessness should require additional training and resources regarding the identification, screening, and assessment of youth who are at risk of or who have experienced sex trafficking in order to more accurately connect youth with trauma-informed services.

## KEYWORDS

Homelessness; human trafficking; sex trafficking; adverse childhood experiences; trauma; youth

## Introduction

Human trafficking is the fastest-growing criminal industry in the world, with 40.3 million human trafficking victims reported globally and hundreds of thousands reported in the United States. Human trafficking can include forced labor and sex trafficking; the current study will focus on sex trafficking (Walk Free Foundation, 2016). Sex trafficking can be understood by dividing sex trafficking victims into two populations: children under the age of 18 who are induced into commercial sex; and adults, aged 18 or older, induced into commercial sex through force, fraud, or coercion (Trafficking and Violence Protection Reauthorization Act, 2013). There has been varied terminology used including terms such as “survival sex,” “child prostitution,” and “commercial sex work” (see Greene et al., 1999;

Weitzer, 2000). Notably, the term commercial exploitation of children (CSEC) is often used more broadly to describe the sexual abuse of children through buying, selling, or trading their sexual services, including engagement with a child in prostitution, as well as pornography, stripping, exotic dancing, as well as other sexual services (see, Franchino-Olsen, 2021; Greenbaum, 2014). For the purposes of this study, the authors use the term sex trafficking to operationalize the experiences of trafficked adults and children.

Sex trafficking has been found to be associated with symptoms of mental and physical health that can have long-term effects. In samples of trafficking victims, sex trafficking has been found to co-occur with victims' experiences of high rates of posttraumatic stress disorder, depression, suicidal ideation, drug addiction, and a multitude of somatic symptoms among the victims (Middleton et al., 2018; Zimmerman et al., 2008). Specifically, most victims experience symptoms of complex trauma, resulting from events that include entrapment; relocation; exposure to the abuse of others; and extended physical, sexual, and psychological abuse (Courtois, 2008). Trafficked youths are also at increased risk for suicide (Dubois & Felner, 2016; Frey et al., 2018).

Sex trafficking, especially of youth, is an epidemic in communities across the United States. In fact, young people make up a majority of all reported sex trafficking cases (see, Banks & Kyckelhahn, 2011; Kyckelhahn et al., 2009). In addition to young age being a risk factor for sex trafficking, many sex trafficking victims tend to come from vulnerable populations, many with a history of previous abuse. Risk factors that increase youths' vulnerability to trafficking include experiences of childhood sexual or physical abuse or maltreatment, running away from home or homelessness, involvement in the child welfare and/or juvenile justice system, being LGBTQ+, experiencing substance abuse, poverty, and early adverse experiences like family member incarceration, parental separation, or mental health issues present in their families (Bryan, 2014; IOM (Institute of Medicine) and NRC (National Research Council), 2013). Similar to and often overlapping with the risk factors increasing vulnerability to trafficking is the risk factors increasing youths' vulnerability to experiencing homelessness (see, Barr et al., 2017; Gattis, 2013; Whitbeck et al., 2000).

The violence literature has recently focused on emphasizing these comorbid forms of victimization and multiple types of abuse, called polyvictimization (see, Finkelhor et al., 2007, 2005). Polyvictimization refers to the combined experience of several forms of victimization experienced by one individual, impacting health and wellbeing among children and youth. When compared to non-polyvictims, polyvictims are more likely to experience multiple types of lifetime adversities, including illnesses, accidents, family unemployment, parental substance abuse, and mental illness (Finkelhor, Shattuck et al., 2011a). Recent research indicates that polyvictimization can increase the vulnerability of children and youth to experience serious crime victimizations such as labor trafficking, through pathways of individual factors (e.g., emotional state, mental illnesses), and environmental factors (routine proximity to exploiters; De Vries & Farrell, 2018). Although the polyvictimization literature has implications for sex trafficking among children and youth, there is a lack of focus on sex trafficking specifically in that literature, particularly among youth experiencing homelessness.

The abovementioned polyvictimization literature inform the current study, particularly in light of the overall increase in vulnerability that often occurs when young people experience multiple adversities. In general, these at-risk youths, including youth experiencing homelessness and youth who run away from home, are more likely to become victims of sex trafficking and are often forced or coerced to trade sex for their basic needs such as food or shelter (Bigelsen & Vuotto, 2013; Hudson & Nandy, 2012). Many of the youth engaging in this type of exchange for something needed or of value meet criteria established by the 2000 Victims of Trafficking and Violence Protection Act (U. S. Department of State, Office to Monitor and Combat Trafficking in Persons, 2000) and often move in and out of traditional third party involved sex trafficking situations (Dank et al., 2014). To develop effective evidence-based services for this population with increased susceptibility to long-term mental and physical health difficulties, this study examines adverse childhood experiences as potential risk factors for sex trafficking among youth experiencing homelessness.

## Prevalence of Sex Trafficking among Youth Experiencing Homelessness

Estimates of the number of youth experiencing homelessness in the United States vary. In January of 2016, the U.S. Department of Housing and Urban Development reported that there were 35,686 unaccompanied youths experiencing homelessness. Almost 4,000 of them were under-age 18 (U.S. Department of Housing and Urban Development, 2016). However, a more recent study by Morton et al. (2017) conducted a national survey, an in-depth interview, and a brief youth survey approach during local Youth Counts across the United States. Respondents included adult respondents with youth and young adults (aged 13–25) living in their household and adult respondents (aged 18–25) themselves. Among the sample of 26,161 people surveyed and interviewed between 2016 and 2017, Morton et al. found that, over the course of a year, 4.3% of youth aged 13–17 and 9.4% of the young adults aged 18–25 were homeless. These estimates translate to roughly 700,000 homeless 13- to 17-year-olds and *more than 3.5 million* homeless 18- to 25-year-olds. Of this population, 73% experienced an episode of homelessness that lasted more than a month (Morton et al., 2017).

Even though incidents of sex trafficking have been documented across communities and span all demographics in the United States, there are some vulnerabilities that may lead to a greater likelihood for experiencing sex trafficking. Current research indicates that youth experiencing homelessness are at greater risk of being trafficked for sex than youth with stable housing. Often these more vulnerable youths have been found to be forced or coerced to trade sex for basic needs such as housing, food, and clothing (Bigelsen & Vuotto, 2013; Hudson & Nandy, 2012). Accurate prevalence of data regarding the trafficking of minors in the United States are limited. Of the few existing studies, they are riddled with methodological challenges. However, some researchers have focused efforts on examining the prevalence of sex trafficking among young people who are experiencing homelessness. This focus is crucial to understanding the prevalence of sex trafficking because it involves starting with one of the most vulnerable populations that may be most at risk for trafficking.

Although accurate prevalence data is limited, Greene et al. (1999) found that among the sample of 631 shelter youths and 528 street youths across the United States, 28% of street youths and 10% of shelter youths reported having participated in “survival sex.” A study by Wagner et al. (2001) found that 41% of a sample of 272 Seattle youth experiencing homelessness had been sexually exploited through either “survival sex” or commercial sex work. A study of youth receiving services from Covenant House, an organization that provides services for homeless youth aged 17 to 25, found that 14% of the youth surveyed had been victims of sex trafficking. Furthermore, 19% of the youth interviewed had engaged in “survival sex” at some point in their lives, and 68% of the youth who had been trafficked or had engaged in survival sex had done so while homeless (Murphy, 2016). The Youth Experiences Survey (YES) study of 131 homeless youth aged 12 to 25 in Louisville, Kentucky, and Southern Indiana found that 41.2% reported being victims of sex trafficking (Middleton et al., 2018). 57.6% of these youths were sex trafficked before they were 18 years old. The current study utilizes this same sample of homeless youth.

## Consequences of Homelessness and Sex Trafficking

For many young people experiencing homelessness, sex trafficking may add to an already existing load of additional adverse experiences. There are numerous complex consequences for both youth homelessness and sex trafficking, many of which overlap. Homeless youth experience an increased likelihood of high-risk behaviors like unprotected sex, multiple partners, and intravenous drug use, and are also at greater risk of experiencing severe anxiety or depression (National Conference of State Legislatures, 2016). Victims of sex trafficking experience both physical and mental consequences, including sexually transmitted infections (STIs; e.g., HIV/AIDS), unwanted pregnancy, physical injuries, post-traumatic stress disorder, anxiety, depression, and suicidal thoughts (Deshpande &

Nour, 2013). Outcomes associated with the overlap of youth homelessness and sex trafficking include increased substance use, criminal behavior, elevated violence, and exploitation, STIs, pregnancy, and suicide attempts (Chettiar et al., 2010; Greene et al., 1999; Halcón & Lifson, 2004; Walls & Bell, 2011).

Suicide risk is perhaps the most detrimental potential outcomes associated with the overlap between homelessness and sex trafficking. Using the same sample as the current study of youth experiencing homelessness in Kentucky and Southern Indiana, Frey et al. (2018) examined the prevalence of suicide attempts and suicidal ideation. They found that 53% of the 128 youths surveyed reported experiencing suicidal ideation at some point in their lifetime. Homeless youth who had experienced sex trafficking were 3.87 times more likely to report suicidal ideation compared to their peers who had not been trafficked. Eighty-four percent of youth who reported suicidal ideation also reported having attempted suicide, and youth with a history of sex trafficking were 4.96 times more likely to attempt suicide than their non-trafficked peers. This research suggests that youth experiencing homelessness and sex trafficking are at risk of severe consequences and require additional resources, including much-needed trauma-informed services. It is possible that the potential childhood experiences and risk factors making youth vulnerable to homelessness and sex trafficking further amplify these consequences.

### **Childhood Trauma as a Risk Factor**

Many of the risk factors for sex trafficking have been linked to childhood experiences of trauma. Choi (2015) performed a literature review to study the risk factors for domestic minor sex trafficking. Choi (2015) found that childhood maltreatment, specifically sexual abuse, and running away from home, were the most significant risk factors for sex trafficking victimization. Varma et al. (2015) performed a retrospective study of the electronic medical records of patients 12–18 years old who presented to a pediatric emergency department or child protection clinic in the United States and were identified as suspected victims of commercial sexual exploitation compared to patients with allegations of child sexual abuse. They found that 44% of child sex trafficking victims had reported a history of physical abuse, 81% of child sex trafficking victims had a history of running away from home, and 50% had a history of multiple drug use. Not surprisingly, research (Coates & McKenzie-Mohr, 2010; Roos et al., 2013) have also suggested that childhood trauma, particularly separation from caregivers and child sexual abuse serves as a risk factor for youth homelessness. Although research regarding adverse childhood experiences as a risk factor for sex trafficking and homelessness separately exists, literature focusing on the impact of adverse childhood experiences on these overlapping populations is lacking. Understanding childhood experiences that increase vulnerability to youth homelessness and sex trafficking is critical for developing trauma-informed services.

### **ACEs, Sex Trafficking, and Homelessness**

While some studies have taken into account the relationship between childhood trauma and sex trafficking, none have observed a link between adverse childhood experiences, youth homelessness, and sex trafficking. One way to assess childhood trauma in this population is by using the adverse childhood experiences (ACEs) scale. The ACEs scale includes seven categories: psychological, physical, or sexual abuse; violence against their mother; or living with household members who were substance abusers, mentally ill or suicidal, or imprisoned. These domains of childhood adversity are important to measure because they closely align with the risk factors for youth experiencing homelessness and youth experiencing sex trafficking (e.g., childhood maltreatment, sexual abuse, physical abuse, substance abuse, mental illness, and criminal behavior).

In the 1990s, Vincent Felitti, Robert Anda, and colleagues surveyed a convenience sample of over 17,400 adults who received services from the Department of Preventive Medicine at Kaiser Permanente in San Diego to measure ACEs. The results showed that childhood trauma is pervasive among adults, as more than half of the respondents reported at least one ACE, and one-fourth

reported two or more. The results also showed a correlation between the number of ACEs and the number of physical and mental health problems in adulthood. For example, those with four or more ACEs had 4 to 12 times increased risk for alcoholism, drug abuse, depression, and suicide attempts compared to those with zero (Felitti et al., 1998).

It is important to examine adverse childhood experiences in sex-trafficked populations that experience vulnerabilities similar to homeless youth in order to determine whether certain ACEs are risk factors for sex trafficking. Some literature has examined samples of justice-involved youth and found specific ACEs that serve as risk factors for sex trafficking. For example, a study by Reid et al. (2017) focused on a sample that included 913 juvenile justice-involved youth who had human trafficking abuse reports compared with 913 juvenile justice-involved youth who did not have abuse reports. Youth who had experienced sex trafficking had higher ACE scores than the control group in every domain indicative of child maltreatment: emotional abuse, physical abuse, sexual abuse, emotional neglect, physical neglect, and family violence. Sexual abuse is the strongest predictor of sex trafficking for both boys and girls. Another study (Naramore et al., 2017) sampled a cohort of 102 youths (all under the age of 18) arrested for offenses related to trading sex/prostitution in the state of Florida between 2005 and 2012. Youth who had been charged with trading sex had higher rates for each ACE, particularly experiences of sexual abuse and physical neglect. All youth charged with prostitution-related offenses reported they had experienced at least one ACE, 97.1% had more than one, and 81.4% had experienced at least four. In both of these studies, it was found that maltreated youth were more vulnerable than non-maltreated youth to sex trafficking and revictimization. Additionally, it was found that youth experiencing multiple victimizations have increased susceptibility, which is congruent with the polyvictimization literature as well.

In a more recent, retrospective study, researchers also found that higher ACE scores and running away from home increased the odds of a child experiencing sex trafficking (Kulig, 2021). The study utilized a national sample of 996 adult women in the general population, aged 18–29 years old. These studies point to the possibility that increased ACE scores can serve as a predictor for increased vulnerability to sex trafficking.

Importantly, Reid et al. (2019) examined which type of ACEs combined with health risk behaviors was more prevalent among 913 trafficked youth in the juvenile justice system. A latent class analysis was conducted to identify profiles of risk for trafficking youth. These risk profiles, in relation to demographic characteristics, provide a more comprehensive depiction of the complexities of trafficking among children and youth. Using a six-class model for each type of ACE and health-risk behavior across the six analytically derived classes, the researchers found that the majority of the trafficked youth were scattered across different risk profiles. These findings point to the need for identifying varying profiles of risk among trafficked youth as screening solely for one set of victim characteristics may result in other subsets of trafficked youth being overlooked and unidentified (see, also De Vries et al., 2020).

In regard to youth experiencing homelessness, in a previously published article pertaining to this same sample of homeless youth, Middleton et al. (2018) found that 66% of the homeless youth surveyed had an ACE score of four or higher, compared to 12% of the respondents in the original study by Felitti et al. (1998). However, this number applies to the entire sample of both trafficked and non-trafficked youth. There is limited information on the link between ACEs and sex trafficking among homeless youth and how certain types of childhood trauma change a youth's odds of experiencing sex trafficking. This information could be an important component in urging public health approaches to combat sex trafficking and providing specialized training for homeless youth service providers and clinicians to identify and treat childhood trauma within this population. Moreover, additional information on the relationship between ACEs and sex trafficking is needed to target prevention efforts in appropriate populations (e.g., homeless youth service providers).



Therefore, this study aimed to determine prevalence of ACEs among youth victims of sex trafficking in Louisville, Kentucky, and Southern Indiana, and to determine the odds of youth victims of childhood trauma experiencing sex trafficking. Research questions for this study include:

- (1) Are homeless youth who report experiences of sex trafficking more likely to report higher levels of ACEs when compared to non-sex trafficked homeless youth?
- (2) Which ACEs are most strongly correlated with sex trafficking among homeless youth?

## Method

### *Sample Characteristics & Sampling Plan*

Respondents for this study were recruited from eight agencies providing services for youth experiencing homelessness within the Kentuckiana region, which consists of eight counties in Kentucky and five counties in Southern Indiana. Youth experiencing homelessness, aged 12–25 years old, were asked to complete a survey about their life experiences, with specific questions targeting whether they had experienced sex trafficking in their lifetime. The survey was completed onsite at one of the above-mentioned eight service provider agencies, took approximately 15 minutes to complete, and youth received monetary compensation through a \$5 gift card for their participation. Respondents remained anonymous by depositing completed paper surveys into a locked box located at each site. The University of Louisville Institutional Review Board (IRB) approved this study. Per the University's IRB, participants completed the survey independently while they were inside the organization where they were receiving services. They completed the informed consent and assent process and were informed that participation is voluntary, and questions might cause some mild discomfort or stress. The on-site agency staff were available if anyone felt triggered or became upset. No such incidents were reported to the research team for the duration of the study. In addition, the research team also provided a list of potential resources for the participants to take with them as part of the survey packet. These sampling procedures resulted in 132 completed surveys and 119 of these surveys were included

**Table 1.** *Respondent Demographic Information (n = 128).*

Characteristic	%
Gender	
Girl/Woman	49.2
Boy/Man	47.7
Other	2.3
Sexual Orientation	
Heterosexual	72.8
Bisexual	15.2
Gay	3.2
Asexual	3.2
Pansexual	3.2
Lesbian	0.8
Other	1.6
Race/Ethnicity	
Black/African American	45.1
White/Caucasian	32.0
Biracial/Multiracial	9.0
African/Caribbean	6.6
Hispanic/Latino/Latina	3.3
Native American/American Indian	2.5
Arab	1.6
Asian/Pacific Islander	0.0
Indian/South Asian	0.0



in data analysis. Thirteen surveys were omitted because respondents failed to answer the sex trafficking question. More details about the sampling and data collection plan has previously been published in Middleton et al. (2018).

The final sample of 119 respondents ranged in age from 12 to 25 years old ( $M = 19.62$ ,  $SD = 3.70$ ). See, Table 1 for a full list of respondent demographic information. The sample was evenly split between female (49.2%) and male (47.7%) respondents, with 2.3% reporting another gender (e.g., transgender, non-conforming, or two-spirit). The sample was primarily heterosexual (72.8%) and primarily African-American (45.1%). Twenty-five percent ( $n = 32$ ) of the sample identified as gender or sexual minority. Respondents' age at first experience of homelessness ranged from 3 to 25 years old ( $M = 16.58$ ,  $SD = 4.07$ ), and the number of times respondents had experienced homelessness ranged from 1 to 22 ( $M = 4.02$ ,  $SD = 4.32$ ). Approximately 41.2% ( $n = 49$ ) of respondents reported that they had been victims of sex trafficking at some point in their lifetime.

### Survey Measures

Data was collected via the Youth Experiences Survey (YES), which is a 60-item survey developed by Arizona State University's Office of Sex Trafficking Intervention Research. The survey has been administered yearly from 2014 to 2018 with homeless young runaway adults aged 18–24 in Arizona (Roe-Sepowitz et al., 2016). It was administered to youth experiencing homelessness for the first time in 2016 in Kentucky. The YES included questions about the youths' demographics, living situation, drug and alcohol use, mental and physical health, and treatment, family experiences, and negative life experiences. A section of the survey addresses experiences related to sex trafficking, including three questions that assessed whether they had ever experienced sex trafficking (i.e., "Have you ever been compelled, forced, or coerced to perform a sexual act, including sexual intercourse, oral, or anal contact for money, food, clothing, drugs, protection, or a place to stay?," "Do you currently have a person who encourages/pressures/forces you to exchange sexual acts for money, drugs, food, a place to stay, clothing, or protection?," and "In the past, has anyone encouraged/pressured/forced you to exchange sexual acts for money, drugs, food, place to stay, clothing, or protection?"). If a respondent indicated a "yes" to any of the three above-mentioned questions, they then responded to additional questions in the survey to determine characteristics of their sex-trafficking experience (e.g., age at first exposure, whether technology was used as a recruitment tool for sex trafficking).

To assess the prevalence and context of ACEs among youth experiencing homelessness in Kentuckiana, 10 questions related to personal history with childhood trauma were added to the YES (Adverse Childhood Experiences Survey, Felitti et al., 1998). For each question that participants answered "yes" to one point was added to their ACE score. The maximum ACE score is 10. The ACEs are split into 10 categories: physical, emotional, and sexual abuse; physical and emotional neglect; mental illness in the home; an incarcerated relative; domestic violence in the home; substance abuse in the home; and divorce. Participants were asked questions like "Did an adult or person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way?," "Did you often or very often feel that no one in your family loved you or thought you were important or special?," and "Was your mother or stepmother often or very often pushed, grabbed, slapped, or had something thrown at her?"

### Data Analysis

Chi-square tests for independence were performed using IBM SPSS Statistics to assess whether ACEs, and certain ACEs in particular were associated with the youth also identified as having been sex trafficked. The Phi coefficient ( $\phi$ ) was used as a measure of association. Effect sizes were manually calculated and were considered meaningful if they were medium to large, which was at least 2.5 for odds ratios in chi-square analyses (Cohen, 1988). Throughout the study,  $p$ -values  $< .05$  were used to determine statistical significance. Reliability testing of the ACE scale indicates a Cronbach's alpha reliability coefficient of 0.740, which is considered acceptable per George and Mallery (2003).

**Table 2.** *Frequencies of Respondent Reports of ACE-Related Variables (n = 119).*

Variable	Yes	No	Missing	Valid % Yes
Emotional Abuse	71	61	0	53.8
Physical Abuse	67	65	0	50.8
Sexual Abuse	50	82	0	37.9
Emotional Neglect	72	60	0	54.5
Physical Neglect	47	85	0	35.6
Parent Separated/Divorced	77	55	0	58.3
Domestic Abuse	41	91	0	31.1
Substance Use	55	77	0	41.7
Mental Illness	37	95	0	28.0
Prison	42	90	0	31.8

**Table 3.** *Number of Respondents Reporting ACEs and Chi-Square Results Based on History of Sex Trafficking (n = 128).*

ACE Variable	Sex Trafficking		$\chi^2$	<i>p</i>	$\phi$	OR*
	No	Yes				
Emotional Abuse	30	37	5.997	.014	.224	2.539
Physical Abuse	32	31	.792	.374	.082	–
Sexual Abuse	17	32	13.346	.000	.335	4.107
Emotional Neglect	31	37	5.224	.022	.210	2.387
Physical Neglect	19	27	5.366	.021	.212	2.421
Separated/Divorced	39	32	.007	.935	–.008	–
Domestic Abuse	14	26	9.359	.002	.280	3.383
Substance Use	25	29	2.765	.096	.152	–
Mental Illness	18	18	.445	.505	.061	–
Incarcerated Relative	23	17	.201	.654	–.041	–

\*OR = Odds Ratio

## Results

Descriptive information related to ACE variables is presented in Table 2. The most common ACEs for both trafficked and non-trafficked youth were parental separation or divorce (58.3%), followed by emotional neglect (54.5%), emotional abuse (53.8%), and physical abuse (50.8%). Almost 40% (37.9%) of the participants had been sexually abused as children. Results from a chi-square ( $\chi^2$ ) test for independence (Table 3) indicate a significant relationship ( $p < .05$ ) between five ACEs (physical neglect, emotional abuse, domestic abuse, emotional neglect, and sexual abuse), and sex trafficking.

A previously published study (Middleton et al., 2018) reported significant differences in total ACE scores between sex-trafficked and non-sex-trafficked youth. The current study explores differences across individual ACE items. Fifty percent of sex-trafficked youth had experienced physical neglect, compared to 35.6% of the non-sex trafficked youth. Youth who had experienced physical neglect were 2.421 times more likely to have also been sex trafficked. Approximately 68.5% of sex-trafficked youth indicated that they had been emotionally abused in childhood, compared to 53.8% of the sample of trafficked and non-trafficked youth. Youths who had been emotionally abused were almost 2.539 times more likely to be sex trafficked. Forty-eight percent of the sex-trafficked youth reported that they had witnessed domestic abuse as children, compared to 31.1% of the non-sex trafficked youth. Youth who witnessed domestic abuse were 3.383 times more likely to also experience sex trafficking. 68.5% of sex trafficked youth reported experiencing emotional neglect in childhood, compared to 54.5% of the non-sex trafficked youth. Youths who had experienced emotional neglect were 2.387 times more likely to be trafficked than their peers. Finally, 59.3% of youth who had been sex trafficked had also been sexually abused, compared to 37.9% of the non-sex trafficked youth. Youths who experienced sexual abuse were over 4 times (OR = 4.107) more likely to be trafficked.

## Discussion

The impact of a high ACE score has been well documented, and the lasting effects on health, both physical and emotional, and wellbeing have been shown to be impacted (Shonkoff et al., 2012). How the toxic stress resulting from experiencing abuse and observing family problems (violence, drug use) impacts the vulnerability of human trafficking victimization has not been well studied. This study explores the association of a high ACE score with victimization, particularly sex trafficking victimization in a novel population, homeless young people aged 12 to 25 in Kentucky and Indiana. This study confirms the finding of Reid et al. (2017)'s study of justice involved youth with a similar finding of higher scores found among the sex trafficked youth on many of the child maltreatment questions (physical neglect, emotional neglect, emotional abuse, and sexual abuse) but did not find significance with physical abuse. This may be due to an overall difference between the two samples as physical abuse is a consistent predictor of youth participation in violence and the resulting juvenile justice involvement (Maas et al., 2008). Also, similar to the Reid et al. (2017) study, we found that sexual abuse was the most highly predictive risk factor for sex trafficking. This study also confirms the findings of Naramore et al. (2015) of youth charged with prostitution. Naramore et al. (2015) also found that sexual abuse and physical neglect were important predictors of involvement in prostitution as a minor.

The study of emotional abuse is a complex endeavor, and in another study of sex trafficking and emotional abuse, Roe-Sepowitz (2012) found that childhood emotional abuse along with sexual abuse was predictors of sex trafficking among adult survivors of sex trafficking. The combination of physical and emotional neglect, emotional abuse, and sexual abuse along with observed violence between primary caregivers appears to be a critical formula for later victimization among homeless young people. Unfortunately, traditional victimization risk screenings for youth may not recognize the combination of risks that lead to sex trafficking (Reid et al., 2019). This suggests the need for developing prevention programs, screening instruments, and interventions that recognize the unique patterns of risk for sex trafficking among the highest-risk youth found in both child welfare services, where previous victimization may be identified, and homeless youth service programs.

## Implications for Practice

Young victims of sex trafficking often experience an increased risk for adverse physical, psychological, and social issues (Deshpande & Nour, 2013). Youth who experience childhood maltreatment are already at a higher risk for many problems including committing and being a victim of violence due to having complex family issues, which indicate limited support and caregiving (National Institute of Justice, 2017). Child maltreatment, specifically physical and emotional neglect, emotional abuse, and sexual abuse add to a higher risk for sex trafficking. In addition, young people experiencing homelessness are at greater risk for sex trafficking due to having fewer resources and support systems to act as protective factors and a higher ACE score appears to add more vulnerabilities. Sex traffickers are particularly nimble at using their knowledge about their victim's vulnerabilities to sexually exploit them (Reid, 2016).

The findings from this study indicate that prevention and early intervention for specific issues that increase risk for later sex trafficking should be implemented. Cases where child welfare agencies or homeless youth serving organizations identify physical neglect, emotional abuse, domestic abuse, emotional neglect, and sexual abuse should be flagged as additional prevention and awareness services to build awareness and resilience to sexual exploitation. These prevention and awareness programs can include material including recognizing the grooming processes used by sex traffickers, internet safety, and what adults to tell if they are approached by a possible sex trafficker. Children with these maltreatment experiences are often referred to clinical treatment to address trauma symptoms and encourage healing. Providing clinical providers for children in child welfare services with awareness training and prevention tools for sexual exploitation is also recommended.

Screening tools for sex trafficking of children and youth vary widely with their questions and inclusion of ACEs. Most screening tools focus on the current behavior of a child or youth, for example, they include items that ask if the child is currently with an older adult or using sex trafficking language (Middleton & Edwards, 2021). This study indicates that sex trafficking screenings should also include, and potentially weigh, specific maltreatment experiences that were associated with sex trafficking in this study including physical neglect, emotional abuse, domestic abuse, emotional neglect, and sexual abuse.

Results indicate the need to develop a well-coordinated system of care to identify and treat homeless youth sex trafficking victims and the interventions can be led by the ACE identified in this study. Helpers who come into contact with homeless young people, including case workers, group home/shelter staff, social workers, psychologists, juvenile probation officers, child welfare workers, and juvenile court and family court judges and staff should all be trained to screen and identify sex trafficking risks among their clients. Clinical service providers, including counselors and social workers, should be trained specifically on how to use trauma-informed treatment approaches to support and provide healing treatment interventions to homeless youth sex trafficking survivors. The process of unlearning the lessons of being a child victim of abuse and neglect and observing dysfunctional relationships in their homes is complicated and should be addressed early and with intensity to prevent sex trafficking victimization.

Further, results suggest that programs servicing youth experiencing homelessness should incorporate additional training and resources regarding the identification, screening, and assessment of youth who are at-risk of or who have experienced sex trafficking in order to more quickly connect these youths with trauma-informed services. These sex-trafficking screening and assessment protocols should also include childhood trauma (e.g., ACEs) measures and the screening should focus on a combination of physical neglect, emotional neglect, emotional abuse, sexual abuse, and observing domestic violence. In addition, the findings from this study highlight the need for childhood trauma prevention and intervention approaches tailored to address the needs of sex-trafficking victims and for increased efforts to deliver these services to populations of youth experiencing homelessness.

### **Implications for Future Research**

This study explores the ACE in homeless young people and sex trafficking along with other studies by Reid et al. (2017) and Naramore et al. (2015), have built a foundation for the development of validated, targeted screening tools using ACE questions specifically for those at high risk for sex trafficking. The screening tools should integrate the five maltreatment variables found to be predictive in this study: physical neglect, emotional neglect, emotional abuse, sexual abuse, and witnessing domestic violence. Future research should include exploring the ACE questions among other high-risk populations within the homeless youth population, including those struggling with substance use disorders, those kicked out of their homes compared to those who ran away, and homeless youth that live unsheltered on the street compared to those who live in shelters or group homes. In addition, considering the fact that the current study is exploratory in nature, future research should move beyond bivariate associations, and explore multivariate implications, paying special attention to the potential importance of length and frequency of homelessness. Furthermore, longitudinal studies should explore the complex pathways through which ACEs may exert their influence, and particularly consider the indirect effects of ACEs on increased risk of sex trafficking, as mediated by homelessness.

### **Limitations**

The findings from the present study should be considered along with their limitations. The study relied on a convenient sample of youth experiencing homelessness in the Kentuckiana region. Therefore, similar prevalence rates may not occur among samples from other regions of the US. Similarly, recruitment methods targeted at young people receiving services, and rates of risk and

victimization may differ among young people who choose not to access or who cannot receive services. Additionally, there was no follow-up with respondents who reported experiences to ensure that trafficking was not ongoing. Data collection for this study also relied on brief, self-report measures that generated categorical data. This type of information limits the ability to conduct more sophisticated data analyses. The data also did not allow for mediation and moderation analyses. Given the increased risk for suicide among those with posttraumatic stress disorder (Krysinaka & Lester, 2010), substance use issues (Pompili et al., 2012) and family distress or isolation (Frey & Cerel, 2015), it is likely that youth who have experienced childhood trauma have additional factors that increase their risk for sex trafficking. Future research needs to examine the role of additional risk factors in understanding the relationship between ACEs and sex trafficking more clearly. The data collected in the survey also were dependent on the respondents' willingness to be honest about their experiences. Therefore, there may be some experiences that were not captured by this study.

## Conclusion

The findings that specific child maltreatment experiences contribute to the sex trafficking victimization of young people experiencing homelessness give vital information to professionals working with this population. Specifically, the present study highlights important questions to ask and additional information regarding intervention and treatment for specific clients. Sex-trafficking-specific awareness training as well as training on trauma-focused treatment interventions with young people experiencing homelessness are recommended for all-helping professionals who may have contact with this population. Without this preparation, professionals will continue to be unprepared to help address not only the risk factors leading to sex trafficking victimization but also the negative consequences that can result from it.

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## References

- Banks, D., & Kyckelhahn, T. (2011). *Characteristics of suspected human trafficking incidents, 2008-2010*. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Barr, N., Fulginiti, A., Rhoades, H., & Rice, E. (2017). Can better emotion regulation protect against suicidality in traumatized homeless youth? *Archives of Suicide Research*, 21(3), 490–501. <https://doi.org/10.1080/13811118.2016.1224989>
- Bigelsen, J., & Vuotto, S. (2013). *Homelessness, survival sex, and human trafficking: As experienced by the youth of Covenant House New York*. National Children's Advocacy Center. Retrieved from <http://www.covenanthouse.org/sites/default/files/attachments/Covenant-Housetrafficking-study.pdf>

- Bryan, C. (2014). What judges need to know about human sex trafficking: Screening and assessment and matching to empirically based treatment [Conference session]. *National Council of Juvenile and Family Court Judges Annual Conference*, Chicago, Illinois, United States.
- Chettiar, J., Shannon, K., Wood, E., Zhang, R., & Kerr, T. (2010). Survival sex work involvement among street-involved youth who use drugs in a Canadian setting. *Journal of Public Health*, 32(3), 322–327. <https://doi.org/10.1093/pubmed/udp126>
- Choi, K. R. (2015). Risk factors for domestic minor sex trafficking in the United States. *Journal of Forensic Nursing*, 11(2), 66–76. <https://doi.org/10.1097/jfn.0000000000000072>
- Coates, J., & McKenzie-Mohr, S. (2010). Out of the frying pan, into the fire: Trauma in the lives of homeless youth prior to and during homelessness. *Journal of Sociology & Social Welfare*, 37(4), 65–96. <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=3561&context=jssw>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates, Publishers.
- Courtois, C. (2008). Complex trauma, complex reactions: Assessment and treatment. *Psychotherapy: Theory, Research, Practice, Training*, 41(4), 412–425. <https://doi.org/10.1037/0033-3204.41.4.412>
- Dank, M., Khan, B., Downey, M., Kotonias, C., Mayer, D., Owens, C., Pacifici, L., & Yu, L. (2014). *Estimating the size and structure of the underground commercial sex economy in eight major U.S. Cities*. Urban Institute. [www.urban.org](http://www.urban.org)
- De Vries, I., & Farrell, A. (2018). Labor trafficking victimizations: Repeat victimization and polyvictimization. *Psychology of Violence*, 8(5), 630. <https://doi.org/10.1037/vio0000149>
- De Vries, I., Kafafian, M., Goggin, K., Bouchard, E., Goldfarb, S., & Farrell, A. (2020). Enhancing the identification of commercial sexual exploitation among a population of high-risk youths using predictive regularization models. *Child Maltreatment*, 25(3), 318–327. <https://doi.org/10.1177/1077559519889178>
- Deshpande, N. A., & Nour, N. M. (2013). Sex trafficking of women and girls. *Reviews in Obstetrics & Gynecology*, 6(1), e22–e27. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3651545/>
- Dubois, D. L., & Felner, J. (2016). Mentoring for youth with backgrounds of involvement in commercial sex activity: National mentoring resource center population review. Final report submitted to National Mentoring Resource Center.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245–258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Polyvictimization and trauma in a national longitudinal cohort. *Development and Psychopathology*, 19(1), 149–166. <https://doi.org/10.1017/S0954579407070083>
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*, 10(1), 5–25. <https://doi.org/10.1177/1077559504271287>
- Finkelhor, D., Shattuck, A., Turner, H. A., Ormrod, R., & Hamby, S. L. (2011a). Polyvictimization in developmental context. *Journal of Child & Adolescent Trauma*, 4(4), 291–300. <https://doi.org/10.1080/19361521.2011.610432>
- Finkelhor, D., Turner, H., Hamby, S. L., & Ormrod, R. (2011b). Polyvictimization: Children's Exposure to Multiple Types of Violence, Crime, and Abuse. National Survey of Children's Exposure to Violence.
- Franchino-Olsen, H. (2021). Vulnerabilities relevant for commercial sexual exploitation of children/domestic minor sex trafficking: A systematic review of risk factors. *Trauma, Violence, & Abuse*, 22(1), 99–111. <https://doi.org/10.1177/1524838018821956>
- Frey, L. M., & Cerel, J. (2015). Risk for suicide and the role of family: A narrative review. *Journal of Family Issues*, 36(6), 716–736. <https://doi.org/10.1177/0192513x13515885>
- Frey, L. M., Middleton, J., Gattis, M. N., & Fulginiti, A. (2018). Suicidal ideation and behavior among victims of sex trafficking in Kentuckiana. *Journal of Crisis Intervention and Suicide Prevention*, 40(4), 240–248. <https://doi.org/10.1027/0227-5910/a000557>
- Gattis, M. N. (2013). An ecological systems comparison between homeless sexual minority youths and homeless heterosexual youths. *Journal of Social Service Research*, 39(1), 38–49. <https://doi.org/10.1080/01488376.2011.633814>
- George, D., & Mallery, P. (2003). *SPSS for windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Allyn & Bacon.
- Greenbaum, V. J. (2014). Commercial sexual exploitation and sex trafficking of children in the United States. *Current Problems in Pediatric and Adolescent Health Care*, 44(9), 245–269. <https://doi.org/10.1016/j.cppeds.2014.07.001>
- Greene, J. M., Ennett, S. T., & Ringwalt, C. L. (1999). Prevalence and correlates of survival sex among runaway and homeless youth. *American Journal of Public Health*, 89(9), 1406–1409. <https://doi.org/10.2105/AJPH.89.9.1406>
- Halcón, L. L., & Lifson, A. R. (2004). Prevalence and predictors of sexual risks among homeless youth. *Journal of Youth and Adolescence*, 33(1), 71–80. <https://doi.org/10.1023/A:1027338514930>
- Hudson, A. L., & Nandy, K. (2012). Comparisons of substance abuse, high-risk sexual behavior and depressive symptoms among homeless youth with and without a history of foster care placement. *Contemporary Nurse*, 42(2), 178–186. <https://doi.org/10.5172/conu.2012.42.2.178>



- IOM (Institute of Medicine) and NRC (National Research Council). (2013). *Confronting commercial sexual exploitation and sex trafficking of minors in the United States*. The National Academies Press.
- Krysinska, K., & Lester, D. (2010). Post-traumatic stress disorder and suicide risk: A systematic review. *Archives of Suicide Research, 14*(1), 1–23. <https://doi.org/10.1080/13811110903478997>
- Kulig, T. C. (2021). Measuring sex trafficking: A national-level victimization survey of an at-risk sample. *Justice Quarterly, 1*–34. doi:10.1080/07418825.2021.1909646.
- Kyckelhahn, T., Beck, A. J., & Cohen, T. H. (2009). Characteristics of suspected human trafficking incidents, 2007–2008. Bureau of Justice Statistics Special Report. US Department of Justice Office of Justice Programs. NCJ, 224526.
- Maas, C., Hewenkohl, T., & Sousa, C. (2008). Review of research on child maltreatment and violence in youth. *Trauma, Violence, and Abuse, 9*(1), 56–67. <https://doi.org/10.1177/1524838007311105>
- Middleton, J. S., Gattis, M. N., Frey, L. M., & Roe-Sepowitz, D. (2018). Youth Experiences Survey (YES): Exploring the scope and complexity of sex trafficking in a sample of youth experiencing homelessness. *Journal of Social Research, 44*(2), 141–157. <https://doi.org/10.1080/01488376.2018.1428924>
- Middleton, J., & Edwards, E. (2021). Detecting child trafficking within the child welfare system: Recommendations and best practices for screening and identification protocols in the United States. *International Journal of Forensic Research and Criminology, 9*(1), 1–10. doi:10.15406/frcij.2021.09.00335.
- Morton, M. H., Dworsky, A., & Samuels, G. M. (2017). Missed opportunities: Youth homelessness in America. In *National estimates*. Chapin Hall at the University of Chicago. ERIC. Retrieved from <https://voicesofyouthcount.org/wp-content/uploads/2017/11/VoYC-National-Estimates-Brief-Chapin-Hall-2017.pdf>
- Murphy, L. T. (2016). *Labor and sex trafficking among homeless youth: A 10-city study full report*. Loyola University, New Orleans. Retrieved November 20, 2017, from <https://oag.ca.gov/sites/all/files/agweb/pdfs/ht/murphy-labor-sex-trafficking-homeless-youth.pdf>
- Naramore, R., Bright, M. A., Epps, N., & Hardt, N. S. (2015). Youth arrested for trading sex have the highest rates of childhood adversity: A statewide study of juvenile offenders. *Sexual Abuse: A Journal of Research and Treatment*. doi:10.1177/1079063215603064
- Naramore, R., Bright, M. A., Epps, N., & Hardt, N. S. (2017). Youth arrested for trading sex have the highest rates of childhood adversity: A statewide study of juvenile offenders. *Sexual Abuse: A Journal of Research and Treatment, 29* (4), 396–410. <https://doi.org/10.1177/1079063215603064>
- National Conference of State Legislatures. (2016, April 14). Homeless and runaway youth. Retrieved November 20, 2017, from <http://www.ncsl.org/research/human-services/homeless-and-runaway-youth.aspx>
- National Institute of Justice. (2017, October 12). Pathways between child maltreatment and adult criminal involvement. NIJ.gov: <https://nij.gov/topics/crime/Pages/Pathways-between-child-maltreatment-and-adult-criminal-involvement.aspx>
- Pompili, M., Serafini, G., Innamorati, M., Biondi, M., Siracusano, A., Di Giannantonio, M., Giupponi, G., Amore, M., Lester, D., Girardi, P., & Möller-Leimkühler, A. M. (2012). Substance abuse and suicide risk among adolescents. *European Archives of Psychiatry and Clinical Neuroscience, 262*(6), 469–485. <https://doi.org/10.1007/s00406-012-0292-0>
- Reid, J. A., Baglivio, M. T., Piquero, A. R., Greenwald, M. A., & Epps, N. (2017). Human trafficking of minors and childhood adversity in Florida. *American Journal of Public Health, 107*(2), 306–311. <https://doi.org/10.2105/ajph.2016.303564>
- Reid, J. A., Baglivio, M. T., Piquero, A. R., Greenwald, M. A., & Epps, N. (2019). No youth left behind to human trafficking: Exploring profiles of risk. *American Journal of Orthopsychiatry, 89*(6), 704. <https://doi.org/10.1037/ort0000362>
- Reid, J. (2016). Entrapment and enmeshment schemes used by sex traffickers. *Sexual Abuse: A Journal of Research and Treatment, 28*(6), 491–511. <https://doi.org/10.1177/1079063214544334>
- Roe-Sepowitz, D. E. (2012). Juvenile entry into prostitution: The role of emotional abuse. *Violence Against Women, 18* (5), 562–579. <https://doi.org/10.1177/1077801212453140>
- Roe-Sepowitz, D., Brockie, M., Bracy, K., & Hogan, K. 2016. *Youth experiences survey: Exploring the sex trafficking experiences of homeless young adults in Arizona, Year 3*. McCain Institute for International Leadership, Arizona State University. Office of Sex Trafficking Intervention Research
- Roos, L. E., Mota, N., Afifi, T. O., Katz, L. Y., Distasio, J., & Sareen, J. (2013). Relationship between adverse childhood experiences and homelessness and the impact of axis I and II disorders. *American Journal of Public Health, 103*(S2), S275–S281. <https://doi.org/10.2105/AJPH.2013.301323>
- Shonkoff, J., Garner, A., Siegel, B. S., Dobbins, M. I., Earls, M. F., Garner, A. S., McGuinn, L., Pascoe, J., & Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232–e246. <https://doi.org/10.1542/peds.2011-2663>
- Trafficking Victims Protection Reauthorization Act of 2013, H. R. 898, 113th Cong. (2013–2014). <https://www.congress.gov/bill/113th-congress/house-bill/898/text?r=41>
- U. S. Department of State, Office to Monitor and Combat Trafficking in Persons. (2000). *Victims of trafficking and violence protection act of 2000*. <https://www.state.gov/j/tip/laws/61124.htm>



- U.S. Department of Housing and Urban Development. (2016). The 2016 Annual Homeless Assessment Report to Congress. <https://www.hudexchange.info/resources/documents/2016-AHAR-Part-1.pdf>.
- Varma, S., Gillespie, S., McCracken, C., & Greenbaum, V. J. (2015). Characteristics of child commercial sexual exploitation and sex trafficking victims presenting for medical care in the United States. *Child Abuse & Neglect*, *44*, 98–105. <https://doi.org/10.1016/j.chiabu.2015.04.004>
- Wagner, L., Carlin, L., Cauce, A., & Tenner, A. (2001). A snapshot of homeless youth in Seattle: Their characteristics, behaviors and beliefs about HIV protective strategies. *Journal of Community Health*, *26*(3), 219–232. <https://doi.org/10.1023/A:1010325329898>
- Walk Free Foundation. (2016). *The global slavery index*. <https://www.walkfreefoundation.org/resources/#library>
- Walls, N. E., & Bell, S. (2011). Correlates of engaging in survival sex among homeless youth and young adults. *The Journal of Sex Research*, *48*(5), 423–436. <https://doi.org/10.1080/00224499.2010.501916>
- Weitzer, R. (2000). Deficiencies in the sociology of sex work. In Ulmer, J.T. (Ed.), *Sociology of crime, law and deviance (Sociology of Crime, Law and Deviance, Vol. 2)* (pp. 259–279). Bingley: Emerald Group Publishing Limited. [https://doi.org/10.1108/S1521-6136\(2000\)0000002014](https://doi.org/10.1108/S1521-6136(2000)0000002014)
- Whitbeck, L. B., Hoyt, D. R., & Bao, W. N. (2000). Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. *Child Development*, *71*(3), 721–732. <https://doi.org/10.1111/1467-8624.00181>
- Zimmerman, C., Hossain, M., Yun, K., Gajdzdziej, V., Guzun, N., Tchomarova, M., Motus, M. N., Johansson, A., Kefurtova, A., Scodanibbio, S., Motus, M. N., Roche, B., Morison, L., & Watts, C. (2008). The health of trafficked women: A survey of women entering post- trafficking services in Europe. *American Journal of Public Health*, *98*(1), 55–59. <https://doi.org/10.2105/AJPH.2006.108357>