

# Vulnerabilities Relevant for Commercial Sexual Exploitation of Children/Domestic Minor Sex Trafficking: A Systematic Review of Risk Factors

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## Abstract

The commercial sexual exploitation of children (CSEC) and domestic minor sex trafficking (DMST) occur across the United States, violating the rights and health of far too many children and youth. Adequate prevention efforts should seek to understand the factors that make minors vulnerable to sexual exploitation in order to properly design programs to prevent victimization. This review presents the identified risk factors collected via a systematic literature review. Following full-text review, 15 studies were selected for inclusion by meeting the following criteria: original quantitative or qualitative research studies published in English from January 2010 to September 2017 with titles or abstracts that indicated a focus on the risk factors, vulnerabilities, or statistics of CSEC/DMST and a domestic focus on CSEC/DMST (for U.S.-based journals) with findings that did not combine associations between minors and adults in the study. Relevant risk factors and vulnerabilities found in this review include child abuse and maltreatment, caregiver strain, running away or being thrown away, substance use, peer influence, witnessing family violence or criminality, poverty or material need, difficulty in school, conflict with parents, poor mental health or view of self, involvement in child protective services, involvement in juvenile detention or delinquency, early substance use, and prior rape or adolescent sexual victimization.

## Keywords

domestic minor sex trafficking, commercial sexual exploitation of children, gender-based violence, risk factors, vulnerabilities, prevention

## Purpose of This Review

This review seeks to clearly discuss risk factors for CSEC/DMST in the United States as found through original quantitative or qualitative research. Thus, the purposes of this review are to (1) clearly define the background and scope relevant to the issue of CSEC/DMST and (2) present and discuss significant risk factors in the reviewed publications.

## Introduction

### Definitions

Commercial sexual exploitation and sex trafficking are issues of concern regarding children and youth in the United States. As the broader of the two terms, commercial sexual exploitation of children (CSEC) captures all forms of sexual involvement of minors in underground economies. As defined by the United Nations, sexual exploitation involves “any actual or attempted abuse of a position of vulnerability, differential power, or trust for sexual purposes, including but not limited to profiting monetarily, socially, or politically” from the

exploitation (Gerassi, 2015). Specifically, CSEC according to The Office of Juvenile Justice and Delinquency consists of “crimes of a sexual nature committed against juvenile victims for financial or other economic reasons” and can include sex trafficking, pornography, prostitution, or stripping, along with other sexual activities for profit (Greenbaum, 2014). Sex trafficking in the United States and involving U.S. citizens or legal residents under age 18—known as domestic minor sex trafficking (DMST)—is a modern form of slavery and child abuse and involves

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the recruitment, harboring, transportation, provision, *or* obtaining of a person for the purpose of a commercial sex act in which a commercial sex act is induced by force, fraud, or coercion, or in which the person forced to perform such an act is younger than age 18. (Clawson, Dutch, Solomon, & Grace, 2009 ; p. 3)

Under U.S. law, any minor involved in a commercial sex act—regardless of the presence of force, fraud, or coercion—is classified as a victim of sex trafficking as they cannot legally consent to trade sex; thus, CSEC and DMST terms are often used interchangeably or simultaneously in the fields of social work, trauma and violence, and legal literature to capture any sexual exploitation of children under age 18 (Choi, 2015; Gerassi, 2015). Consequently, any individual involved in exploiting minors for any type of commercial sex act (often referred to as “pimping”), as listed above, should be prosecuted as a trafficker, even when lacking coercion or movement of victims across state lines (Chung, Lee, Morrison, & Schuster, 2006; Kotrla, 2010). However, a minor can be a victim of CSEC/DMST without the presence of a third-party exploiter (e.g., pimp), given their inability to consent to sex work. DMST definitions were set forth and signed into law under the Victims of Trafficking and Violence Protection Act (VTVPA) of 2000, which sought to decriminalize selling sex for both underage and adult victims of trafficking (Clawson et al., 2009; Kotrla, 2010). (Prior to the VTVPA, minors found selling sex or related acts were charged and prosecuted with juvenile prostitution; Duger, 2015.) The shift in mentality of the law enforcement and the criminal justice system toward recognizing minors in the sex industry as victims rather than criminals was a promising first step in tackling this monumental problem, though much more action is currently needed to address the issue.

### Statistics

Researchers seeking to understand the domestic prevalence of sex trafficking and exploitation face a number of barriers. Not only is the industry underground and practically invisible, but many victims in the industry fail to recognize they are being exploited (Mcclain & Garrity, 2011). Much of this exploitation occurs in the shadows or in the margins of society, meaning researchers have difficulty collecting reliable data that reflect the volume of victims and frequency of CSEC or DMST (Duger, 2015). As a result, the scope and scale of the problem is only hazily understood as estimates are based on prevalence numbers from nonrepresentative and unreliable data (Duger, 2015). These estimates regarding how many minors are being trafficked and exploited range from the thousands to the millions, with the most common estimates being in the hundreds of thousands (Clawson et al., 2009; Duger, 2015; Mcclain & Garrity, 2011). The United States lacks a common database to collect statistics on reported CSEC/DMST and many agencies use their own databases or tracking systems, which leads to both gaps and double counting of identified victims (Greenbaum, 2014). Additionally, few large-scale prevalence studies have investigated the issue (Gerassi, 2015). Thus, as explained by

the Crimes Against Children Research Center (2008), all estimates of prevalence are too flawed and too unreliable to be cited. Sex trafficking has been found in all 50 states in the United States, and the law enforcement and service providers recognize that many victims, if not most, are undiscovered and fail to receive help (Clawson et al., 2009). While the United States is seen as a profitable destination country for international sex traffickers, most data suggest that the majority of minor victims of sexual exploitation in the United States are citizens (Kotrla, 2010; Mcclain & Garrity, 2011; Spear, 2004). Trafficked minors include young girls—who may typically enter the industry between 12 and 14 years of age—along with boys and transgendered youth who may enter even sooner at 11–13 years old on average (Clawson et al., 2009; Hardy, Compton, & McPhatter, 2013).

### Policy

There are numerous perspectives on how to best address both prevention and intervention for CSEC/DMST from a multisector position which may involve health-care professionals, law enforcement, education systems, child protection services, and others. Given the complex and hidden nature of the issue, no consensus has been reached in any field or sector regarding how to screen or identify victims in an efficient and trauma-informed manner (Choi, 2015). Even more debate swirls around how to prevent CSEC among high-risk populations, since the presence of some risk factors only leads a small proportion of those children to experience exploitation (Clayton, Krugman, & Simon, 2013). For example, individuals who experience childhood sexual abuse (CSA) have a greater likelihood of later becoming CSEC/DMST victims compared to their non-CSA peers. While a large majority of CSEC/DMST youth have a prior history of CSA, only a small portion of large number of CSA children ultimately fall victim to CSEC/DMST (Clayton et al., 2013). While some professionals see wisdom in providing services to any and all youth who fall under certain categories risk factors, others argue this dehumanizes them and only sees them as potential victims (Duger, 2015). Thus, no policy agreement has been reached on how to address this issue. However, in examining it from a multilevel perspective, it seems that macro-level interventions would require dealing with the large range of circumstances that make minors vulnerable to abuse and neglect, such as poverty and inequality (Duger, 2015; Rafferty, 2013). Microlevel interventions would include policy changes to better protect individual children via government agencies, including social services, law enforcement, and child protection teams (Rafferty, 2013).

### CSEC/DMST Experience and Effects on Health

Once victimized, minors frequently encounter horrific abuses and exploitation, which may continue even after they escape the industry (Mitchell, Finkelhor, & Wolak, 2013). The growth of the Internet has stimulated demand for minors, especially very young girls, in the sex industry (Farley, 2003). Multiple

social-level norms increase the ease with which vulnerable individuals are exploited. Gender inequality and early-age objectification of women and girls place them in a vulnerable position for trafficking as they may adopt the perspective at a young age that they are primarily sexual objects and thus become prime targets for exploitation in the commercial sex industry (Konstantopoulos et al., 2013). Societal (i.e., macro-level) sexualization of females lowers their status and increases their risk of victimization, while the traffickers or exploiters themselves are elevated as “pimping” becomes an aspirational, glamorized, and praised venture for young men (Kotrla, 2010).

The health effects of victimization are immense and entail both behavioral and physical consequences (Varma, Gillespie, McCracken, & Greenbaum, 2015). Commonly cited effects include weight loss, poor nutrition, injuries from physical abuse (e.g., broken bones), depression, post-traumatic stress disorder, other mental health disorders, substance abuse, and sexually transmitted infections (Choi, 2015; Miller-Perrin & Wurtele, 2017; Spear, 2004; Varma et al., 2015). The risk of HIV infection is high among CSEC/DMST minors, as are unplanned pregnancies and the effects of unsafe (and often multiple) abortions (Hardy et al., 2013). The stress and physical trauma associated with victimization, along with low access to comprehensive health care such as immunizations and preventative care, can lead to worse outcomes of individuals experiencing these disorders or infections (Miller-Perrin & Wurtele, 2017; Spear, 2004). Problematic behaviors, such as poor attachment and relation to others or antisocial behaviors, are also common for this population (Miller-Perrin & Wurtele, 2017).

### *Stereotype of a CSEC/DMST Victim*

The stereotype for the underage sex trafficking victim tends to be young women who are tricked and kidnapped into sexual exploitation. However, the issue is more nuanced and diverse than such a perspective offers. Victims include both young boys, girls, and transgender youth, with boys and transgender individuals suffering even lower awareness and visibility than female victims both in society and within published literature on the topic (Choi, 2015; Clawson et al., 2009; Greenbaum, 2014; Miller-Perrin & Wurtele, 2017). Boys may be more likely to engage in survival sex and criminal or delinquent behaviors while being trafficked (Clawson et al., 2009). Girls, however, seem to have a higher likelihood of being arrested while being trafficked and are more likely than boys to be controlled by third-party exploiters (Clawson et al., 2009; Greenbaum, 2014). The type of CSEC/DMST associated more with girls and involving the entrapment of girls via third-party involvement receives the greatest amount of attention in prevention and intervention efforts and characterizes the stereotypes widely associated with the issue (Greenbaum, 2014).

Additionally, stereotypes about victims and experiences of trafficking may limit not only external identification of victims

but also how youth characterize their own experience of trading sex and whether they view themselves as victims of exploitation (Reid, 2016). Due to various grooming and entrapment schemes used by third-party exploiters, some youth view their engagement in sex trade as their choice of “being in the life” of prostitution while failing to recognize the exploitative nature of their arrangement with their trafficker or buyers (Reid, 2016; Roe-Sepowitz et al., 2017). The fostering of trust, hope for a better life, and promises of family by an exploiter to a trafficked youth also prevent CSEC/DMST victims from recognizing the relationship as exploitative and harmful (Reid, 2016).

Addressing the causes and risk factors of trafficking and exploitation of minors requires an in-depth understanding of the status of the problem and the complex risk factors of the victims. Additionally, the allocation of resources and pooling of local and national systems are required to recover and to treat the needs of the victims. Without such understanding and collective actions, we are failing to reestablish the basic rights and health of the weakest and most vulnerable members of society.

### **Gaps in Data and Research**

While this topic has been of interest to researchers for decades, there remain numerous gaps in our understanding of and research on the risk factors that lead vulnerable youth into CSEC/DMST. This is evident in both a lack of quantitative peer-reviewed studies regarding risk factors—especially those with comparable methodologies that would allow for a meta-analysis on the topic—and primary prevention strategies that have been evaluated for effectiveness (Clayton et al., 2013; Oram, Stockl, Busza, Howard, & Zimmerman, 2012; Rafferty, 2013; Varma et al., 2015). Of note, given the stereotypical view of CSEC/DMST victims described above, relatively little research has focused on exploited boys (Clayton et al., 2013; Rafferty, 2013). Thus, significant gaps exist in the information and synthesis on the complex and interconnected vulnerabilities and protective factors related to CSEC/DMST (Choi, 2015; Clayton et al., 2013; Edwards & Mika, 2017; Meshkovska, Siegel, Stutterheim, & Bos, 2015; Rafferty, 2013). Any research and intervention efforts seeking to properly address and prevent this exploitation must first strive to create a clear picture of these factors in order to assure prevention efforts target the correct populations effectively (Miller-Perrin & Wurtele, 2017; Rafferty, 2013). Such work should be methodologically rigorous and build on what is known in the field regarding risk factors (Meshkovska et al., 2015; Miller-Perrin & Wurtele, 2017; Rafferty, 2013).

### **Method**

This review explores the risk factors or vulnerabilities for CSEC/DMST. Eligibility criteria were original research studies with some type of quantitative or qualitative data and analysis published in English from January 2010 to September 2017

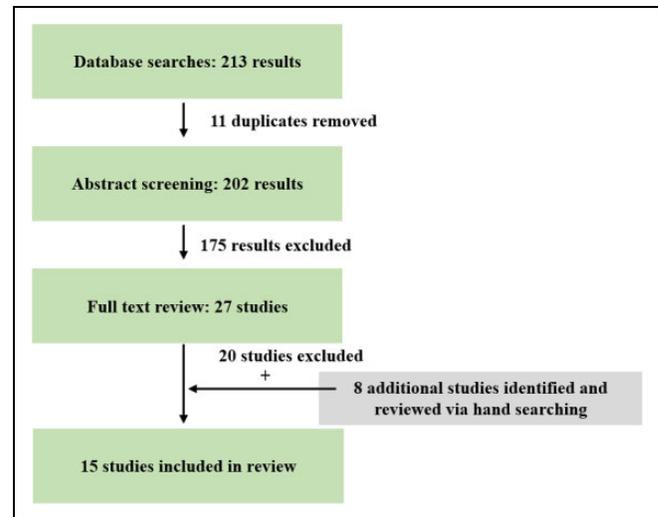
with titles or abstracts that indicated a focus on the risk factors, vulnerabilities, or statistics of CSEC/DMST. The time period for publication was utilized because 2010 onward represented a theoretical and language shift for the field in which CSEC and DMST became the common terms (Choi, 2015). The previous decades primarily framed the issue with criminal or delinquent language (e.g., prostitution), transactional language (e.g., sex work), survival language (e.g., survival sex), or a more vague victimization term (“sexual victimization”) than CSEC or DMST (Choi, 2015). For U.S.-based journals, the issues had to include a domestic focus in order to ensure the topic was DMST and neither international trafficking nor a mix of domestic and international. A broad range of study designs, methodologies, and settings were included in the review of risk factors given the limited number of studies on the topic.

*PubMed* and *Web of Science* databases were searched using search terms as listed in Appendix A. These searches returned 202 unique results, which then underwent title and abstract screening to determine whether they fell within the listed inclusion criteria. Studies were excluded for the following reasons: systematic review with no original data, reviews of programs for treatment of survivors of DMST/CSEC with a focus solely on survivor and lacking focus on the time period preceding victimization, inclusion of data on vulnerabilities from non-U.S. countries exclusively or failure to separate U.S. domestic data from international data, major focus on labor trafficking or failure to distinguish labor and sex trafficking in the results and discussion of findings, data only on adults experiencing sexual exploitation or failure to separate the results between minors and adults when data collected from individuals both above and below the age of 18, “call to action” or opinion pieces without novel data or perspectives on vulnerabilities, focus solely on response to and treatment of victims and survivors in a medical setting, and focus on traffickers or third-party exploiters or buyers of CSEC services with little discussion on the risk factors or circumstances of the victims.

Abstract screening returned 27 eligible studies, which were then subjected to full-text review to assess the relevance of the article to this review and the strength of the findings. Following full-text review and hand searching, 15 studies were selected to be included in the review of risk factors (Figure 1). Risk factors in Table 1 were reported as significant in the models presented in the quantitative studies. For the one qualitative study included in Table 1 (Cobbina & Oselin, 2011), the risk factors shown in Table 1 were drawn from characteristic typologies of minors entering CSEC/DMST, which were constructed from the common themes in their qualitative data.

## Results

As summarized in Table 1, there are numerous risk factors noted in peer-reviewed studies that increase a minor’s vulnerability to exploitation.



**Figure 1.** Preferred reporting items for systematic reviews and meta-analyses (PRISMA) diagram summary of the number of found, reviewed, and included studies in this review.

## Demographics

Several studies made note of demographic features of sex or race that show increased vulnerability to CSEC/DMST. Some modeled data indicated that racial and ethnic minorities are at an increased risk of CSEC/DMST as compared to White, non-Hispanic minors (Fedina, Williamson, & Perdue, 2016). Baseline characteristics of participants in one study showed that survivors participating in a particular treatment program are primarily female, African American, and non-Hispanic, though these prevalence numbers likely reflect bias related to who is most able to access treatment in the study setting rather than being representative of youth involved in CSEC/DMST (Landers, McGrath, Johnson, Armstrong, & Dollard, 2017). Across various studies, significant demographic factors for CSEC/DMST risk included males (Kaestle, 2012), African Americans (Kaestle, 2012; Reid & Piquero, 2014), or equal risk of males and females (O’Brien, White, & Rizo, 2017).

## Childhood Abuse and Maltreatment

Perhaps the most commonly cited risk factor in the literature on CSEC/DMST is the role of childhood abuse—including physical, emotional, and sexual abuse—on leading minor victims into sexual exploitation (Cobbina & Oselin, 2011; Cole & Sprang, 2015; Fedina et al., 2016; Havlicek, Huston, Boughton, & Zhang, 2016; Kaestle, 2012; Landers et al., 2017; Reid, Baglivio, Piquero, Greenwald, & Epps, 2017; Roe-Sepowitz, 2012). Multiple forms of abuse are noted as motivation for youth to leave home, which eventually leads them into CSEC/DMST (Cobbina & Oselin, 2011). In this way, childhood abuse, particularly sexual abuse, may be the causal factor which spurs individuals to run away (another noted risk factor), making them further susceptible to CSEC/DMST (Fedina et al., 2016). Beyond its connection to running away, sexual abuse

**Table 1.** Summary Critical Findings Regarding Risk Factor DMST/CSEC.

Paper	Purpose	Data Source and Sample Size	Variables Assessed	Significant Risk Factors for CSEC and/or DMST
Martin et al. (2010)	Compare the experiences, characteristics, risks of adult women who trade sex based on whether they entered the work as adults or minors	Individuals who indicated they traded or sold sex in the North Minneapolis Prostitution Research project ( <i>n</i> of minors at onset = 63)	<ul style="list-style-type: none"> <li>- Demographics</li> <li>- Housing</li> <li>- Relationships/family</li> <li>- Work and money</li> <li>- Health</li> <li>- Substance use</li> <li>- Violence</li> <li>- Crime</li> <li>- Entry into prostitution</li> <li>- Age at entry</li> <li>- Length of time in trade</li> <li>- Experiences with sex work</li> </ul>	<ul style="list-style-type: none"> <li>- Childhood sexual abuse</li> <li>- Running away</li> <li>- Early sexual initiation</li> <li>- Survival sex</li> </ul> <p>(note: drug use found to initiate after involvement in sex work began)</p>
Cobbina and Oselin (2011)	Assess the impact of age of entry into sex work on the pathways leading to sex work	Qualitative interviews of street sex workers and incarcerated women with a history of sex work ( <i>n</i> = 40)	<ul style="list-style-type: none"> <li>- Caregiver strain</li> <li>- Child maltreatment</li> <li>- Age of first drug/alcohol</li> <li>- Running away</li> <li>- Sexual denigration of self or others</li> </ul>	<ul style="list-style-type: none"> <li>- Childhood abuse (physical and/or sexual)</li> <li>- Running away</li> <li>- Peer or family influence</li> <li>- Caregiver strain (mental illness, drug/alcohol abuse, domestic violence, etc.)</li> <li>- Child maltreatment</li> <li>- Sexual denigration of self/others</li> </ul>
Reid (2011)	Investigate if caregiver strain is linked to maltreatment using structural equation modeling	Child abuse victims who visited ER from 1973 to 1974 ( <i>n</i> = 174) who were contacted in 1996–1997 and interviewed again	<ul style="list-style-type: none"> <li>- Caregiver strain</li> <li>- Child maltreatment</li> <li>- Age of first drug/alcohol</li> <li>- Running away</li> <li>- Sexual denigration of self or others</li> </ul>	<ul style="list-style-type: none"> <li>- Caregiver strain (mental illness, drug/alcohol abuse, domestic violence, etc.)</li> <li>- Child maltreatment</li> <li>- Sexual denigration of self/others</li> </ul>
Kaestle (2012)	Investigate risk and protective factors for buying and selling sex in a longitudinal study	Waves I and III of <i>National Longitudinal Study of Adolescent Health (Add Health)</i>	<ul style="list-style-type: none"> <li>- Demographics</li> <li>- Maltreatment</li> <li>- Attraction</li> <li>- Delinquency behaviors</li> <li>- Protective factors</li> </ul>	<ul style="list-style-type: none"> <li>- (via multivariate analysis)</li> <li>- Male</li> <li>- Black</li> <li>- Child sexual abuse</li> <li>- History of shoplifting</li> <li>- History of homelessness</li> <li>- Running away</li> </ul>
Roe-Sepowitz (2012)	Assess the characteristics and effect of childhood emotional abuse on adult women in a prostitution-exiting program	Female residents in the program to leave prostitution in Phoenix, AZ ( <i>n</i> = 71)	<ul style="list-style-type: none"> <li>- Childhood abuse and maltreatment</li> <li>- Family issues</li> <li>- Risk taking behaviors</li> <li>- Criminal behaviors</li> <li>- Childhood risk factors</li> <li>- Education completed</li> </ul>	<ul style="list-style-type: none"> <li>- Childhood emotional abuse (predicted a younger age of entry)</li> <li>- Running away</li> <li>- Survival-based sex</li> <li>- Adolescent sexual victimization (13–17 years old)</li> <li>- Age at first alcohol/drug use (focus on “early starters” because captures only minors)</li> </ul>
Reid (2014)	Assess variables associated with minor versus adult initiation of CSE and identify risk and resiliency factors	Child abuse victims who visited ER from 1973 to 1974 ( <i>n</i> = 87) who were contacted in 1996–1997 and interviewed again	<ul style="list-style-type: none"> <li>- Early (before age 17) or late (age 17+) involvement in CSEC</li> <li>- Demographics</li> <li>- 10 psychosocial risk factor variables</li> </ul>	<ul style="list-style-type: none"> <li>- Early versus never groups: African American (<i>OR</i> = 2.77)</li> <li>- Maternal substance use problems (<i>OR</i> = 1.98)</li> <li>- Psychoticism (<i>OR</i> = 1.68)</li> <li>- Younger age at first sex (<i>OR</i> = 0.77 times lower for each year delayed)</li> </ul>
Reid and Piquero (2014)	Assess age-associated risks for onset of CSE between females and males	Youthful offenders in Philadelphia County, PA, or Maricopa County, AZ, from longitudinal study (“pathways to desistance”; <i>n</i> = 1,354)	<ul style="list-style-type: none"> <li>- Early versus late groups: maternal substance use problems (<i>OR</i> = 2.62)</li> </ul>	<ul style="list-style-type: none"> <li>- Early versus late groups: maternal substance use problems (<i>OR</i> = 2.62)</li> </ul>

Table 1. (continued)

Paper	Purpose	Data Source and Sample Size	Variables Assessed	Significant Risk Factors for CSEC and/or DMST
Cole and Sprang (2015)	Examine awareness, knowledge, and experience of professionals in working with minor victims of sex trafficking in metropolitan and nonmetropolitan communities	Personnel in agencies that provide services to at-risk youth or crime victims found via purposive sample and online searches ( $n = 323$ )	<ul style="list-style-type: none"> <li>- Community type</li> <li>- Awareness of CSEC/DMST as a problem</li> <li>- Experience working with victims of DMST and info on vulnerabilities of victims</li> </ul>	<ul style="list-style-type: none"> <li>- Compromised parenting or unstable home/family</li> <li>- Material need</li> <li>- Substance use/misuse (by parents or victim)</li> <li>- Developmental issues</li> <li>- Mental health or feelings about self</li> </ul>
Chohaney (2016)	Quantitative analysis of risk factors specific to Ohio sex trafficking victims	Survey of urban, street-based sex workers ( $n = 328$ )	<ul style="list-style-type: none"> <li>- Demographics</li> <li>- Sex work history</li> <li>- Abuse history</li> <li>- Runaway episodes</li> <li>- Peer influence</li> <li>- Transportation routes taken by traffickers</li> </ul>	<ul style="list-style-type: none"> <li>- History of abuse or neglect</li> <li>- Placed in juvenile detention before sex work involvement</li> <li>- Difficulty in school before sex work involvement</li> <li>- Conflict with parents before sex work involvement</li> <li>- Engaged in survival sex while running away</li> <li>- Friends involved in sex trade (bought or sold others into sex)</li> </ul>
Fedina et al. (2016)	Investigate associations between multiple risk factors and DMST in the United States	English speakers over age 16 who engaged in commercial sex in the past 6 months ( $n = 328$ )	<ul style="list-style-type: none"> <li>- Demographics</li> <li>- Age when started commercial sex work</li> <li>- Potential risk factors (e.g., running away, economic stressors, school dropout, identified as LGBTQ, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Runaway history</li> <li>- Childhood sexual abuse</li> <li>- Childhood emotional abuse</li> <li>- Raped</li> <li>- Family members in sex work</li> <li>- Friends who bought sex</li> <li>- Noted pathway: childhood sexual abuse → running away (often) → increased vulnerability for DMST</li> <li>- Racial and ethnic minorities at heightened risk compared to White, non-Hispanic youth</li> </ul>
Havlicek et al. (2016)	Compare characteristics of investigated cases of human trafficking versus cases of maltreatment	Human trafficking ( $n = 563$ ) and maltreatment cases between years 2012 and 2015, involving victims under age 21; use of Illinois administrative databases to locate cases	<ul style="list-style-type: none"> <li>- Demographics</li> <li>- Maltreatment history</li> <li>- Trafficking details</li> <li>- Out-of-home care history</li> </ul>	<ul style="list-style-type: none"> <li>- Maltreatment history and past contact with child protection authorities</li> </ul>

(continued)

**Table 1.** (continued)

Paper	Purpose	Data Source and Sample Size	Variables Assessed	Significant Risk Factors for CSEC and/or DMST
Reid and Piquero (2016)	Use multigroup structural equation modeling to explore commonalities and distinctions in vulnerability to CSE across gender	Youthful offenders (ages 14–18 at time of offense) in Philadelphia County, PA, or Maricopa County, AZ, from longitudinal study (“pathways to desistance”; $n = 1,354$ )	<ul style="list-style-type: none"> <li>– Caregiver strain</li> <li>– Youth nurturing</li> <li>– Negative psychosocial emotion</li> <li>– Endangering behaviors</li> <li>– CSE/prostitution</li> </ul>	<ul style="list-style-type: none"> <li>– Increased caregiver strain (arrests, relationship problems between caregivers, substance use; boys and girls)</li> <li>– Poor nurturing environment (boys and girls)</li> <li>– Endangering behaviors: running away; age of first alcohol/drug use (girls); age at first sex (boys)</li> <li>– Psychosocial problems: hostility and interpersonal sensitivity (boys)</li> </ul>
Landers et al. (2017)	Provide a demographic and clinical profile of youth who experienced CSE in Miami, FL, metropolitan area	CSE youth admitted to CHANCE treatment program (ages 9–18, in child welfare dependency system, living/lived in Miami-Dade county, presenting serious mental/behavioral problems that require therapeutic intervention)	<ul style="list-style-type: none"> <li>– Child and adolescent needs and strengths-CSE assessment tool</li> </ul>	<p>Noted pathway<sup>a</sup>: Caregiver strain → poor nurturing environment → endangering behaviors and psychosocial problems → CSE</p> <p><i>Baseline characteristics (no statistical analysis):</i></p> <ul style="list-style-type: none"> <li>– Female (94.3%), Black (59.3%), Non-Hispanic (61.6%)</li> <li>– Out-of-home placement history (67.8%)</li> <li>– High rates of physical abuse, neglect, and emotional abuse</li> <li>– At least one experience of sexual abuse (87%)</li> <li>– Witnessed repeated episodes of family violence (24%)</li> <li>– Witnessed significant criminal activity (26.3%)</li> <li>– Equal involvement of males and females</li> <li>– Runaway history</li> <li>– Demonstration of externalizing behaviors<sup>b</sup></li> <li>– Clinical substance abuse</li> </ul>
O’Brien et al. (2017)	Investigate associations between variables for youth in welfare who indicated they’ve been paid for sex	All youth ( $n = 38$ ) who reported being paid for sex in the last 6 months in Wave 1 or 2 of the National Survey of Child and Adolescent Well-Being (compared to youth who did not indicate CSE involvement; $n = 776$ )	<ul style="list-style-type: none"> <li>– Demographics</li> <li>– Seven DMST-related variables</li> <li>– Two child permanency variables</li> <li>– Five child well-being variables</li> </ul>	<ul style="list-style-type: none"> <li>– Witnessed significant criminal activity (26.3%)</li> <li>– Equal involvement of males and females</li> <li>– Runaway history</li> <li>– Demonstration of externalizing behaviors<sup>b</sup></li> <li>– Clinical substance abuse</li> </ul>
Reid et al. (2017)	Explore connection between DMST and childhood adversity	Juvenile justice-involved children/youth in Florida who had human trafficking report via child abuse hotline ( $n = 913$ )	<ul style="list-style-type: none"> <li>– ACE score (0–10)</li> </ul>	<ul style="list-style-type: none"> <li>– Emotional abuse</li> <li>– Physical abuse</li> <li>– Sexual abuse</li> <li>– Emotional neglect</li> <li>– Physical neglect</li> <li>– Family violence</li> </ul>

Note. ACE = Adverse Childhood Experiences; CSEC = commercial sexual exploitation of children; DMST = domestic minor sex trafficking; ER = emergency room.

<sup>a</sup>Not equivalent effect across genders. <sup>b</sup>Include physically and/or emotionally aggressive behaviors, sexually aggressive behaviors, truancy, runaway behavior, drug use, and vandalism.

experienced as a child seems to play a major role in the vulnerability of minors to exploitation later in life, even when controlling for other risk factors in multivariate models. (Kaestle, 2012; Martin, Hearst, & Widome, 2010; Reid & Piquero, 2014). Others noted their desire to sell sex as minors in order to regain some element of control over their bodies and sexuality, regardless of any actual control they had while selling sex due to their involvement with a pimp or third-party exploiter (Cobbina & Oselin, 2011). A history of maltreatment in childhood, including neglect, is also common among CSEC/DMST victims (Havlicek et al., 2016; Landers et al., 2017). Like child sexual abuse, maltreatment also seems to be connected with other risks, such as running away and age at first drug/alcohol use (Reid, 2011). Childhood emotional abuse seems to increase vulnerability by reducing an individual's coping skills, without which youth are unable to escape their high-risk relationships with their exploiter(s), leading to increased dependence on their exploiter(s) for shelter and basic needs (Roe-Sepowitz, 2012). One study used a measure of a "poor nurturing environment" to capture behavior of neglect and maltreatment with authors noting that the decay of support for a child (including neglect of, lack of monitoring of, and failure to emotionally engage with the child) creates a poor nurturing environment and increases vulnerability to CSEC/DMST (Reid & Piquero, 2016). Taken together, histories of trauma in childhood in the form of some type or combination of abuse, maltreatment, or neglect heighten the vulnerabilities of children and youth to exploitation and often cause individuals to fail to recognize their experience as exploitative (Landers et al., 2017).

### *Compromised Parenting or Caregiver Strain*

Multiple studies also found a connection between compromised parenting and/or an unstable home life and experience with CSEC/DMST (Cole & Sprang, 2015; Reid, 2011; Reid & Piquero, 2014, 2016). Compromised parenting was captured via multiple measures, including substance use by mothers or either parent (Cole & Sprang, 2015). Other measures included caregiver strain and its correlation to child maltreatment (Reid, 2011). Caregiver strain encompassed substance use (alcohol, drug), emotional and mental health problems (e.g., depression, anxiety, poor anger management), arrests, relationship problems between caregivers, and family violence (discussed further below; Reid, 2011; Reid & Piquero, 2016). Maternal substance use, specifically, was found to increase the likelihood of CSEC/DMST victimization (Reid & Piquero, 2014).

### *Witnessed Family Violence or Criminal Activity*

In addition to negative experiences suffered by the minors personally while growing up, the occurrence of dangerous, violent, or illegal activities in their environment, particularly their home, increases their risk of future victimization in CSEC/DMST. A common feature among victimized minors is a preexploitation history of witnessing family violence or

significant criminal activity, though most studies did not investigate further regarding the nature, duration, or severity of what these illegal activities entailed (Landers et al., 2017; Reid et al., 2017).

### *Poverty or Material Need*

Economic vulnerability or material need is associated with CSEC/DMST vulnerability (Cole & Sprang, 2015). Recognized as a risk factor that may lead an individual into CSEC/DMST, and subsequently prevent them from leaving the exploitation, poverty was noted as a vulnerability for minors in rural, metropolitan, and metropolitan areas (Cole & Sprang, 2015).

### *Conflicts With Parents*

Experiencing conflict with parents prior to engagement in CSEC/DMST is also a risk factor that may be connected to other known factors (Chohaney, 2016). Conflict with parents may arise out of a poor nurturing environment, caregiver strain, compromised parenting, or other negative atmospheres and may lead to a minor placing themselves in situations which elevate their risk of exploitation, such as running away or engaging in survival sex (discussed below).

### *Difficulty in School*

One study noted that difficulty in school, which may result from a variety of other risk factors discussed here, including child abuse, compromised parenting, or conflicts with parents, increases odds of an individual being forced into CSEC/DMST (Chohaney, 2016).

### *Running Away or Being Thrown Away*

A commonly cited risk factor is that youth who run away from home/their guardianship or who are thrown away (asked or forced to leave home by their caregivers with no alternate care or shelter arranged) are likely to fall into CSEC/DMST exploitation (Cobbina & Oselin, 2011; Fedina et al., 2016; Kaestle, 2012; Martin et al., 2010; O'Brien et al., 2017; Reid & Piquero, 2016; Roe-Sepowitz, 2012). Running away seems to strongly correlate with the age at which minors enter CSEC/DMST; runaways often becoming involved in the sex trade in early adolescence (Roe-Sepowitz, 2012). Minors from abusive homes or involved in foster care, which often results from some type of abusive childhood, may be prone to running away from their home to escape abuse or from their placement and subsequently falling into exploitation at the hands of some third-party exploiter(s) (O'Brien et al., 2017; Roe-Sepowitz, 2012). However, diversity among youth experiences demonstrates that runaway/throwaway youth are not pushed into CSEC/DMST exclusively when they are out of their home, as a simple history of running away can lead into CSEC/DMST (Fedina et al., 2016; Kaestle, 2012). It is worth noting that running away could push youth into engagement in survival sex, the latter

being another known risk factor for CSEC/DMST (Fedina et al., 2016).

### **Survival Sex**

Discussion of survival sex (otherwise known as “survival-based sex”) as a risk factor for CSEC/DMST is complicated by the murky nature of the distinction between survival sex for minors and CSEC/DMST. Since any involvement in the sex trade below age 18 is considered a form of CSEC/DMST, it is difficult to consider survival sex, which is defined as selling or exchanging sex for money, food, drugs, and/or shelter, as vulnerability leading to exploitation rather than exploitation of powerless and young individuals in the absence of a third-party exploiter (Fedina et al., 2016). However, it is worth noting that multiple studies found a connection between survival sex and later being forced into exploitation in CSEC/DMST by third-party exploiters (e.g., pimps; Chohaney, 2016; Martin et al., 2010; Roe-Sepowitz, 2012). Survival sex may lead minors into high-risk situations and cause them to interact with individuals who can then manipulate their economic (and often emotional) vulnerabilities to force them into exploitation (Roe-Sepowitz, 2012). Homelessness—occasionally captured within the survival sex variable, especially among runaway/throwaway youth—also leads to CSEC/DMST vulnerability (Kaestle, 2012).

### **Negative Mental Health or View of Self/Psychoticism**

Several studies found an association between some negative mental health state and later victimization in CSEC/DMST (Cole & Sprang, 2015; Reid & Piquero, 2014, 2016). These included vulnerabilities exacerbated by an individual’s mental health or feelings about self and developmental issues, as reported by service providers (Cole & Sprang, 2015). Others in this category were psychoticism and psychosocial problems of hostility and interpersonal sensitivity, the latter of which was found to be a risk factor for boys only (Reid & Piquero, 2014, 2016).

### **Child Protection Involvement**

Some sort of contact with or involvement in the child protection system seems correlated with subsequent victimization in CSEC/DMST (Havlicek et al., 2016; Landers et al., 2017). A history of out-of-home placement—such as foster care placement or kinship care—was common among victims in one study, indicating that not only did the child protection system investigate abuse and maltreatment in the home but found sufficient evidence to remove the child from the home and place them in alternative care (Landers et al., 2017).

### **Juvenile Detention Involvement or Delinquency**

Similar to involvement with the child protection system, a common risk factor for victims is prior involvement in the juvenile detention system, indicating some history of

delinquency prior to CSEC/DMST (Chohaney, 2016). Other studies detected delinquency as a risk factor, including a history of shoplifting and externalizing behaviors (including vandalism), though additional measures were not included to detect whether this led to involvement with the juvenile detention system (Kaestle, 2012; O’Brien et al., 2017).

### **Peer or Family Influence**

Researchers have noted the effect of socialization leading to CSEC/DMST, which is also tied to low-resource communities in which sex work was common and often engaged in by friends or family (Cobbina & Oselin, 2011). Involvement of peers who engage in sex work, including survival sex, or purchase sex or sell others into sex as exploiters influences the entry of minors into commercial sex work (Chohaney, 2016; Fedina et al., 2016). The involvement of family may normalize the industry and cause youth to view it as the “family business” rather than recognizing the transactions as exploitative when involving minors or any form of coercion (Fedina et al., 2016).

### **Early Sexual Initiation or Sexual Denigration**

The age of sexual initiation is tied to future involvement in CSEC/DMST, as earlier initiation increases an individual’s vulnerability to exploitation (Martin et al., 2010; Reid, 2011; Reid & Piquero, 2014, 2016). Earlier initiation in sexual activities by minors seems to push them into exploitative sexual activities (Martin et al., 2010). One study reported an odds ratio for sex work involvement of 0.77 for each year initiation of sex was delayed among minors (Reid & Piquero, 2014). Another model reported the risk factor for age at first sex for CSEC as only significant for boys (Reid & Piquero, 2016). A measure of sexual denigration of themselves or others was shown as a vulnerability tied to child sexual abuse that potentially leads to further victimization via CSEC/DMST (Reid, 2011).

### **Early Age of First Alcohol/Drugs**

The potential of drug or alcohol use leading to vulnerabilities for CSEC/DSMT is a complicated and debated point in the literature (Clayton et al., 2013). While many victims of CSEC/DMST are known to have substance abuse problems, it has often been unclear if this abuse created dependencies and vulnerabilities that led to CSEC/DMST or if the use of substances was employed after CSEC/DMST entry by either an exploiter to exercise greater control over the victim or the exploited minors as a means of coping with sex work involvement (Clayton et al., 2013). Several studies in this review report substance abuse/misuse (Cole & Sprang, 2015), clinical substance abuse (O’Brien et al., 2017), and age at first alcohol or drug use (Reid, 2014; Reid & Piquero, 2016) as risk factors for minors that later lead to exploitation. (Of note, Reid and Piquero [2016] found this only to apply to exploited boys, not girls.) However, other studies found minors’ use of substance

**Table 2.** Summary of Reviewed Studies Reporting on CSEC/DMST and Their Reported Risk Factors (*n* = 15).

Risk Factors	References														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Demographics				✓			✓						✓		✓
Child abuse and maltreatment <sup>a</sup>	✓s	✓p, s	✓m	✓s	✓e			✓g, n		✓s, e	✓m		✓p, s, n, e		✓p, s, n, e
Compromised parenting and caregiver strain			✓				✓	✓				✓			
Witnessed family violence or criminal activity													✓		
Poverty or material need								✓							
Difficulty in school									✓						
Conflict with parents									✓						
Running away or thrown away	✓	✓		✓	✓					✓		✓			✓
Survival sex	✓				✓				✓						
Negative mental health or negative view of self or psychoticism							✓	✓				✓			
Child protection involvement											✓		✓		
Juvenile detention involvement or delinquency				✓					✓						✓
Peer or family influence		✓							✓	✓					
Earl sexual initiation	✓						✓					✓			
Early substance use/first alcohol or drug						✓						✓			✓
Prior rape or adolescent sexual victimization						✓				✓					

Note. CSEC = commercial sexual exploitation of children; DMST = domestic minor sex trafficking.  
<sup>a</sup>Types of child abuse and maltreatment, if specified: (p = physical; s = sexual; e = emotional; g = general/nonspecified abuse; m = maltreatment; n = neglect).

to being after or simultaneous to involvement in CSEC/DMST (Choi, 2015; Martin et al., 2010).

**Prior Rape Experience or Adolescent Sexual Victimization**

Sexually exploited minors have often experienced prior rape or sexual victimization before involvement in CSEC/DMST (Fedina et al., 2016; Reid, 2014). This includes a self-reported history of rape prior to CSEC/DMST (Fedina et al., 2016) and adolescent sexual victimization, which included nonconsensual sexual contact between ages 13 and 17 with someone at least 5 years older (Reid, 2014). While this latter measure may have some assessment overlap with the child sexual abuse risk factor, it highlights the sexual victimization that CSEC/DMST minors potentially experience both within their home/family and outside of it.

**Discussion**

In considering these reviewed risk factors and vulnerabilities, some seem particularly common among CSEC/DMST victims and perhaps cluster together well in themes or groups shown in Table 2 in a logical manner to explain the pathway that may lead an individual to exploitation. Of those, child abuse, neglect, and maltreatment seem to be major factors in the lives of victims. Child abuse (especially sexual abuse)—assessed as significant in numerous studies—could potentially effect an individual in numerous ways: damage a child’s coping skills and mental health, harm their relationship with their caregivers, negatively affect their home life, and/or motivate dysfunctional, criminal, or harm-seeking behavior as adolescents. All these potential downstream effects make youth susceptible

to CSEC/DMST. Similarly, running away from home (or being thrown away) creates instability and significant material need in the life of a minor. Efforts to meet those needs can lead them to engage in survival sex or to become dependent on third-party exploiters who lead them to and possibly trap them in underage sex work. Given that many children who run away also come from an abusive home, these major risk factors seem to be correlated and connected. Of course, not all youth who fall into CSEC/DMST will present with a history of childhood abuse or running away, but the patterns demonstrated by the reviewed studies highlight the significant vulnerability for exploitation that is opened in a minor’s life when they experience either.

Internalized norms surrounding violence and sex work also seem key to later CSEC/DMST victimization, and several of the reviewed risk factors can be clustered within this category. Childhood physical abuse, witnessing family or domestic violence, and the influence of peers could all act to normalize violence in an individual’s life. Consequently, victims may be more disempowered to leave or less shocked and less motivated to leave when suffering violence leading into or occurring throughout CSEC/DMST. (This violence can be inflicted by buyers or third-party exploiters.) These norms may couple with poor coping skills brought about by a negative home life during childhood to exacerbate the vulnerability of minors and make them easier to control or exploit in the course of CSEC/DMST.

Certain limitations of this review must be considered. Gender was not included as a risk factor in this review, which may be a limitation of the review or of the body of research in general. While the stereotypical CSEC/DMST victim is a

**Table 3.** Implications for Practice, Policy, and Research.

Practice	<ul style="list-style-type: none"> <li>• Aid in identifying minors who have a potentially higher risk of experiencing CSEC/DMST</li> <li>• Allow for provision of services to youth who are marginalized and potentially vulnerable</li> <li>• Improve targeting of prevention programs and services to relevant populations</li> </ul>
Policy	<ul style="list-style-type: none"> <li>• Improve protections for marginalized and at-risk groups of children and youth</li> <li>• Improve and target training for groups that interact with CSEC/DMST individuals or those who may be especially vulnerable (including teachers, counselors, law enforcement, and health-care workers), in which training will increase awareness, teach how to handle disclosure, and provide trauma-informed care</li> </ul>
Research	<ul style="list-style-type: none"> <li>• Investigate opportunities to interact with vulnerable minors and prevent potential exploitation</li> <li>• Initiate more research and in-depth analysis of aspects surrounding “nonstereotypical victims”</li> </ul>

Note. CSEC = commercial sexual exploitation of children; DMST = domestic minor sex trafficking.

female, there are mixed results in the literature on the effect of gender as vulnerability. While some CSEC/DMST theories on power dynamics between victim and exploiters posit that female gender is a vulnerability, evidence is lacking (Choi, 2015; Reid, 2012). Some reports from service providers identify female gender as a vulnerability, though this may reflect bias in who is sufficiently visible to seek or access care (Landers et al., 2017). Certain models report male gender as increasing vulnerability (Kaestle, 2012), while other studies found equal involvement of males and females reporting involvement in CSEC/DMST (O’Brien et al., 2017). This ambiguity prevented any definitive statements about the risks tied to gender in this review. Future research and analysis efforts could enhance our understandings of vulnerabilities by clarifying this complexity and contradictory results.

Although discussed by some authors as a factor leading to other vulnerabilities such as being thrown away or engagement in survival sex (Fedina et al., 2016), LGBTQ+ identities were not focused on in the studies reviewed here. However, qualitative work and reports from case workers in the field have noted that LGBTQ+ individuals are at a heightened risk of CSEC/DMST exploitation, as their sexuality or identity creates additional vulnerability (Choi, 2015; Clayton et al., 2013; Fedina et al., 2016). Synthesis of the LGBTQ+ experience and relevant vulnerabilities would deepen our understanding of CSEC/DMST involvement for these populations and allow for the creation of better prevention efforts tailored to their potentially unique needs. Such work would increase the applicability of these efforts to more diverse populations and better meet the needs of individuals who differ from a “stereotypical victim.” Future research should focus on these vulnerabilities and the potentially unique dynamics affecting these populations and their experience with CSEC/DMST.

## Conclusion and Next Steps

Understanding the collection of risk factors that may increase the vulnerability of a minor for CSEC/DMST is key to creating effective, targeted, and sensitive prevention programs and policies, as summarized in Table 3. Implications of these findings for practice include improved and targeted provision of services and CSEC/DMST prevention programs to youth who are marginalized and potentially “high risk” in their vulnerability. This review also points to the need for advocacy and policy to improve the protections for at-risk groups of children and youth. Policy and prevention efforts should focus on awareness and training programs for populations that interact with CSEC/DMST individuals or youth who may be particularly vulnerable. This includes teachers, counselors, law enforcement, and health-care workers, all of whom should know the factors that increase a minor’s vulnerability, as well as knowing how to handle CSEC/DMST disclosures and provide trauma-informed care to victims.

The findings here highlight the complex needs of CSEC/DMST victims beyond their trafficking experience. Policy and practice should comprehensively address not only the harm caused via trafficking but the trauma, abuse, and difficulties that made a youth vulnerable to trafficking in the first place, such as marginalization, childhood abuse, or mental health issues. The compounding disadvantages and abuse suffered by CSEC/DMST-involved youth make necessary a systematic, multifaceted commitment in policy, practice, and funding to provide them with the help they need for care and recovery. Ideally, such work would help youth avoid further exploitation, abuse, and/or violence in their future.

Finally, it should be noted that a key element on the path to such programs and policies is the integration of evidence-based vulnerabilities with frameworks and models grounded in theory. Such synthesis provides meaningful insight regarding interaction of risk factors. When placed in the appropriate framework or model, this organization would aid in the design of prevention work by identifying key time points, levels, or populations at which efforts can be aimed. Such work will ensure efforts are effective and better protect some of the most vulnerable members of society from horrific abuse and exploitation.

## Appendix A

Searches were conducted within the Web of Science electronic database using combinations of the following key words: sex\* traffick\*, minor\*, child\*. Searches were also carried out in the PubMed electronic database using similar terms: sex\* traffick\*, minor\*, youth\*, child\*, domestic\*, “commercially sexually exploited children”, “domestic minor sex trafficking”.

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