SEX TRAFFICKING PREVENTION EDUCATION FOR YOUTH WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES: PROMISING PRACTICES

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ABSTRACT

Melissa Renee Jenkins: Sex Trafficking Prevention Education for Youth with Intellectual and Developmental Disabilities: Promising Practices
(Under the direction of Cynthia Fraga Rizo)

The past two decades have seen a wealth of research devoted to the exploration of risk factors and negative outcomes associated with sex trafficking. There have been significant strides in raising awareness about the vulnerability of youth and the importance of sex trafficking prevention and intervention. However, our understanding of the prevalence and prevention of sex trafficking among youth with intellectual and developmental disabilities (IDD) is limited. This three-paper dissertation investigates contributing factors to the development and implementation of sex trafficking prevention education for youth with IDD. Paper 1 consisted of a systematic review of studies focused on the prevalence and prevention of interpersonal violence (i.e., dating violence, sexual violence, and sex trafficking) among youth with IDD. Paper 2 involved a qualitative exploration of service provider recommendations for developing or adapting sex trafficking prevention programming for youth with IDD. Paper 3 utilized social network analysis to examine organizational collaboration and coordination among service sectors relevant to the prevention of, and response to, sex trafficking among youth with IDD. Results from Paper 1 revealed that youth with IDD experience interpersonal violence at higher or similar rates to youth without IDD, though victimization prevalence and risk may depend on IDD diagnosis. While no studies described sex trafficking prevention for this population, sexual violence and dating violence prevention programs featured various topics (e.g., boundaries, safety) and methods for

improving accessibility for youth with IDD. Findings from Paper 2 suggested that sex trafficking prevention education for youth with IDD should include several topics (e.g., consent, social rules/context for appropriate behavior), teaching approaches (e.g., co-facilitation), and accommodations (e.g., breaking down material into smaller tasks). Service providers noted that systems can improve how they respond to sex trafficking involving youth with IDD through professional training, cross-sector collaboration, and structured disclosure and referral processes. Results from Paper 3 indicated that organizations engaged the most in sharing information and resources, and the least in coordinating trainings. Communication frequency was significantly associated with coordination. This dissertation establishes promising practices for sex trafficking prevention for youth with IDD. Future research should involve this population in program development and evaluations.

To my family and friends who have supported me along the way.

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LIST OF ABBREVIATIONS AND SYMBOLS

ADHD	Attention-deficit/hyperactivity disorder
ANOVA	Analysis of variance
ASD	Autism spectrum disorder
β	Standardized beta coefficient
b	Unstandardized beta coefficient
CAC	Child advocacy center
CAG	Community advisory group
CI	Confidence interval
CPS	Child protective services
CSA	Childhood sexual abuse
DV	Dating violence
F	F-statistic
ID	Intellectual disability
IDD	Intellectual and developmental disabilities
LD	Learning disability
LGBTQ+	Lesbian, gay, bisexual, transgender, gender-diverse and queer-identifying
M	Mean
MRQAP	Double Dekker Semi-Partialling multiple regression quadratic assignment procedure
N	Sample size

n	Subsample size
OR	Odds ratio
PTSD	Posttraumatic stress disorder
QAP	Quadratic assignment procedure
R^2	R-squared
r	Pearson correlation coefficient
SD	Standard deviation
SE	Standard error
SNA	Social network analysis
ST	Sex trafficking
SV	Sexual violence
UDL	Universal design for learning

INTRODUCTION

For over 25 years, there has been a focus on preventing dating violence and sexual violence among youth in the United States, often by implementing school-based educational programming (Crooks et al., 2019). Recently, states have recognized the importance of also educating youth about sex trafficking, as noted by the increasing number of states amending their public education policies to include sex trafficking prevention in health education curricula. Notably, there is a dearth of rigorous research evaluating the acceptability, feasibility, and effectiveness of sex trafficking prevention programs. Whether such programming is delivered in schools, communities, or other settings, it is imperative that development and implementation decisions address the support needs of all youth.

Youth Sex Trafficking

Sex trafficking is defined as the receipt of persons (e.g., recruiting, harboring, transporting) via force, coercion, or fraud (e.g., false promises) for commercial sexual exploitation (Trafficking Victims Protection Reauthorization Act, 2017). The proof of force, coercion, or fraud is not required for youth under 18 years of age. Although establishing prevalence is important for determining the scope of a social problem, there are several methodological challenges to determining the prevalence of sex trafficking. Notably, there is a lack of a centralized system for tracking and analyzing trafficking data, and counts of suspected cases of sex trafficking involving minors (based on arrest records or hotline reports) are often presented as accurate estimates without substantiation (Franchino-Olsen et al., 2020). In a scoping review of methods used to estimate the prevalence of sex trafficking among minors in

the United States, Franchino-Olsen et al. (2020) found that sex trafficking prevalence was often calculated based on specific subpopulations (e.g., homeless youth, adjudicated males) or geographic areas, thereby limiting the generalizability of study findings. Reviewed studies also featured different measures of sex trafficking (e.g., youth engaged in survival-based sex, youth who experienced sex trafficking, youth at-risk of sex trafficking), and sampling methods were contingent on subpopulation characteristics. In an effort to advance the field, respondent-driven sampling—a useful method for sampling hard-to-reach populations such as exploited or trafficked youth (Dank, 2011)— has been proposed as a possible strategy for determining the prevalence of sex trafficking among minors. However, achieving a sufficient sample size requires strong social networks, and this strategy inadvertently misses disconnected or isolated youth (Franchino-Olsen et al., 2020). Regardless of these challenges, cases of sex trafficking have been identified in all 50 states across the country (Polaris Project, 2020).

Sex trafficking is associated with a plethora of potential adverse outcomes for survivors, including health challenges, housing instability, unemployment, and failure to complete education (Duncan & DeHart, 2019; Mumey et al., 2021; Rajaram & Tidball, 2018). Similar to adults, youth who have experienced sex trafficking are at risk of (a) developing symptoms of posttraumatic stress disorder (PTSD); (b) experiencing depression and anxiety; (c) having suicidal ideation; (d) needing care for sexually transmitted infections (STIs) and/or unplanned pregnancies; and (e) misusing drugs and alcohol (Le et al., 2018). There are several factors that may increase a youth's vulnerability to experiencing sex trafficking, including running away, juvenile justice and child welfare involvement, and unmet basic needs (e.g., food insecurity, housing instability) (Franchino-Olsen, 2021; O'Brien et al., 2017; Twis, 2020). Youth who are socially marginalized because of their sexual orientation, gender identity, or race/ethnicity might

also be at heightened risk (Gerassi et al., 2021; Harper, 2013). While all youth may be vulnerable to experiencing sex trafficking, one subpopulation remains at an elevated risk: youth with intellectual and developmental disabilities (IDD).

Youth with IDD and Vulnerability to Sex Trafficking

IDD represents a group of neurodevelopmental disorders that affect learning, behavior, social, and/or physical development (Centers for Disease Control and Prevention [CDC], 2020). Unlike other risk factors that have been extensively discussed in the literature, few empirical studies have examined the association between IDD and exposure to sex trafficking. Even less research has investigated the physical, behavioral, and mental health outcomes experienced by survivors of sex trafficking who also have an IDD. However, research examining the impact of sexual violence more broadly among this population suggests that these individuals are more or as likely to experience negative outcomes compared to individuals without IDD. Specifically, youth with IDD who have experienced sexual abuse are more likely to engage in self-injurious behavior and develop a conduct disorder than their peers who do not have an IDD (Mansell et al., 1998; Soylu et al., 2013). Individuals with IDD who have experienced sexual abuse also experience high levels of anxiety and depression, but the extent to which these symptoms are the same or worse than for sexual abuse victims without IDD is unclear (Smit et al., 2019). As more research evidence suggests that disability status may be a factor that increases vulnerability to sexual exploitation (Franklin & Smeaton, 2017; Sherry, 2019), it is necessary to consider how sex trafficking prevention programs should be adapted or new programs tailored for youth with IDD.

Comprehensive Sex Trafficking Prevention

Given the profoundly negative impact associated with experiencing sex trafficking, there has been an increased focus on the prevention of sex trafficking among youth. In 2017, the National Advisory Committee on the Sex Trafficking of Children and Youth in the United States (the Committee) was established as authorized by the Preventing Sex Trafficking and Strengthening Families Act (P.L. 113-183). In the Committee's interim report, one of the topic areas for the 127 recommendations for states was prevention best practices, including (a) establishing policies that require children in the care of juvenile justice and/or child welfare systems to receive research-based sex trafficking prevention education, and (b) requiring middle and high schools to provide all students with basic information on sex trafficking (National Advisory Committee on the Sex Trafficking of Children and Youth in the United States, 2020).

Despite the need for more rigorous evaluation studies, preliminary research suggests that participating in prevention education increases youth's knowledge about sex trafficking, including indicators of sex trafficking, steps to take when encountering a victim, and safety when navigating online relationships (Scott et al., 2019; Zhu et al., 2020). Importantly, none of these studies reported any identifiable disabilities among participants; this limits our understanding of the appropriateness, acceptability, and effectiveness of these programs for youth with IDD. Existing sex trafficking prevention education may need to be tailored according to the learning needs of youth with IDD, especially if they experience challenges with communication, reasoning, or comprehension. Additionally, little is known about how organizations should respond to disclosures made in the context of providing sex trafficking prevention education to youth with IDD. This process involves understanding organizational collaboration among agencies that can contribute to sex trafficking prevention and intervention among this population.

Dissertation Focus

To address these research and practice gaps, the goal of this dissertation is to identify promising practices for developing and implementing sex trafficking prevention education for youth with IDD. This dissertation uses a three-paper format to address the following study aims.

Aim 1

First, little is currently known about the prevalence and prevention of sex trafficking (and similar forms of violence) among youth with IDD. The goal of Aim 1 was to synthesize the research literature focused on dating violence, sexual violence, and sex trafficking among youth with IDD in the United States. The systematic review was guided by the following research questions: (1) What is known about the prevalence of dating violence, sexual violence, and sex trafficking among youth with IDD? (2) What is known about prevention education for dating violence, sexual violence, and sex trafficking among youth with IDD in terms of content, delivery, effectiveness, and alignment with Universal Design for Learning principles (CAST, 2018)?

Aim 2

Second, sex trafficking prevention education must be inclusive and accessible to youth with IDD; however, there is limited evidence to guide the development or adaptation of sex trafficking prevention education for this group of youth. Therefore, the goal of Aim 2 was to determine recommendations for developing or adapting sex trafficking prevention education to be inclusive of youth with IDD, as well as approaches and processes for responding to disclosures made in the context of prevention education. Using qualitative data collected from IDD service providers and sex trafficking advocates and prevention experts, this study sought to answer the following research questions: (1) What are potential challenges to educating youth

with IDD about sex trafficking prevention and responding to potential disclosures? And (2) What are key recommendations for sex trafficking prevention targeting youth with IDD (e.g., content, delivery, timing, setting), as well as approaches and processes for responding to disclosures made in the context of prevention education?

Aim 3

Finally, comprehensive sex trafficking prevention should entail collective action within and across various professional sectors. The goal of Aim 3 was to examine an inter-organizational network of coordination among six sectors relevant to sex trafficking prevention and response for youth with IDD. This study used social network analysis with organizational survey data to answer the following questions: (1) Which organizations/types of organizations have the most coordination (i.e., are in the core of the network) and which have the least coordination (i.e., are in the periphery of the network)? (2) Which organizations/types of organizations primarily engage in one-way coordination (e.g., only sending referrals, information sharing) and which engage in two-way coordination (e.g., both sending/receiving referrals)? (3) Is there an association between relationship strength (i.e., communication frequency, reliability, and trust) and types of coordination?

Organization of the Dissertation

All three papers in this dissertation are presented in their own respective chapter. Findings from these studies are summarized in the final chapter, which also includes implications for future research, practice, and policy. Together, these studies will contribute empirical evidence to the sex trafficking prevention research literature by highlighting strategies for educating youth with IDD about sex trafficking. Social work research focused on ensuring sex trafficking prevention efforts are inclusive of youth with IDD has the potential to inform micro

practice (e.g., accessibility of trauma-informed interventions and strengths-based rather than deficit-oriented services) and macro practice (e.g., creating wrap-around services and evaluating anti-trafficking policies for protections afforded to individuals with IDD).

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PAPER ONE: PREVALENCE AND PREVENTION OF DATING VIOLENCE, SEXUAL VIOLENCE, AND SEX TRAFFICKING AMONG YOUTH WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES: A SYSTEMATIC REVIEW

Introduction

Every year, millions of youth experience some form of interpersonal victimization (e.g., dating violence, sexual violence), increasing their likelihood of developing negative behavioral health outcomes and experiencing revictimization (Classen et al., 2005; Jouriles et al., 2017). For nearly three decades, there has been a concerted effort in schools and communities across the United States to promote effective strategies for reducing dating and sexual violence, with sex trafficking prevention being a more recent addition. However, little is known about the prevalence and prevention of the aforementioned forms of violence among youth with intellectual and developmental disabilities (IDD). This systematic review summarizes what is known about the prevalence and risk of experiencing dating violence, sexual violence, and sex trafficking among youth with IDD, as well as promising practices for prevention education.

Intellectual and Developmental Disabilities (IDD)

Approximately one in six youth[1] aged 3 to 17 years in the United States have an IDD (Zablotsky et al., 2019). IDD is an umbrella term for neurodevelopmental disorders that affect learning, behavior, social, and/or physical development (Centers for Disease Control and Prevention [CDC], 2020). Common IDD diagnoses include autism spectrum disorder (ASD),

[1]Youth is inclusive of individuals age 24 and under. This decision is based on the United Nations definition of youth (United Nations, n.d.), as well as evidence indicating that most individuals in the general population experience their first interpersonal victimization before the age of 25 (see Black et al., 2011).

attention-deficit/hyperactivity disorder (ADHD), and learning disabilities. Intellectual disabilities are a subcategory of IDD and specifically describe challenges with intellectual functioning (i.e., learning, reasoning, and problem solving) and adaptive behavior (i.e., everyday conceptual, social, and practical skills; American Association on Intellectual and Developmental Disabilities, n.d.). While some studies suggest that the prevalence of intellectual disabilities has remained relatively stagnant over time (McKenzie et al., 2016), others have found a 26% increase between 2009 and 2017, and as much as a 122% increase in ASD diagnoses over this same time period (Zablotsky et al., 2019).

Dating Violence, Sexual Violence, and Sex Trafficking Among Youth with IDD

Youth with IDD are at risk of experiencing various forms of interpersonal violence, including dating violence, sexual violence, and sex trafficking (Helton & Cross, 2011; Maïano et al., 2016; Montesanti, 2015). Youth with IDD's risk factors for experiencing interpersonal violence range from structural (e.g., insufficient legal protection, stigmatization of sexual expression) to individual (e.g., limited reasoning skills, learned helplessness; Curtiss & Kammes, 2020). Dating violence refers to physical violence, psychological aggression, or sexual violence from a dating partner; in contrast, sexual violence is defined as sexual activity when consent is neither obtained nor freely given (Centers for Disease Control and Prevention, 2021a, 2021b). Mitra et al. (2013) and Basile et al. (2016) report that adolescents and adults with disabilities are 3.4 times and 2 to 3.3 times more likely than their nondisabled peers to experience dating or sexual violence, respectively. However, disability in these studies was broadly defined to include: (a) physical or learning disabilities, (b) activity limitations due to mental, physical, or emotional problems, or (c) use of special equipment. Moreover, when sexual violence research

focuses specifically on adolescents and adults with IDD, much of the literature has emphasized their roles as sexual offenders or perpetrators (Marotta, 2017; Shenk & Brown, 2007).

Another type of violence that continues to receive considerable attention is sex trafficking. Sex trafficking is defined at the federal and state legislative levels as the receipt of persons (e.g., recruiting, harboring, transporting) via force, coercion, or fraud (e.g., false promises) for the purpose of commercial sexual exploitation (Trafficking Victims Protection Reauthorization Act, 2017). Federal and state legislation also extends special protections to minors in that the means of a sex trafficking situation (i.e., force, coercion, or fraud) does not have to be proven. In some states, such as Ohio, this protection also includes individuals with IDD (End Demand Act, 2014/2022). Youth who engage in survival-based sex (e.g., exchange sex for money or food without a third-party trafficker) are still considered victims of sex trafficking, which has important implications for (a) estimation of the problem, and (b) the development of anti-trafficking efforts. Learning, behavioral, and social challenges associated with having an IDD have been theorized as risk factors for experiencing sex trafficking (Franklin & Smeaton, 2017; Reid, 2016). Despite challenges to determining the true scope of sex trafficking, incidents of sex trafficking involving youth have been identified in all 50 states across the United States (Polaris Project, 2020).

Dating Violence, Sexual Violence and Sex Trafficking Prevention for Youth with IDD

Primary prevention through a multilevel approach is necessary to effectively have a population-level effect on violence (Basile, 2015). Comprehensive violence prevention includes policies and programs that reduce victimization and perpetration across various populations and settings (DeGue et al., 2014). Prevention education delivered to students in secondary schools and universities is an essential element of such a comprehensive, multilevel approach given the

prevalence of interpersonal violence among youth, along with the amount of time youth spend in these settings. Systematic reviews and meta-analyses of dating and sexual violence prevention studies suggest significant positive effects for improving knowledge and attitudes in the general adolescent population, with mixed evidence regarding reductions in victimization (De La Rue et al., 2017; Finnie et al., 2022; Lee & Wong, 2020).

Literature over the past decade has focused on adapting violence intervention services to be inclusive of individuals with disabilities (Lund, 2011; Ruiz-Pérez et al., 2018). However, primary prevention programming to reduce violence, particularly for youth with IDD, is underdeveloped. Notably, there has been a growing emphasis on ensuring that interpersonal violence primary prevention is adapted to meet the needs of different groups of youth. It is critical to tailor prevention efforts to fit the unique needs of youth with IDD, given that the variability in learning styles among these youth complicates the "one size fits all" approach of most violence prevention programs (Fox et al., 2014).

Accessibility of Violence Prevention Education for Youth with IDD

While needs vary among youth with IDD, special education theoretically provides equitable access to services that support youth with IDD in their development and wellbeing. Some approaches, such as the Universal Design for Learning (UDL), recognize the importance of providing multiple options for comprehension and communication to benefit all students (CAST, 2018). Though often associated with accessible technology in education, UDL is also applicable to pedagogy and instructional practices for children with and without disabilities (King-Sears, 2009). The three principles of UDL are (a) representation (i.e., providing options for perception, language, and comprehension), (b) action and expression (i.e., providing options for physical action, expression and communication, and executive functions), and (c)

engagement (i.e., providing options for interest recruitment, effort and persistence, and self-regulation; CAST, 2018). These principles are based on neuroscience research that demonstrates the connection between learning and brain networks, with representation linked to recognition (i.e., the "what" of learning), action and expression linked to strategy (i.e., the "how" of learning), and engagement linked to affect (i.e., the "why" of learning; Barteaux, 2014). To ensure the accessibility of dating violence, sexual violence, and sex trafficking prevention education, it is important to examine how such prevention aligns with UDL principles.

Current Study

This study aimed to: (a) determine what is currently known about prevalence and prevention of dating violence, sexual violence, and sex trafficking among youth with IDD in the United States, and (b) compare extant prevention programming to UDL principles. To date, no systematic review has synthesized the literature regarding dating violence, sexual violence, and sex trafficking prevalence and prevention for youth with IDD. One recent and relevant systematic review conducted by Stobbe et al. (2021) summarized 12 studies that featured prevention and intervention programs targeting sexual abuse among individuals with mild intellectual disabilities. Although sexual abuse was broadly defined to include sexual violence, the reviewed studies were not limited to youth and did not examine dating violence or sex trafficking prevention programs. Therefore, the current study extends this prior work by identifying programs developed or modified to prevent dating violence, sexual violence, and/or sex trafficking among youth with IDD.

The systematic review was guided by the following research questions:

1) What is known about the prevalence of dating violence, sexual violence, and sex trafficking among youth with IDD?

2) What is known about prevention education for dating violence, sexual violence, and sex trafficking among youth with IDD in terms of content, delivery, effectiveness, and alignment with UDL principles?

Methods

Search Strategy

The systematic review was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 (PRISMA) statement (Page et al., 2021), and the study protocol was registered with PROSPERO (#CRD42022312398). See Figure 1.1 for a PRISMA flow diagram depicting the review process. A comprehensive search strategy was developed to identify all relevant peer-reviewed and grey literature published between January 2000 and January 2022 in the following 13 computerized bibliographic databases: PsycINFO, Social Work Abstracts, PubMed, Sociological Abstracts, Social Services Abstracts, ASSIA, ERIC, CINAHL, ProQuest Criminal Justice, SafetyLit, Social Care Online, Scopus, and ProQuest Dissertations & Theses Global. An approximately twenty-year range was chosen to capture the scope of recent research and has been previously used for synthesizing dating violence and sexual violence prevention literature (Graham et al., 2021). In consultation with a reference librarian, subject headings unique for each database were combined with search terms related to (a) violence, (b) IDD, and (c) prevention and prevalence (see Appendix 1A for the search strategy terms). The search yielded 5,020 articles.

Identified articles were collected via Zotero and references were imported into Covidence systematic review software (Veritas Health Innovation, 2022) for deduplication and screening. After removing 1,423 duplicates, 3,597 articles remained for screening (i.e., title and abstract review, full-text review). Articles were eligible for inclusion if they met the following criteria:

(a) peer reviewed or grey literature (e.g., unpublished thesis, conference abstract); (b) available in English; (c) United States-based sample or subsample; and (d) focus on the prevalence or prevention of dating violence, sexual violence, or sex trafficking among youth (age 0 to 24 years) with an IDD. Articles regarding prevalence could include those that (a) described the prevalence of youth with IDD in a sample of victimized youth, (b) described the prevalence of youth who experienced victimization in a sample of youth with an IDD, or (c) compared prevalence of victimization among youth with and without IDD. Articles regarding prevention could include formative or outcome research focused on the development or application of standalone prevention programming. Considering the potential for content overlap between sexual education and prevention curricula, particularly in recognizing characteristics of unhealthy relationships, this systematic review also included sexual health education developed or modified for youth with IDD.

Studies solely focused on participants' opinions or knowledge about general topics in sexual health and violence (rather than empirical testing or development of a program) were excluded. Studies were excluded if disabilities were not disaggregated or solely reported youth with sensory or physical disabilities. Studies with samples older than age 24 were included if the victimization occurred in childhood or adolescence. Additionally, there is an increasing interest in generating knowledge regarding the prevalence and typology of dual sex trafficking victim-offenders (Broad, 2015; Shared Hope International, 2020). Thus, this systematic review included studies consisting of dual victim-offender samples which can inform nuanced approaches to prevention of dating violence, sexual violence, and sex trafficking.

Titles and abstracts were independently screened by three research team members according to the pre-specified eligibility criteria. The principal investigator reviewed the titles

and abstracts of all identified articles, and one of two graduate students also screened each article. The reviewers agreed to advance 517 articles for full-text review. The research team was unable to locate one reference (*n* =1); two team members (the principal investigator and one graduate student) then independently screened the remaining 516 full-text articles. It was determined that 46 articles met the criteria and would be included in the review. Articles were excluded for the following reasons: (a) not having a United States-based sample (*n* = 312); (b) wrong population (e.g., adults, non-IDD disabilities only; *n* = 65); (c) wrong outcomes (i.e., victimization not measured or separated from other forms of abuse; *n* =54); (d) no empirically tested or developed prevention (*n* = 38); and (e) published before 2000 (*n* =1). Throughout the screening process, the research team met to resolve conflicts and reach consensus.

Abstraction

A standard abstraction form was developed to collect information on: (a) study aim; (b) article type (i.e., peer-reviewed or grey literature); (c) location or setting; (d) methodology (e.g., study design, sampling, data collection method, measures, and data analysis); (e) sample or key target (e.g., age and IDD diagnoses); (f) key findings related to prevalence and prevention; and (g) program characteristics and/or recommendations for preventing dating violence, sexual violence, and/or sex trafficking among youth with an IDD. Two research team members (the principal investigator and one graduate student) double-abstracted the included articles and assessed the methodological quality of peer-reviewed studies using several Joanna Briggs Institute (JBI) Critical Appraisal Tools. Studies establishing prevalence were assessed using the JBI Checklist for Prevalence Studies (Munn et al., 2015) which consists of 9 items that assign a score of *yes, no, unclear,* or *not applicable* to indicate quality in obtaining prevalence estimates. Studies focused on prevention were assessed using checklists according to study design. This

included the JBI Checklist for Qualitative Research (Lockwood et al., 2015), the JBI Checklist for Quasi-Experimental Studies (Tufanaru et al., 2020), and the JBI Checklist for Randomized Controlled Trials (Tufanaru et al., 2020). The same two team members used the Authority, Accuracy, Coverage, Objectivity, Date, and Significance Checklist (AACODS, Tyndall, 2010) to assess the quality of the included grey literature. The team members met throughout the abstraction process to identify, discuss, and resolve discrepancies through consensus.

Data Analysis

A narrative synthesis was used for data analysis given the inclusion of peer-reviewed and grey literature, as well as the variability of methods across the included studies. The following four elements of the narrative synthesis process were based on the general framework set forth by Popay et al. (2006): (a) developing a preliminary synthesis of the prevalence and prevention evidence; (b) summarizing theoretical models of prevention strategies; (c) exploring relationships within and between studies, as well as how prevention strategies and findings compare to UDL principles; and (d) assessing the robustness of the synthesis using the aforementioned critical appraisal tools. The preliminary synthesis of evidence included organizing articles into categories of prevalence or prevention, producing textual descriptions of each article, and tabulating article details. Summarizing theoretical models of prevention strategies consisted of determining the underlying theoretical and philosophical approaches used for development and implementation of dating violence, sexual violence, and sex trafficking prevention programming. Exploring relationships within and between studies included identifying any factors that explain differences (e.g., in direction or size of an effect, facilitators or barriers to implementation) across the included studies. Additionally, these factors as well as the theoretical approach applied were examined in the context of UDL principles (i.e., if and how

study authors developed or adapted prevention programming to provide students options for multiple means of representation, action and expression, and engagement) according to the UDL guidelines and checkpoints outlined by CAST (2018). Study characteristics are summarized in Table 1.1. Complete findings for prevalence studies and prevention studies can be found in Appendix 1B and Appendix 1C, respectively.

Results

Prevalence Studies

Study Characteristics

Of the 46 studies included in this review, 40 (87%) focused on prevalence. Of these, 30 (75%) were peer-reviewed manuscripts and ten (25%) were theses or conference abstracts. Seventeen studies (42.5%) based victimization estimates on national or multiregional samples. Most samples were drawn from the general population (k=10, 25%) or college students (k=9, 22.5%). Thirty-six (90%) studies reported victimization estimates for samples of youth while four (10%) studies focused on adult retrospective samples. Thirty studies reported an average age (M=14.76 years, SD=4.83), not including studies with adult samples reporting childhood sexual abuse. The most common diagnosis was ADHD (k=18, 45%) followed by intellectual disability (k=10, 25%). Twenty-six (65%) studies featured majority (at least 50%) White, non-Hispanic samples. Studies were more likely to include female participants (k=36, 90%) than male participants (k=29, 72.5%); transgender and nonbinary or gender non-conforming participants were included in three (7.5%) and two (5%) studies, respectively. Fourteen (35%) of studies used nationally representative samples, and thirty-three (82.5%) studies used a cross-sectional design. The majority of studies (k=31, 77.5%) featured estimates of sexual violence, followed by sex trafficking (k=6, 15%) and dating violence (k=5, 12.5%); only two studies (5%) estimated

prevalence for more than one form of victimization. Though not the focus of this review, six (15%) studies either consisted of samples of sexual offenders or estimated violence perpetration or aggressive behaviors in addition to victimization.

Prevalence of Sexual Violence

Twenty studies included comparison samples of youth without any reported disability, 17 of which conducted bivariate or multivariate analyses to examine differences in prevalence of sexual violence. Mixed findings were found in terms of youth with IDD and their risk of experiencing sexual violence compared to youth without IDD. Specifically, of the seventeen studies that had comparative estimates, eight (47%) studies found that youth with IDD were not more likely to experience sexual violence than their neurotypical peers. In two of these studies (McDonnell et al., 2019; Sullivan & Knutson, 2000), youth with intellectual disabilities were more likely than their neurotypical peers to experience sexual violence, but autistic youth were not. In Turner et al. (2011), youth with and without ADHD experienced the same prevalence of sexual violence (6.7%), and there was a non-significantly lower prevalence among youth with learning disabilities (5.1%) than youth without learning disabilities (6.8%). Non-significantly lower rates of sexual violence among youth with IDD were also found in Carrellas et al. (2021) and Van Horne et al. (2018), whereas non-significantly higher rates of sexual violence among youth with IDD were found in Rothman, Heller et al. (2021) and Walters (2009). Though Perrigo et al. (2018) did not report an estimate, the authors stated that no differences were found between children with and without developmental delays in alleged maltreatment type, including sexual, in reports to child protective services (CPS).

Four studies (Ballan et al., 2014; Dye, 2021; McGrath et al., 2007; Roberts et al., 2015) provided retrospective estimates of sexual violence experienced by adults with IDD. Three of

these studies (Ballan et al., 2014; Dye, 2021; McGrath et al., 2007) featured samples of adults with documented intellectual disabilities or developmental delays, with approximately one-third reporting childhood sexual abuse. Roberts et al. (2015) found that adult women who scored in the highest quintile of autistic traits on a standardized measure (Social Responsiveness Scale) were 1.8 times more likely than adult women in the lowest quintile of autistic traits to have experienced childhood sexual abuse.

Prevalence of Dating Violence

The five studies with dating violence estimates explored the relationship between this type of victimization and ADHD or learning disability; all but one study consisted of samples of college students. Prevalence of physical dating violence among youth with ADHD or learning disability ranged from 4.6% to 30.7%. Findings were mixed with regard to comparison estimates for youth with and without these disabilities. ADHD symptomology was positively associated with general dating violence victimization in Scherer (2016) but not Sacchetti and Lefler (2017). Although Guendelman, Ahmad et al. (2016) found a significant positive association between ADHD and physical dating violence victimization, Wymbs (2017) found a significant positive association between ADHD and psychological dating violence victimization, but not physical dating violence victimization. Of note is Guendelman, Ahmad et al.'s (2016) investigation of the persistence or transience of ADHD diagnosis and its relationship to dating violence. This study found that young women who met ADHD criteria in both Wave 1 and Wave 3 (persistent) were 2.5 times more likely to experience dating violence than young women who met ADHD criteria in only Wave 1 or Wave 3 (transient); this persistent subgroup was 9.5 times more likely than young women who never met ADHD criteria to be exposed to dating violence.

Prevalence of Sex Trafficking

Only six studies conducted univariate or bivariate analyses examining the prevalence of sex trafficking. In two studies with non-probability samples of child welfare-involved youth who had experienced sex trafficking, 13% out of 75 cases (Smith, 2009) and 28% out of 54 cases (Reid, 2018) consisted of youth with an intellectual disability. Two studies with nationally representative samples estimated the prevalence of experiencing sex trafficking among youth with and without intellectual disabilities. Franchino-Olsen, Silverstein et al. (2020) found that youth with low cognitive abilities (scoring at least two standard deviations below the mean on a receptive vocabulary measure) were 4.9 times more likely to experience sex trafficking than their peers with average or high cognitive ability, and Carrellas et al. (2021) found that a one-unit increase in intellectual ability was associated with .92 lower odds of engaging in transactional sex. Uguru (2022) and Escovedo et al. (2020) examined the association between sex trafficking and IDD more broadly. Uguru (2022) found that youth who experienced sex trafficking had poorer executive functioning according to the Rey–Osterrieth Complex Figure (ROCF) test than the standardized population, while Escovedo et al. (2020) found that youth in 9% of 125 cases of human trafficking (88% of which involved sex trafficking) had a developmental delay, and 25% previously received special education services.

Prevention Studies

Prevention Study Characteristics

Six studies in this review featured formative (i.e., program development or implementation) or outcome (i.e., measured change in knowledge, behavior, or attitude) research related to violence prevention. Of these, three (50%) were both formative and outcome studies, two (33.3%) featured only formative-related research, and one (16.7%) featured only outcome-

related research. Three (50%) of the studies were peer-reviewed publications and three (50%) were dissertations. The geographic regions reported by four studies were the Midwest, Northeast, South, and national or multiregional (each *k*=1). Youth participants were primarily sampled from the general population (*k*=4) and had an average age of 17.3 (*SD*=2.1). Four studies (Hentoff, 2015; Pugliese et al., 2020; Rothman, Bair-Merritt et al, 2021; Rothman & Graham Holmes, 2022) described programs developed for youth with autism and two studies (Moyher, 2018; Schmidt, 2019) described programs for youth with IDD broadly. All studies with racial/ethnic data (*k*=5) had majority White, Non-Hispanic samples. Female participants were included in all studies, followed by male participants (*k*=4, 66.7%) and nonbinary or gender non-conforming participants (*k*=2, 33.3%). All studies used convenience sampling and a cross-sectional design. Most studies (*k*=4) focused on sexual health and relationship education, with the remaining two featuring dating violence prevention (Rothman, Bair-Merritt et al., 2021) and sexual harassment prevention in the workplace (Moyher, 2018).

Prevention Program Content and Delivery

Program content in order from most to least common included: (a) relationship and sexual boundaries (*k*=6), (b) reproductive anatomy and body parts (*k*=4), (c) rights in the context of reproductive health and legal consequences of sexual violence or inappropriate sexual behavior (*k*=4), (d) safe sex practices (*k*=3), (e) inappropriate versus appropriate sexual behavior (*k*=3), (f) dating etiquette (*k*=3), (g) sexual orientation (*k*=3), (h) gender identity (*k*=2), (i) consent (*k*=2), and (j) sexual harassment (*k*=2). Some of the research was explicitly theoretically driven, including social thinking theory (Hentoff, 2015), behavior modification and learning theory (Moyher, 2018), and Accessible Sexuality Education Theory (Schmidt, 2019). Additionally, Rothman, Bair-Merritt et al. (2021) modeled curriculum development on the

ADAPT-ITT framework which was originally designed for adapting evidence-based HIV interventions (Wingood and DiClemente, 2008). Two prevention programs featured online components: (a) an interactive computer game (Pugliese et al., 2020) and (b) a synchronous online class (Rothman, Bair-Merritt et al., 2021). The number of program sessions ranged from 4 to 20 sessions, with six being the most common (k=3); sessions ranged from 20 to 120 minutes, with 90 minutes being the most common (k=3). Two programs (Hentoff, 2015, Pugliese et al. 2020) had curricula for parents or legal guardians to reinforce content in the home setting. Schmidt (2019) provided a detailed decision tree to train study staff in the event that program participants made concerning comments regarding suicidal ideation or sexual assault. Facilitation was conducted (or intended to be) by behavior analysts (Moyher, 2018), clinical psychologists (Hentoff, 2015; Pugliese et al., 2020), and occupational therapists (Schmidt, 2019). Co-facilitation was utilized or recommended in three studies. Hentoff (2015) noted that sexual health programming should be conjointly led by a medical professional and a licensed mental health professional, while Rothman, Bair-Merritt et al. (2021) examined a program co-facilitated by an autism service provider and dating abuse prevention educator. Youth participants in Rothman and Graham Holmes (2022) preferred programming be co-taught by one neurotypical and one autistic facilitator.

Prevention Program Formative Findings

Two studies focused on program development and solicited perspectives from service professionals (Hentoff, 2015) and autistic youth (Rothman & Graham Holmes, 2022). In Hentoff (2015), the most common needs that survey participants described as integral to a sexual health and relationships guide were accessibility (e.g., concrete factual information), sex (e.g., sexual expression), and safety (e.g., birth control). The most common psychoeducation group needs

identified by survey participants were social (e.g., cliques), safety (e.g., safe dating practices), sex (e.g., healthy sexual relationships), and emotions (e.g., fear). In Rothman and Graham Holmes (2022), interviewed youth reported the following challenges in maintaining healthy peer relationships: (a) motivation to socialize, (b) anxiety about rejection or manipulation, (c) emotional intimacy, (d) mutual investment, and (e) setting boundaries. These findings informed the following program modules: (a) differentiating between healthy and unhealthy relationships, (b) relationship challenges, (c) relationship anxiety and neurohealth, (d) starting relationships, and (e) ending relationships.

Three studies focused on program feasibility, acceptability, and usability of two sexual health education programs (Pugliese et al., 2020; Schmidt, 2019) and a dating violence prevention program (Rothman, Bair-Merritt et al., 2021). Feasibility was assessed in terms of retention and fidelity. For the single group interventions, the retention rates were 90% (Rothman, Bair-Merritt et al., 2021) and 77.8% (Schmidt, 2019); each study met the retention rate threshold of 80% and 70%, respectively. For the controlled intervention, retention rates were 89% for the facilitator-led group, 69% for the self-guided group, and 85% for the attentional control; the self-guided group did not meet the 80% benchmark (Pugliese et al., 2020). The authors posited that parents in the self-guided group struggled to teach their children independently without expert guidance, thus leading to lower completion rates.

Regarding program fidelity, Rothman, Bair-Merritt et al. (2021) noted that there were no deviations in content delivery, but Schmidt (2019) reported that study staff spent more time than anticipated on learning activities and less time than anticipated on explicit instruction. Across all studies, programs were deemed to be acceptable overall according to quantitative and qualitative feedback. The notable exceptions were two youth participants in Rothman, Bair-Merritt et al.

(2021) who felt the content was too basic, and parents of two participants in Schmidt (2019) withdrew their youth from the study because they felt their children had a higher level of functioning than the rest of the group. Schmidt (2019) conducted a usefulness, usability, and desirability (UUD) assessment to assess the impact the activities had on one's learning, the ease of interaction with the activities, and the interest experienced with the activities. Visuals used for the puberty module needed improvement in all three areas (e.g., participants described visuals as too child-like), and usability of the contraceptive infographic (e.g., too much information) was a concern. Though Pugliese et al. (2020) did not conduct a formal UUD assessment, parents found the program website easy to navigate and youth found the online game instructions easy to understand. Similarly, participants in Rothman, Bair-Merritt et al. (2021) enjoyed the features of the videoconferencing software used to deliver the program.

Prevention Program Outcome Findings

Four studies measured outcomes related to changes in knowledge, attitudes, beliefs, and/or behaviors. In one study (Schmidt, 2019), there was no significant increase in sexual knowledge as indicated by participants' high baseline scores on the Socio-Sexual Knowledge and Attitudes Test-Revised (SSKAAT-R). Similarly, though Rothman, Bair-Merritt et al. (2021) observed some substantial improvements in dating violence attitudes according to participants' scores on the Dating Abuse Perpetration Acts Scale, all participants at baseline rated examples of unhealthy dating behaviors as either somewhat or very abusive, on average. Two studies (Moyher, 2018; Pugliese et al., 2020) utilized an experimental design. In Moyher (2018), young women with IDD were randomized into one of three tiers that introduced a sexual harassment prevention program in a staggered fashion (i.e., multiple probe). All participants were able to identify appropriate responses to fictional sexual harassment scenarios during the intervention

and maintenance phases, and at post-intervention most (n=8, 88.9%) were able to express how to refuse a sexual harassment lure without a scenario. Parents and youth in Pugliese et al. (2020) were randomized to three groups (i.e., a facilitator-led parent-mediated sexuality education program, a self-guided version of the aforementioned program, and a drug and alcohol education program that served as an attentional control). There were no significant differences between the facilitator-led and self-guided groups in terms of changes in parent and youth sexuality knowledge.

Prevention Programs and UDL Principles

Program activities corresponding to UDL principles and guidelines are presented in Table 1.2. Across the articles, three studies (50%) addressed all three guidelines for representation: (a) perception (i.e., interacting with content through sight, hearing, movement, or touch), (b) language and symbols (i.e., communicating that creates a shared understanding), and (c) comprehension (i.e., constructing meaning and generating new understandings). In a PowerPoint training, Moyher (2018) accounted for perception by using large font text and a human voice recording that read the text aloud. For language and symbols, a contraceptive infographic developed by Schmidt (2019) contained both text and images that presented information according to decreasing levels of effectiveness. Moyher (2018) used simplified language in sexual harassment scenarios corresponding to a Flesch-Kincaid Grade Level of 2.2. To support comprehension, Hentoff (2015) incorporated assignments which required participants to recall personal experiences with a program topic, thereby activating background knowledge.

Though action and expression were the least likely to be addressed, four studies (66.7%) addressed executive functions (i.e., acting on plans to improve learning). Examples include a posted schedule or agenda (Hentoff, 2015; Schmidt, 2019), visual cue checklist of a four-chain

response to sexual harassment (Moyher, 2018), quizzes to monitor progress (Pugliese et al., 2020), and worksheets for resource management (e.g., who to talk to for help; Schmidt, 2019). For the engagement principle, four articles addressed recruiting interest (i.e., sparking excitement for learning and optimizing relevancy), five articles addressed sustaining effort and persistence (i.e., facing challenges with determination), and one article addressed self-regulation (i.e., harnessing emotions and motivation). Rothman and Graham Holmes (2022) and Schmidt (2019) maintained authenticity and recruitment interest by including program facilitators with autism and actors with disabilities in video curricula, respectively. To encourage participants to sustain effort, Moyher (2018) enacted a token system for reinforcement in which students could exchange university bucks for auctioned items. Hentoff (2015) promoted self-regulation by teaching coping skills for anxiety surrounding flirting and dating.

Risk of Bias

Published Literature on Prevalence. Of the 30 studies assessed using the JBI Checklist for Prevalence Studies, most (k=19, 63.3%) studies utilized an appropriate sample frame for the target population. These studies inferred results to the target population and did not generalize beyond the sampled group (e.g., college students are not comparable to all young adults). Although most (k=15, 50%) studies were nationally representative or provided a representative sample of the population, such as random probabilistic sampling or census (e.g., total state population), some studies used purposive samples (k=9, 30%) or convenience samples (k=7, 23.3%) and were not representative of the population. Additionally, only seven studies explicitly addressed coverage bias in that response rate or sample coverage was contextualized to rates in the general population or geographic area. Six studies either reported high response rates or adequately addressed low response rates through weighting or justified rates with cited literature.

The sample size was adequate in most (*k*=19, 63.3%) studies. A sample size of at least 196 is recommended based on the formula by Naing et al. (2006) and when using an expected prevalence of 15%; two systematic reviews found sexual violence prevalence rates of 15% (Jones et al., 2012) and 15.2% (Tomsa et al., 2021) among samples of individuals with IDD. Four studies were rated *unclear* due to having adequate sample sizes but not completing a power analysis, or for only completing a power analysis for estimates not relevant to this review. All but two studies sufficiently described participants and settings in detail, including geographic region and relevant demographic information (e.g., race/ethnicity, gender). Most studies (*k*=23, 76.7%) used comprehensive methods for measuring disability and victimization. The studies that did not (*k*=7, 23.3%) used both self-reported data and non-validated measures. Twenty studies used standard, reliable methods for measuring disability and victimization (nine studies described reliable methods for either disability or victimization). Most studies (*k*=17, 56.7%) included the numerator and denominator in prevalence estimates and provided confidence intervals when reporting risks in the form of odds ratios.

Published Literature on Prevention. Three JBI Critical Appraisal Tools were used to assess the quality of three published violence prevention studies. The JBI Critical Appraisal Checklist for Qualitative Research was used for one study, and all but one domain was fully addressed; the authors did not state a philosophical perspective that the review team could assess as congruent with the research methodology. The JBI Critical Appraisal Checklist for Quasi-Experimental Studies was used for one study; four of the nine domains were sufficiently addressed: (a) clear cause/effect association, (b) similar comparison group, (c) consistent measurement, and (d) reliable measurement. Finally, the JBI Critical Appraisal Checklist for Randomized Controlled Trials was used for one study and seven of the thirteen domains were

fully met; specifically, blindness of treatment assignment and usage of intent-to-treat analysis were not explicitly explained.

Grey Literature. The AACODS was used to assess the quality of ten grey literature prevalence studies. All studies met four of the six domains, specifically authority (e.g., research conducted under expert supervision), objectivity (e.g., work seems balanced in presentation), date (e.g., clearly stated date or can be closely ascertained), and significance (e.g., research is meaningful and unique contribution). Accuracy (e.g., stated methodology and explicit data collection) was only partially met in six studies, and coverage (e.g., limits clearly stated) was not fully addressed in two studies. The AACODS was also applied to three grey literature violence prevention studies; all domains were adequately addressed.

Discussion

The purpose of this study was to synthesize the research literature focused on the prevalence and prevention of dating violence, sexual violence, and sex trafficking among youth with IDD. Critical findings of this review are summarized in Table 1.3. The long-term negative social and health effects of violence beget the need to examine the vulnerability of marginalized groups of youth. Prior systematic reviews established that youth with IDD are at risk of experiencing sexual victimization (Jones et al., 2012; Fang et al., 2022). In addition to this form of violence, the current study contributes to the literature by summarizing the prevalence and prevention of dating violence and sex trafficking among youth with IDD. Overall, this review found 46 articles that either estimate prevalence or describe prevention of sexual violence, dating violence, and sex trafficking. Of these, 40 focused on examining prevalence of the aforementioned forms of violence, and six focused on examining the process or impact of sexual

health and relationship education or violence prevention programming. Key findings as well as implications for research, practice, and policy are presented below (see also Table 1.4).

Prevalence Findings

Youth with IDD experience victimization at rates similar to or higher than youth without IDD. Samples mainly consisted of college students, child welfare system-involved youth, and youth in residential or inpatient settings. Several studies utilized comprehensive measures of victimization, particularly in distinguishing subtypes of sexual violence (e.g., nonconsensual touch, attempted or completed rape) and dating violence (e.g., psychological abuse, physical abuse). Although youth with IDD are vulnerable to experiencing all forms of violence, youth with intellectual disabilities and youth with ADHD were overwhelmingly represented in sex trafficking and dating violence estimates, respectively. However, it cannot be determined whether youth with these specific diagnoses are more at risk of experiencing these victimizations than youth with other diagnoses due to a lack of sufficient comparisons within the IDD population. Additionally, few studies featured multiple reporters; the exceptional cases often did not produce separate estimates. For instance, Ford et al. (2000) combined reports of sexual violence on the parent and child versions of the Traumatic Events Screening Inventory. However, one study (Hartmann et al., 2019) compared reports of sexual violence from young autistic adults and their parents, finding that parents underestimated their children's experiences. This finding has important implications for researchers who rely on proxy-reported data for determining victimization prevalence and risk.

Few studies provided prevalence estimates of sex trafficking. This is unsurprising given the lack of a centralized system for tracking and analyzing trafficking data. Additionally, counts of suspected cases of sex trafficking involving minors (based on arrest records or hotline reports)

are often presented as accurate estimates without substantiation (Weiner & Hala, 2008). In a scoping review of methods used to estimate the prevalence of sex trafficking among minors in the United States, Franchino-Olsen, Chesworth et al. (2020) found that sex trafficking prevalence was often calculated based on specific subpopulations (e.g., homeless youth, adjudicated males) or geographic areas, thereby limiting generalizability of study findings. Reviewed studies also featured different measures of sex trafficking (e.g., youth engaged in survival-based sex, youth at-risk of sex trafficking), and sampling methods were contingent on subpopulation characteristics.

Of the 38 prevalence or risk studies that included the racial/ethnic composition of samples, the majority of studies featured predominately White, non-Hispanic samples; however, the same number of studies had samples in which at least 30% of the sample was non-White. Additionally, in several comparison studies, youth with IDD were more likely than neurotypical youth to identify as queer, transgender, and non-binary. Despite this diversity, estimates of victimization were not primarily focused on disparities across racially marginalized, sexual minority, or gender-expansive groups. Thus, more research is needed to understand the complexity of IDD intersected with other marginalized identities and risk of victimization.

Prevention Findings

Most (*k*=5) prevention studies examined at least one implementation-related component, including social validity, usability, and feasibility. Overall, participants considered programming to be interesting, relevant, and necessary. Due to the small number of violence prevention programs developed for youth with IDD, one avenue is exploring how sexual health education has been adapted for this population. In a systematic review, Schaafsma et al. (2015) identified effective methods for teaching sexual health education to individuals with intellectual

disabilities, including corrective feedback, guided practice, role-play, modelling, rehearsal, reinforcement, imagery, and discussion. Although self-protection skills were heavily emphasized, participants struggled to generalize these skills to real-life scenarios. Despite its relevance, comprehensive sex education is often excluded from sexual violence prevention due to funding restrictions and political reasons (see footnote in Moras, 2015, p. 37). Nevertheless, guidance for how schools can implement sex education for students with disabilities continues to grow (Sinclair et al., 2017).

This systematic review aimed to determine how strategies used to deliver violence prevention education align with UDL principles and guidelines. To the principal investigator's knowledge, no study has applied UDL principles and guidelines to violence prevention education for youth with IDD.[2] Across the six studies, the most guidelines addressed were for the representation principle followed by engagement. Future violence prevention programs should explicitly include activities that allow for multiple opportunities of action and expression. Additionally, programs were theoretically informed and incorporated activities that accommodated multiple learning styles and abilities. Notably, all prevention studies with race/ethnicity data (k=5) had majority White, non-Hispanic samples. A relevant theoretical framework for examining access to violence prevention curricula is DisCrit (Annamma et al., 2013). As a branch of Critical Race Theory, it posits that both Whiteness and Ability are valued properties which impact who can obtain services. For example, youth of color who have experienced sex trafficking and are involved in the juvenile justice system may be perceived as criminals rather than victims. These youth may also exhibit challenges in executive functioning

[2]Although not a sexual violence prevention program, Grove et al. (2018) applied UDL principles to modifying components of a sexual education program to be made accessible to adolescents with intellectual disabilities.

and decision-making skills that are not adequately addressed in service provision. When developing and implementing violence prevention programming, it is important for all youth-facing environments to make a wide range of learning supports available, particularly for youth in highly restrictive settings (e.g., self-contained classrooms, justice facilities).

Limitations and Strengths

Despite the several studies featured in this review, research prior to 2000 was not included and potentially obscures the full extent of violence prevalence and prevention. Additionally, the heterogeneity in study design also made it difficult to compile and compute estimates for a meta-analysis, which would provide a numerical (rather than descriptive) summary of victimization experienced by youth with IDD. While violence against youth with IDD remains a global issue, findings are only generalizable to the United States, and several of the studies with nationally representative samples used the same dataset (e.g., American College Health Association - National Health College Assessment [ACHA-NHCA]). It is possible that not all relevant articles were identified, and study methods and findings may have been misinterpreted during the abstraction process.

Notwithstanding these limitations, the research team anticipated that much of the literature would be unpublished and thus included dissertations, theses, and conference abstracts in the eligibility criteria. Additionally, following data synthesis, articles were revisited on a recurring basis to ensure all aspects of research (e.g., limitations acknowledged by the authors) were thoroughly considered. Another strength of this study was the use of a detailed abstraction form which provided information about violence prevalence and prevention for specific IDD diagnoses.

Implications for Practice, Policy, and Research

Prevalence

Approximately three-quarters of the prevalence studies utilized validated instruments or standardized diagnostic criteria to measure sexual violence, sex trafficking, dating violence, and disabilities. Despite the wide array of comprehensive disability and victimization measures used in prevalence research, low-resource community settings may encounter challenges including tool access and time or personnel administration burdens (Beidas et al., 2015; Hatfield & Ogles, 2007). The availability of free and brief disability and victimization instruments with established psychometric properties enables service agencies to utilize them in intake screening and risk assessments. Another concern is the underreporting of victimization, particularly if law enforcement or healthcare systems solely rely on proxy reports from clinicians or caregivers of youth with IDD. The use of multiple informants or data sources is important when documenting victimization, in addition to providing communication and advocacy support when youth with IDD are self-reporting. Moreover, future research that incorporates a longitudinal design can address temporality concerns of disability onset and victimization when estimating prevalence.

Prevention

There was a glaring lack of studies focused on violence prevention, but the number of studies focused on sexual health education suggests that states' legislation would benefit from clarifying accessibility of such programming (or healthy relationships curricula) to students with IDD in schools. It is pertinent to understand how federal protections afforded to youth with IDD in schools extend to accessibility of sexual health education and violence prevention. Moreover, several studies investigated both victimization and perpetration of violence which suggests the importance of a comprehensive approach to prevention, particularly for youth with IDD in

restrictive settings. Institutional policies for juvenile offenders with IDD should account for victimization history when developing treatment plans. Additionally, the need for more effectiveness studies focused on long-term health outcomes of violence prevention programming is especially important for youth with IDD who have been historically excluded from this research (Ozaki & Brandon, 2020). Subsequent investigations of violence prevention education for youth with IDD should feature diverse samples to ensure programming is acceptable and feasible across various racial/ethnic, sexual, and gender identities. Prevention study samples predominantly featured youth with autism, and future research should explore program outcomes among youth with other IDD diagnoses.

Conclusion

This systematic review summarizes two decades of literature on dating and sexual victimization prevalence and risk among youth with IDD. It is also one of the first to provide a summary of sex trafficking estimates for this population. There was great variation in how disability and victimization were measured; regardless, youth with IDD had high rates of sexual violence, dating violence, and sex trafficking. Though none of the studies in this systematic review focused on sex trafficking prevention, findings from sexual health education and dating or sexual violence prevention studies can inform promising practices.

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PAPER TWO: SEX TRAFFICKING PREVENTION FOR YOUTH WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES: SERVICE PROVIDER PERSPECTIVES

Introduction

Across the United States, there is an increasing effort to prevent and respond to cases of sex trafficking, particularly among youth. Sex trafficking is defined as the use of force, fraud, or coercion to compel someone into performing commercial sex acts, or in which the person performing commercial sex acts has not attained 18 years of age (U.S. Department of State, 2023). Accurate prevalence estimates are difficult to capture as the hidden nature of this crime and logistical challenges with data collection complicate this task. Nevertheless, incidents of sex trafficking have been recorded in all 50 states. Previous research has identified several vulnerability factors, including runaway behavior, housing instability, a history of abuse, systems involvement (e.g., child welfare, juvenile justice), and substance abuse (Naramore et al., 2017; O'Brien et al., 2017; Panlilio et al., 2019; Roe-Sepowitz, 2012). Heightened risk is also associated with adversity experienced by youth with socially marginalized identities. For example, youth who identify as Black, Indigenous, and People of Color (BIPOC) or lesbian, gay, bisexual, transgender, gender-diverse and queer-identifying (LGBTQ+) are more likely to experience sex trafficking (Boukli & Renz, 2019; Gerassi et al., 2021; Pierce, 2012; Xian et al., 2017). An additional marginalized identity that is garnering growing attention in the area of sex trafficking is disability, including intellectual and developmental disabilities (IDD; Franklin & Smeaton, 2017; Sherry, 2019)

Sex trafficking is associated with numerous negative outcomes for youth, including mental health issues (e.g., depression, anxiety, posttraumatic stress disorder), substance abuse (e.g., alcohol addiction, drug misuse), physical health problems (e.g., asthma, bodily injury), and sexual health problems (e.g., sexually transmitted infections, pregnancy complications; Le et al., 2018; Levine, 2017; Muftić & Finn, 2013). Given the impact of sex trafficking on youths' life trajectories, funders, practitioners, and researchers alike have stressed the need for efforts to prevent youth from experiencing sex trafficking (Gallegos, 2023; Roby & Vincent, 2017; Wachter et al., 2016). Assuming a "one size fits all" approach is misguided and may not be developmentally appropriate, as demonstrated in research examining how existing sexual health education omits the specific needs of LGBTQ+ youth (Greene et al., 2015; Pingel et al., 2013). Understanding how prevention strategies can be modified to protect vulnerable youth is imperative. Thus, an exploration of how sex trafficking prevention can be tailored and cognizant of vulnerable youth, particularly youth with IDD, is warranted. This study expands our understanding of developing and implementing sex trafficking prevention for youth with IDD.

Youth with IDD and Vulnerability to Sex Trafficking

To date, only a few empirical studies have estimated the prevalence or risk of experiencing sex trafficking among youth with IDD. One of the earliest research studies was conducted by Reid (2018), who reviewed 54 sex trafficking case records from social service agencies and found that 15, or 28%, of instances involved youth victims with IDD. More recently, investigations utilizing nationally representative samples illustrate the association between IDD and experiences of sex trafficking reported by youth. Analyzing data from the second National Survey of Child and Adolescent Well-Being (NSCAW II), Carrellas et al. (2021) found a significant correlation between intellectual ability and sex trafficking

victimization in a subsample of transition-age youth with child welfare involvement. Specifically, youth who scored higher on the Kaufmann Brief Intelligence Test (K-BIT) had lower odds of exchanging sex for money. Franchino-Olsen et al. (2020) and Franchino-Olsen et al. (2022) analyzed data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) to examine sex trafficking prevalence and risk among female and male youth with IDD, respectively. Both studies found that youth with low cognitive ability (scoring at least one standard deviation below the mean on a receptive vocabulary measure) were 4.86 times (girls) and 2.80 times (boys) more likely than their peers with average or high cognitive ability to exchange sex for money or drugs. Additionally, the prevalence of sex trafficking among girls with IDD was 9.70% (Franchino-Olsen et al., 2020), while the prevalence among boys with IDD was 9.57% (Franchino-Olsen et al., 2022).

In addition to research focused on the risk of experiencing sex trafficking, it is equally important to determine what resources youth with IDD need upon disclosing. The support needs of sex trafficking survivors are necessary to consider for enhancing youth functioning and wellbeing and play a critical role in prevention. Common needs include safety planning, consistent housing, sexual health care, educational support, and mental health services (Duncan & DeHart, 2019; Gibbs et al., 2015; Landers et al., 2017). The support needs of youth sex trafficking survivors can overlap with general support needs of youth with IDD. For instance, the Supports Intensity Scale – Children's Version (SIC-C), adapted from the first standardized measure to assess the support needs of adults with IDD (Thompson et al., 2004), identifies seven support need domains for youth with IDD ages 5 to 16 years: (a) home life, (b) community and neighborhood, (c) school participation, (d) school learning, (e) health and safety, (f) social, and (g) advocacy activities (Shogren et al, 2015). Given the negative outcomes associated with sex

trafficking, and the increased vulnerability of youth with IDD, comprehensive sex trafficking prevention should consider the needs of youth with IDD.

Youth Sex Trafficking Prevention

Comprehensive youth sex trafficking prevention consists of targeted responses across four socio-ecological levels: societal (i.e., macro-level factors that encourage or inhibit the acceptability of sex trafficking), community (i.e., social and institutional settings that affect vulnerability to sex trafficking), interpersonal (i.e., peer and familial relationships that impact risk of sex trafficking exposure), and individual (i.e., personal history and characteristics that affect likelihood of experiencing sex trafficking; Finigan-Carr et al., 2019). On the societal level, this can include harsher criminal penalties for buying or contributing to sex trafficking and technology-based deterrence methods to counter online sexual exploitation (Raino, 2017; Van der Watt, 2023). Required youth sex trafficking awareness trainings for child welfare workers can support community-level prevention (Harmon-Darrow et al., 2023). Prevention at the interpersonal level may include promoting positive peer behavior in schools, such as bystander education interventions (Preble et al., 2019). Prevention at the individual level may include cognitive and trauma-focused treatment approaches for youth both with and without a history of sex trafficking victimization (Palines et al., 2020; Salami et al., 2018). It can also include programming that educates youth about sex trafficking and that is delivered in community-based or school settings.

Community-based Prevention Programming

Optimal community-based environments for implementing sex trafficking prevention programming are youth-facing community settings, such as social service agencies, healthcare clinics, child welfare agencies, and juvenile justice facilities. Such prevention is likely to include

youth with a history of sex trafficking victimization or youth who are at an elevated risk of experiencing sex trafficking. For example, federal funding through the Family First Prevention Services Act (FFPSA) encourages child welfare agencies to provide high-quality residential care and support services for youth sex trafficking victims or at-risk youth (Murphy, 2021). However, to date, few evaluation studies have been completed regarding the implementation of community-based sex trafficking prevention efforts, and such programming has not been evaluated for effectiveness with youth with IDD.

A longstanding example of an evidence-informed intervention is My Life My Choice (MLMC), a survivor-led, group mentorship program for youth to reduce the risk of exploitation (Rothman et al., 2021). MLMC is a 10-session class for cisgender or gender fluid females between the ages of 12 and 18, and groups are facilitated in middle and high schools, congregate care settings, juvenile justice facilities, child welfare offices, and other community-based settings (My Life My Choice, 2020). Two trained facilitators are required, and best practice recommends that one facilitator have survivor experience and the other facilitator have advanced clinical training (My Life My Choice, 2020). MLMC participants learn about sex trafficking risk factors and build self-esteem and empowerment skills; activities include group discussions and journaling that personalizes the class material and incorporates direct feedback from facilitators (Rothman et al., 2021). Referrals for this program come from several sources, including child welfare agencies and juvenile justice facilities (Rothman et al. 2020). MLMC has yet to be evaluated for youth with IDD. Importantly, substantial evidence suggests youth with IDD are overrepresented in these respective settings, thus begetting a need to determine how community-based prevention can be tailored toward youth with IDD (Helton et al., 2019; Mendoza et al., 2020; Slayter, 2016; Quinn et al., 2005).

School-based Prevention Programming

In the report *Human Trafficking in America's Schools*, the U.S. Department of Education recommended that schools (a) develop comprehensive prevention programs that target students, school staff, and parents to increase awareness of the existence and dynamics of sex trafficking; and (b) develop protocols to address trafficking crimes and provide services to victims (U.S. Department of Education, 2015). Several states have passed legislation to require sex trafficking prevention education for middle and high school students (Rizo et al., 2021; Salas & Didier, 2020). However, the scarcity of evidence-based programs for delivering sex trafficking prevention education in schools increases the difficulty of this task (Rizo et al., 2019). Additionally, little is known about how such legislation affects children in restrictive special education settings and their access to the general health curriculum.

Despite the lack of outcome research on school-based sex trafficking curricula, previous research has identified important content and delivery strategies. Lesak et al. (2021) interviewed various experts (e.g., school personnel, anti-human trafficking advocates, and legal professionals) who recommended the inclusion of the following topics: (a) healthy and unhealthy relationships, (b) general information about sex trafficking (c) factors related to sex trafficking (e.g., minoritized identity, child maltreatment), and (d) identification of safe people and resources. Experts also suggested a team facilitation approach, developmentally appropriate education in elementary and middle schools, flexible formats (e.g., in-person classroom setting, school assemblies, online), and various activities (e.g., real-life scenarios, group discussion, videos; Lesak et al., 2021). Schools serve as a critical touchpoint for vulnerable youth. Harper's (2013) formative research on school-based sex trafficking prevention for at-risk African American girls highlighted the need for culturally responsive and context-specific delivery,

including using positive regard (e.g., active listening), ethnic-specific strategies (e.g., talking to girls and caregivers about prejudice and discrimination), and flexible language/communication styles (e.g., code switching). This led to the development and implementation of an afterschool sex trafficking prevention program for at-risk African-American girls (Kruger et al., 2013). While not focused on program outcomes, Kruger et al.'s (2013) qualitative research found that the incorporation of trust exercises increased students' participation in sex trafficking prevention education and strengthened trust between youth and facilitators.

Although these strategies are discussed in the context of general education, Jackson (2022) argued for the involvement of special education staff in preventing or responding to sex trafficking. For instance, special education staff can intervene in incidents of ableist bullying which may lead to school dropout and youth with IDD becoming more vulnerable to sex trafficking (Jackson, 2022). Though in reference to school-based child maltreatment prevention, Ortega et al.'s (2023) recommendations for adapting education for youth with IDD are relevant to sex trafficking prevention development. Specifically, decisions around developmentally appropriate program content, delivery frequency, teaching methods, and parent involvement influence the accessibility of sex trafficking prevention for youth with IDD. Examples of best practices identified by Ortega et al. (2023) include avoidance of abstract concepts, re-iteration and review of concepts throughout programming, and incorporation of hands-on activities, role play, and videos. It is unknown the extent to which these recommendations can also be applied to sex trafficking prevention for youth with IDD. Although these findings might also apply to sex trafficking prevention, research is needed to corroborate the potential differential effects of programming for youth with IDD.

Disclosures and Referrals in Sex Trafficking Prevention Programming

In addition to content and delivery strategies, a necessary feature of any violence prevention programming is coordinating referral practices in the event of disclosures (Miller, 2019). In a systematic review of school-based teen dating violence prevention laws, Cascardi et al. (2018) found that only one of 19 state statutes or regulations required all school personnel to report offenses, and none of the laws specified investigation, response, and/or documentation procedures. Chesworth et al. (2020) recommended five steps for educators and other school personnel to follow when reporting sex trafficking: (a) take action if there is a disclosure or suspicion (e.g., offer reassurance to the student, gather key information), (b) inform all necessary parties, (c) collaboratively decide who to involve in reporting, (d) submit a report to child protective services (CPS), and (e) follow-up after the report. Beyond schools, properly handling disclosures and referral processes in the healthcare setting is important for securing services for youth victims of sex trafficking. Using a two-round Delphi method, Miller et al. (2016) convened a panel of interdisciplinary subject-matter experts and sex trafficking survivors who identified the following aspects as relevant to healthcare referral practices: (a) safety post-discharge, (b) privacy, (c) information to include in referral, (d) resources, (e) consent to refer, (f) patient empowerment, and (g) compliance issues. For youth with IDD, the involvement of multiple parties during the disclosure and referral processes may be complicated depending on their support needs. Therefore, the development and implementation of sex trafficking prevention for youth with IDD should incorporate guidelines for investigation and reporting.

Accessibility of Violence Prevention Programming

Central to this study is determining what factors can promote the accessibility of sex trafficking prevention education to youth with IDD. One influential conceptualization of

accessibility is Levesque et al.'s (2013) access to healthcare framework, which has been used in research to understand how women with disabilities perceive challenges to accessing intimate partner violence services (Robinson et al., 2021). Access is defined as the opportunity to obtain appropriate services when there is a perceived need and features five dimensions of accessibility of services with five corresponding abilities of service seekers (Levesque et al., 2013). The accessibility dimensions consist of (a) approachability (i.e., transparency and outreach that allows people to identify services), (b) acceptability (i.e., cultural values and social norms influencing people's acceptance of services), (c) availability and accommodation (i.e., services can be reached physically and timely), (d) affordability (i.e., direct and indirect costs of services), and (e) appropriateness (i.e., fit between services and people's needs and technical and interpersonal quality of services). The five complementary abilities are (a) ability to perceive (i.e., need based on health literacy, knowledge, and beliefs), (b) ability to seek (i.e., personal autonomy and capacity to choose services), (c) ability to reach (i.e., personal mobility and flexibility to reach service providers), (d) ability to pay (i.e., capacity to generate economic resources to pay for services), and (e) ability to engage (i.e., motivation to participate and involvement in decision-making). A nuanced conceptualization of accessibility can provide the foundation for eliminating barriers to inclusive sex trafficking prevention education for youth with IDD.

Current Study

Within the past decade, an increasing amount of conceptual and formative research has focused on sex trafficking prevention that is tailored for youth with varying identities, including at-risk youth of color and LGBTQ+ youth (Pierce, 2012; Harper, 2013; Xian et al., 2017). Though it is apparent that youth with IDD are also at risk of experiencing sex trafficking, little

research has been devoted to considering their support needs in the development and implementation of prevention education. The current exploratory, qualitative study seeks to examine IDD and sex trafficking prevention experts' perspectives regarding challenges and recommendations for educating youth with IDD about sex trafficking. Perspectives from sex trafficking prevention experts can help direct efforts to protect youth with IDD from this form of victimization. Moreover, youth with IDD have diverse systems of care depending on their support needs, and their interactions with service providers may give these professionals valuable insight into inclusive sex trafficking prevention program content and delivery. To contribute to the sex trafficking prevention research literature, the current study was guided by the following research questions:

1) What are potential challenges to educating youth with IDD about sex trafficking prevention and responding to potential disclosures?
2) What are key recommendations for sex trafficking prevention targeting youth with IDD (e.g., content, delivery, timing, setting), as well as approaches and processes for responding to disclosures made in the context of prevention education?

Methods

This study was guided by a qualitative descriptive approach in which findings were generated closer to the data or used data-near interpretations (Sandelowski, 2000; 2010). This approach can help provide straightforward summaries of people's perceptions and experiences in areas where little research has been conducted (Doyle et al., 2020; Sandelowski, 2010). Furthermore, a congruent philosophical perspective views reality as existing dynamically within various contexts and perceived differently depending on the individual or population (Doyle et al., 2020; Lincoln et al., 2017). In the context of the current study, a qualitative descriptive

approach is appropriate for (a) examining the "who, what, and where" of sex trafficking prevention in terms of providers, content, and setting, and (b) understanding how perceptions of disability service providers and sex trafficking prevention experts converge and diverge. The study was conducted in consultation with a community advisory group consisting of service providers and content experts with knowledge of or practice experience in either working with youth with IDD or sex trafficking prevention and response. The study methods were reviewed and approved by the Office of Human Research Ethics at the University of North Carolina at Chapel Hill (#22-0685)

Participants

Participants were identified using expert sampling, a type of purposive sampling in which key informants with expertise or knowledge about a topic are sought for their valuable insights (Patton, 2018). Key informants were derived from two broad field areas: (a) professionals providing services to individuals with IDD, and (b) professionals involved in sex trafficking prevention. The identification process was twofold. First, the principal investigator conducted a web search and compiled a list of organizations in a southeastern state that (a) directly provide mental health or social services for youth with IDD (e.g., university-affiliated clinics, disability advocacy groups, and local service agencies serving individuals with IDD and their families); (b) connect disability services, prevention, or special education professionals (e.g., professional membership organizations); or (c) develop, implement, or provide training on sex trafficking prevention education. Second, the principal investigator consulted with a community advisory group to identify key informants who met eligibility criteria; the list was further expanded to regional and national organizations.

The final list consisted of 59 organizations or service providers who were called and/or emailed with a flyer about the study for recruitment. When recruiting from organizations, clinical directors, program managers, or administrative staff were contacted; if ineligible, recruited persons were asked to share study information with colleagues directly or via a listserv. Interested participants contacted the principal investigator via email or phone to learn more about the study, determine eligibility, and schedule their participation. To be eligible, participants had to (a) be 18 years of age or older, and (b) have at least three years of experience in either providing mental health, educational, or social services to youth with IDD, or developing, implementing, or training on sex trafficking prevention education. Participants were asked to indicate their availability via a scheduling software to select a time to participate in a virtual focus group or interview.

Twenty-two service providers participated in the study (n = 11 sex trafficking prevention experts, n = 11 disability service providers). Of these, nine (40.9%) participated in an individual interview, 13 (59.1%) participated in a focus group, and 21 (95%) completed a demographic and work history survey. All survey respondents identified as female and ranged in age from 28 to 61 years old (M = 39.5, SD = 11.1). The majority of respondents identified as White/Caucasian (n = 15, 71.4%), followed by Black/African-American (n = 4, 19%), Asian (n = 2, 9.5%), and Latinx/Hispanic (n = 2, 9.5%). Respondents represented an array of professional backgrounds, including social work (n = 10, 47.6%), education (n = 4, 19%), and public health (n = 3, 14.3%). Organizational roles included anti-human trafficking or sexuality specialists (n = 6, 28.6%), clinic or program directors (n = 5, 23.8%), other leadership positions (n = 4, 19%), %), behavioral health therapists/consultants (n = 2, 9.5%), researcher (n = 1, 4.8%), special education teacher (n = 1, 4.8%), behavior analyst (n = 1, 4.8%), and peer support specialist (n = 1, 4.8%).

Several respondents (*n* = 8, 38.1%) reported having been in their current organizations for one year or less.

Although interview and focus group sessions were scheduled according to the field area in which participants were initially identified, some survey respondents had prior experience in the other respective field area. Nineteen respondents had a range of 0.5 years to 25 years of experience working with youth with IDD (*M* = 9.4, *SD* = 6.4), and 13 respondents had a range of 2 to 10 years of experience developing, implementing, or providing training in sex trafficking prevention (*M* = 5.5, *SD* = 2.9). When asked about their level of knowledge regarding youth sex trafficking dynamics and warning signs, most respondents reported that they were very knowledgeable (*n* = 10, 47.6%), followed by somewhat knowledgeable (*n* = 9, 42.9%), somewhat unknowledgeable (*n* = 1, 4.8%) and very unknowledgeable (*n* = 1, 4.8%). When asked about their level of knowledge regarding youth with IDD and associated risks of experiencing sex trafficking, most respondents reported that they were somewhat knowledgeable (*n* = 11, 52.4%), followed by very knowledgeable (*n* = 7, 33.3%), and somewhat unknowledgeable (*n* = 3, 14.3%).

Data Collection

All interviews (*n* = 11) or focus group sessions (*n* = 5) were conducted by the principal investigator and ranged from 20 to 92 minutes (*M* = 56.1, *SD* = 20.5). The number of participants in focus group sessions ranged from 2 to 4 (*M* = 2.6, *SD* = 0.9). All sessions took place using Zoom videoconferencing software. At the beginning of each session, the principal investigator reviewed the study objectives, answered any questions, obtained verbal consent from participants, and asked for permission to audio record. Interviews and focus groups were conducted using a semi-structured interview guide comprised of open-ended questions informed

by the violence prevention education literature and revised based on feedback from the community advisory group. The interview guide included one section focused on sex trafficking prevention education (i.e., content and implementation), and a second section on disclosures and referral processes (see Appendix 2A). Questions pertaining to sex trafficking prevention education included relevant topics, relevant existing resources, parent and youth acceptability of content, delivery recommendations (e.g., format, setting, facilitator characteristics), and potential funding streams. Participants were also asked about ideal disclosure and referral processes and challenges (e.g., what challenges exist for a systems-level response to youth with IDD's disclosure of sex trafficking?). Following the interviews or focus groups, participants were emailed a link to a demographic and work history questionnaire and offered a $30 electronic Amazon gift card. The principal investigator completed field notes during and after sessions to document instances of nonverbal behavior and personal reactions to the data collected (Padgett, 2016). Audio recordings were transcribed using Rev software with the permission of the participants.

Data Analysis

Interview and focus group data were analyzed using thematic analysis (Braun & Clarke, 2006), which is a common strategy used in qualitative descriptive studies (Kim et al., 2017). Thematic analysis is appropriate when viewing qualitative data through a factist perspective—that is, the beliefs and behaviors shared by participants are assumed to be "truthful indexes of reality" (Sandelowski, 2010, p. 80). Themes were identified through a mix of inductive and deductive approaches at the semantic level (i.e., explicit or surface meanings) with data analysis following a six-phase process: (1) familiarization with the data, (2) generation and application of

initial codes, (3) search for themes, (4) review of themes, (5) definition of themes, and (6) production of a report (Braun & Clarke, 2006).

Familiarization with the data included the principal investigator reading through the entire data set and sessions notes prior to coding and documenting preliminary patterns in memos. Transcripts from the audio-recorded interviews and focus groups were uploaded into the coding software ATLAS.ti 23.2.3 for analysis. For code generation and application, the principal investigator initially summarized data segments for the entire data set and developed a codebook with definitions. Data were analyzed in the form of "meaning units" (i.e., words and sentences that share similar meanings) and labeled with codes deductively via a priori codes and inductively through two iterative cycles of coding (Graneheim & Lundman, 2004; Miles et al., 2014). This was completed using First Cycle coding grammatical methods (e.g., subcoding) and elemental methods (e.g., descriptive coding; Saldaña, 2013). A priori codes were informed by Levesque et al.'s (2013) access to healthcare framework according to the five service accessibility domains and five individual/population ability domains.

Four out of twelve transcripts (25%) were randomly selected to be double coded by the principal investigator and a graduate student to compare and agree on code definitions and textual applications. Pre-specified segments of data (i.e., paragraphs of participants' responses) were coded. Following an intercoder consistency approach, coders met after each transcript to discuss overlapping and divergent codes (MacPhail et al., 2016; Thomas & Harden, 2008). The principal investigator recoded the remaining eight transcripts, and the aforementioned graduate student reviewed and documented disagreements via memos. The principal investigator then searched for themes by using a Second Cycle focused coding method in which data segments

were clustered into salient categories and themes (Saldaña, 2013). This involved exploring similarities and differences between codes and grouping them into hierarchical structures.

In reviewing the themes, the principal investigator used the Code-Document Analysis function in ATLAS.ti to produce a cross-tabulation and compare coding distributions across extracted data. Themes were defined and refined by organizing data extracts into a coherent account of sub-themes with accompanying narratives (Braun & Clark, 2006). In the findings reported below, data extracts which best illustrate these sub-themes are included. To increase study rigor, an audit trail documented the coding process and decisions (Bass, 2018). This included memos to document reactions to the data and summarize major takeaways for comparative analysis across transcripts. Additionally, the analysis employed multiple coders and used negative case analysis was used to identify accounts that diverge from overarching themes (Bazeley, 2009).

Findings

Three major themes emerged from the data: (a) acceptability of sex trafficking prevention education, (b) programming considerations, and (c) systems involvement in the disclosure and referral processes. Each theme is further expanded by subthemes and example quotes from participants. Table 2.1 highlights participant recommendations related to each theme.

Acceptability of Sex Trafficking Prevention Education

Participants shared several challenges and recommendations for improving the accessibility of sex trafficking prevention education for youth with IDD. When contextualizing service providers' perspectives according to Levesque's access to healthcare framework, the most prominent findings were for the acceptability domain, specifically (a) acceptability from caregivers or parents, and (b) acceptability from culture or society.

Acceptability from Caregivers or Parents

Challenge: Discomfort with Discussing Sex and Sex Trafficking. A common issue identified by participants was the reluctance of caregivers to engage in discussions about sex—including sex trafficking—with youth with IDD. This discomfort was associated with problematic ideas about what is appropriate to teach youth with IDD and the infantilization of adolescents and young adults with IDD by their parents or caregivers. Interestingly, in contrast, one participant said "the idea of sex trafficking probably would promote it in parents" in that caregivers are inclined to support educational efforts if it reduces vulnerability. Participants also shared that many caregivers have misperceptions about sex trafficking stereotypes and understandings of who is at risk, thereby leading them to believe that youth with IDD are not at risk of experiencing sex trafficking. Participants highlighted that caregivers' discomfort with their youth with IDD learning about sex trafficking may prevent these youth from receiving accurate information and needed resources. One participant, a disability service provider, noted the impact this challenge has on individuals with IDD: "I think that caregivers and the discomfort of caregivers and structures is the biggest issue there. And that people [youth with IDD] then don't know who they can talk to…what they can access…what the safe flow of information is."

Recommendation: Encouraging and Validating Involvement in Programming. The importance of involving family in the development or implementation of sex trafficking prevention education was discussed in nearly all of the interviews and focus groups. Participants provided various suggestions for involving family, particularly caregivers and parents. For example, it was highlighted that prevention efforts could include a separate educational component for caregivers. As expressed by a participant, "Caregivers should be involved in the

process…if we're just training the students on this information, and then they're going back home to their parents who don't have the resources or the understanding of it, it kind of defeats the purpose." Participants also noted that providing this education in groups could create opportunities for caregivers to connect with other caregivers and combat feelings of isolation when learning about a sensitive topic. Further, messaging regarding the purpose of sex trafficking prevention education should meet caregivers' expectations to improve buy-in. Participants suggested that recruitment efforts for sex trafficking prevention programs for youth with IDD should connect the relevance of such programs with caregivers' desires to protect their children.

Acceptability from Culture or Society

Challenge: Misconceptions about IDD and Sex Trafficking. A predominant challenge voiced by participants was the misconception that individuals with IDD are asexual and not interested in forming romantic relationships. As described by a disability service provider with over ten years of experience: "They're actually seen as asexual, they don't have sexual needs or they can't learn this information. That's how they're so easily sexually trafficked or abused because they're not seen in that manner and that needs to shift." Additionally, myths about what typical sex trafficking victims look like and the way this crime is sensationalized in the media were described as challenges. One sex trafficking prevention expert shared her struggle with maintaining youth engagement without including salacious details about her story as a survivor:

> When I go into a classroom and I'm talking to kids about this and I let it slip that I'm a survivor, all of a sudden the whole tone of the room changes and they want to hear all the secret stories that I have about my own stuff. And I have to take that moment to be like, "It's really not that exciting. My body has been raped over 1,000, maybe even 2,000 times. I lost count. There's nothing exciting about that. It's gross. I don't want to tell you about those stories. I want to tell you about the stuff that you need to know about"…And making sure that I cut that excitement out of the equation seems to be key to getting kids

to go, “Okay, well I'm going to make this about me then. I'm going to make this about my sister, I'm going to make this about whatever.”

Challenge: Values that Discourage Open Discussion about Sex and Sex Trafficking. In the majority of interviews and focus groups, participants mentioned that cultural-level stigma pertaining to sex contributes to abstinence-only health education as well as a hesitancy to provide education on sex trafficking given that such education necessitates discussion about sex. Entangled in this challenge are regional variations, particularly in the southern United States and among religious communities with conservative values. One disability service provider explained, “I think that there is a big cultural lens that this has to be looked through, especially here in the South with a lot of people being brought up in strong Christian homes.” Here resistance to sex trafficking prevention stems from caregivers and community members dismissing conversations around any engagement in sexual activity, whether it is consensual or coerced. A sex trafficking prevention expert also shared how religious organizations that are vocally anti-sex work can hinder progress in establishing a comprehensive response to sex trafficking. Conflicting narratives (i.e., anti-sex trafficking agencies recognize sex work as legitimate work while religious organizations do not distinguish sex work from sex trafficking) can generate confusion for the general public when trying to raise awareness.

Recommendation: Implementing Sex Trafficking-Related Programming Early and for Everyone. Participants suggested that some topics, such as healthy relationships and establishing boundaries, should be introduced during or prior to elementary school. Presenting these topics developmentally appropriately can improve comprehension of more complex topics (e.g., grooming) presented during adolescence. One participant remarked, “I think it should be everywhere, and I think it should start in preschool.” To help normalize conversations about sex and sex trafficking, an additional recommendation was to ensure the universality of sex

trafficking prevention education. Some service providers recommended that youth with IDD be educated alongside their peers without disabilities to promote empathy and positive socialization. Universal implementation provides the additional benefit of youth developing reciprocal sympathy and can serve as a step toward positive bystander behavior (i.e., youth intervening when they suspect that their peer is experiencing sex trafficking).

Programming Considerations

Service providers offered several recommendations for the development and implementation of sex trafficking prevention education for youth with IDD. Suggestions included a range of topics and activities, considerations for formatting, settings, and facilitation, and ideal approaches and accommodations.

Content and Delivery

Topics and Activities. Participants shared that sex trafficking prevention programming for youth with IDD should include the following information: (a) basic sex education (e.g., body parts, puberty, relationships and intimacy), (b) basic sex trafficking (e.g., exploitation, grooming, myths, red flags or warning signs), (c) boundaries (e.g., defining and asserting), (d) consent (e.g., giving and receiving, everyday examples), (e) safety (e.g., developing a safety plan, forming online relationships), and (f) context/social rules (e.g., appropriate touch in different settings). According to disability service providers, teaching boundaries, consent, and context/social rules is critical given that youth with IDD are often taught to be compliant, especially when interacting with authority figures. One participant said, “I think a lot of our kids don't necessarily understand consent and what that looks like, and specifically consent with adults. Just because someone is in a position of power doesn't mean that they have to consent to something.” To maximize youth’s ability to engage, suggested activities included scenarios depicting examples of sex trafficking,

role plays, and art or other expressive activities. Recommended activities in the home setting included practicing consent at the dinner table (e.g., choosing what to eat) and sharing "did you know" facts about sex trafficking with friends and family.

Format and Setting. In general, disability service providers were open to programming taking place virtually or in-person. However, sex trafficking prevention experts were adamant about programming taking place in-person, with one participant stating, "I believe in the impact of in-person learning, especially for sensitive topics like trafficking. I think it's really hard to do that behind a computer." Reasons for favoring in-person delivery included the ability for facilitators to clearly read youths' body language and reactions to content, and challenges related to maintaining youths' attention when presenting content using a virtual platform. If programming were to occur virtually, service providers either preferred asynchronous or a hybrid of asynchronous and synchronous learning in which youth with IDD can complete modules at their own pace and have a follow-up discussion with an educator about the program material. In line with Levesque's access to health framework, participants also explained that offering a virtual option can expand programming to youth with IDD who experience mobility or transportation challenges, thus improving availability and accommodation.

Most participants supported a group learning environment while being mindful of challenges associated with large group sizes (e.g., conversation monopolization). Individual learning was recommended for youth with IDD with a history of sex trafficking or other sexual trauma. One service provider, speaking from personal experience, noted a downside to individual learning being that youth with IDD may misinterpret concepts (e.g., boundaries) when conveying what they learn to caregivers, putting the facilitator at risk. When asked if programming should be provided in schools or community settings, participants suggested a combination of both. The

primary reasons for school implementation were existing infrastructure as a common youth-facing setting and the availability of schools in low-resource areas with scarce community organizations. Reasons for implementation in community settings included the ability to (a) reach older youth with IDD, (b) offer programming to youth with IDD in youth detention centers, and (c) deliver more in-depth, comprehensive programming than may be allowed in school settings.

Facilitator Characteristics and Facilitation. Professional backgrounds mentioned by participants as ideal for program facilitators included special education and social work. However, participants considered specific professional education to be less important than facilitator characteristics (i.e., qualities and skills), and facilitation (i.e., training, collaboration, and flexibility). Ideal facilitator qualities named were compassion, comfort with the topic, and relatability to youth. Although some service providers acknowledged that lived experience with either disability or surviving sex trafficking can enhance facilitation, one participant shared that this induces an unfair burden for survivors while another participant shared that restricting the facilitator role to survivors would limit a program's reach. Preferred skills included classroom management, rapport building, and the ability to emotionally support youth in cases of disclosure.

It was noted that facilitators of sex trafficking programming for youth with IDD could benefit from trauma-informed training, consultation with content experts, and co-facilitation. Benefits of co-facilitation include the combination of professional expertise (e.g., social work, health education) and skill sets (e.g., one facilitator is adept at handling student emotions while the other facilitator can manage student behaviors). In alignment with the appropriateness domain in Levesque's access to health care framework, one participant shared how flexibility

with sex trafficking prevention curricula improved her ability to make the content more relatable to her audience:

> We had this huge curriculum that had been built for us and it was a beautiful machine. And I walked into a school on a reservation and I start spitting out all of this information I have about trafficking. And they're like, "What are you talking about? That's our normal lives." …And I was like, "Okay." And I went to the bathroom and I cried, and I came back out and I sat down and I was like, "Clearly, I'm not the one here to teach today, you are. I came here with an idea and that idea was wrong, and there's no room for me to teach you anything if I don't know about your life." And so, we sat and we spent that whole first day that I was supposed to be covering internet safety, on them telling me about how trafficking looks on their home space. And the next day I came back and I said, "Okay, based on what you gave me yesterday, I went home and I redid some things and this is what I have about internet safety. Can we talk about how this is relatable to you? How it's relevant. Do you feel like any of this information is true for you?"

Approaches and Accommodations

Several participants described the importance of using a person-centered approach that accounts for different learning styles. Such an approach offers facilitators an opportunity to determine if youth with IDD are struggling with processing information and to modify activities accordingly. This recommendation enhances youth with IDD's ability to perceive by ensuring that adaptation is based on cognitive ability and prior knowledge/beliefs about topics. Participants also suggested that programming be delivered through an empowerment-based approach, especially for youth with IDD who have been denied autonomy. An example provided to illustrate empowerment in action was to allow program recipients to make structural decisions (e.g., when to take breaks, what to do during breaks). Recommended accommodations included using plain language to define concepts, generalizing and reinforcing concepts across settings (e.g., home, school), scaffolding (e.g., breaking down content or learning activities into smaller tasks), letting youth with IDD be accompanied by a support person, and using visuals (e.g., pictures, anatomically accurate dolls). A few participants emphasized the importance of selecting realistic images rather than cartoons, particularly if individualizing program components (e.g.,

having a picture of one's primary care physician as a safe person). Moreover, some participants spoke about using dichotomous thinking to clarify concepts. A disability service provider with experience supporting autistic adolescents shared:

> I think having really black and white rules is really helpful for them. I work with, especially with teenagers, to recognize the gray in life and that not everything is a binary choice, but when it comes to sex education and their bodies and that kind of thing, I think that you can actually use that black and white thinking to their advantage to keep them safe and to help them understand this is okay and this is not okay. This is okay and this is not okay.

Systems Involvement in Disclosure and Referral Processes

Participants described several factors that influence how disclosures and referrals are handled in the context of sex trafficking prevention for youth with IDD. Notably, service providers mentioned the value of professional training, cross-sectoral collaboration, and accessible communication and predictability when identifying and responding to reports.

Professional Training

Law enforcement officers and medical providers were often mentioned as prominent sources for disclosures and referrals made when implementing sex trafficking prevention education. When asked about how various professional sectors can be involved in sex trafficking prevention education for youth with IDD, participants in all interviews and focus group sessions advocated for more professionals to receive training in either sex trafficking or the IDD population. As described by one participant, "Law enforcement needs to be going through specialized training just as much as the nurse and the advocate, and everybody needs to go through training, not just for trafficking but disabilities being combined." This included recognizing signs of sex trafficking and behaviors that youth with IDD may present when in distress. Several participants described staff turnover as a commonly encountered challenge and recommended that training be ongoing and included as part of the onboarding process. When

large scale training is difficult, a few participants suggested that having at least one person designated to respond to sex trafficking disclosures or referrals would still be beneficial.

Cross-sectoral Collaboration

Once a disclosure is made after providing sex trafficking prevention education, referral challenges cited by participants were lack of systems coordination, misunderstanding of responsibility, and issues with information sharing. Organizational siloes and agencies' ignorance of available community resources were common problems faced by service providers. Additionally, confusion regarding which governmental agencies are required to intervene in situations involving older youth with IDD (e.g., adult protective services [APS] or CPS) resulted in "passing the buck." How organizations share information when making referrals was also a concern, more so around maintaining confidentiality and healthcare authorization of a Release of Information (ROI). To combat this, participants strongly pushed for careful development of referral protocols and policies in which all relevant sectors are treated as sites for potential disclosures. This was described by a sex trafficking prevention expert as the No Wrong Door approach:

> One way, and this kind of goes into what I was speaking of, is the No Wrong Door approach…The thought is that any survivor can knock on any door and say, "I need help." And they're going to get help immediately, like that one asked-for questions. So this looks like wrapping the community in support. That's where we get the law enforcement, hospitals, churches, schools, community centers, advocates, really anybody that could potentially come in contact with youth was getting this trafficking training and was being part of the conversations. So it's like, "Okay, I think this might be trafficking. Let me call this one phone number. We're going to get you somebody right now."

One service provider stated that child advocacy centers (CAC) would be a preferable choice as a referral source compared to law enforcement, due to forensic interviewers affiliated with CACs possessing trauma-informed training and training in neurotypical and neurodivergent child development. As such, CACs may play a critical role when developing referral protocols.

Accessible Communication and Predictability

Youth with IDD may experience communication challenges when making a disclosure of sex trafficking; potential inaccuracies in their accounts can result in youth with IDD being discredited. Participants gave several reasons for communication issues when reporting, including problems with information processing, co-occurring mental health disorders, and untreated trauma that becomes triggered and leads youth to report past abuse or exploitation as contemporary. Being accused of making false allegations can contribute to youth with IDD not feeling safe to disclose and mistrusting systems, especially law enforcement. One participant suggested that organizations giving or receiving referrals expand communication options to be text-based and not require a call back or scheduling from youth with IDD. Another recommendation was to have an entrusted advocate or support person present during disclosures and referrals.

Furthermore, several service providers noted the importance of ensuring youth with IDD have predictability in how disclosures are handled. This includes clearly explaining to whom it is safe to disclose, what is meant by "mandated reporters," and what happens after making a disclosure. Part of establishing a structure may involve developing a script to be used when reporting. One disability service provider shared her experience with developing a crisis script for an autistic youth who engaged in violent and runaway behavior:

> We ended up writing together—the family, myself and the crisis counselor—wrote several different scripts for different situations. So what do you say to bystanders who might want to help in a situation when we're having an epic violent meltdown in a store or a restaurant or a gas station or wherever or the side of the road?…And then what do you say to the police that come and how do you keep everybody safe, yourself, the teenager, all the bystanders? And so it was a checklist and the script for these different things, and then we practiced them and the parents would use them...And basically it was to deescalate situations that were escalating quickly and to keep everybody safe. We also had scripts for calling 911 in various cases…we were also introducing the sheriff's office

and the police department to the kiddo and making sure that his picture was disseminated there and that he was known to the local law enforcement as a person with a disability.

Discussion

The purpose of this study was to explore challenges and recommendations for educating youth with IDD about sex trafficking. Disability service providers and sex trafficking prevention experts described numerous challenges to the accessibility of sex trafficking prevention programming for youth with IDD. Obtaining support from caregivers was seen as markedly difficult, especially in light of cultural considerations that discourage transparent, in-depth discussions around sex or sex trafficking. However, participants also shared several recommendations for overcoming accessibility barriers, including accommodations to content delivery and opportunities for professional sectors to adequately respond to disclosures. Below the most prominent challenges and recommendations are summarized alongside implications from these findings.

Improving Acceptability of Sex Trafficking Prevention

Both disability service providers and sex trafficking prevention experts acknowledged the importance of developing or modifying existing sex trafficking prevention curricula to accommodate the support needs of youth with IDD. Overall, participants believed that interpersonal and societal factors strongly influence the acceptability of sex trafficking prevention education for youth with IDD. A commonly identified challenge was caregivers' discomfort with programming content. However, one disability service provider noted that parents may be more accepting of sex trafficking prevention than sexual health education because of the protection from danger aspect. This runs counter to complaints of infantilizing youth with IDD in the guise of protection and suggests that encouraging family involvement includes considering how the purpose and benefits of this programming are communicated as

safety promotion. Previous research has explored an evidence-based intervention for homeless youth and their parent or guardian that builds on family strengths, with the aim of adapting it for youth at-risk of sex trafficking (Bounds et al., 2020). As with the findings of the current study, the authors found that youth's advocacy and support needs conflicted with caregivers' expectations. Additionally, prior studies have emphasized the critical role of parents in sexual abuse prevention and sex education for youth with IDD (Pugliese et al., 2020; Skarbek et al., 2009). Thus, acceptability of sex trafficking prevention programming for youth with IDD involves balance and validation of the perspectives of both youth with IDD and their caregivers.

Moreover, participants recommended that early introduction of sex trafficking prevention concepts such as consent can help reduce cultural stigma. The push for early intervention in reducing risk of sexual abuse among youth with IDD demonstrates an opportunity to expand learning about healthy sexuality in early childhood as a protective factor against sex trafficking (Martinello, 2014). Lastly, participants noted that socially conservative religious communities can impede organizational collaboration and raising awareness of sex trafficking. At the same time, faith-based communities have remained an integral part of the anti-sex trafficking movement, and Knight et al.'s (2022) interviews with faith leaders in the movement uncovered shared values between social work and Christian faith-based organizations. One value was the dignity and worth of all survivors and respecting their agency and choices; when developing relationships with religious communities, sex trafficking prevention experts can highlight the importance of autonomy for youth with IDD and its connection to dignity and worth.

Sex Trafficking Prevention Content and Implementation

When asked about sex trafficking prevention content and delivery, participants indicated that basic sex education should be paired with basic sex trafficking topics. Several topics (e.g.,

healthy and unhealthy relationships) identified were congruent with findings from Lesak et al. (2021). Consent and boundaries were particularly emphasized as necessary to generalize to various settings. For youth with IDD, asserting autonomy is a skill that challenges compliance which service providers noted as a paradigm shift. As such, sex trafficking prevention education may lead to overall gains in independence and self-advocacy. In terms of ideal formats, group learning was preferred except in cases when youth with IDD are known survivors of sex trafficking or other sexual trauma. One participant acknowledged that individual learning can lead to confusion if youth with IDD alert their caregiver of what they are learning in a way that misconstrues course concepts. This further begets the need for family involvement so that content and skills are reinforced appropriately. As with what experts conveyed in Lesak et al. (2021), co-facilitation was a preferred approach. One mixed finding pertained to the requirement that facilitators have lived experience with IDD or, more so, sex trafficking. Although facilitators who are survivors are part of the model of MLMC, this program was developed as secondary prevention (i.e., youth identified as at a high risk or prior experience with sex trafficking) and draws on survivorship as a means for rapport building (My Life My Choice, 2020). It is possible that lived experience becomes less crucial if sex trafficking prevention for youth with IDD is delivered as a primary prevention strategy (i.e., prior to experiencing sex trafficking). Nevertheless, facilitators' lived experience is one of many characteristics to consider for implementation of sex trafficking prevention education.

Additionally, participants tended to favor in-person learning though they recognized that some youth with IDD thrive from asynchronous virtual learning. One quasi-experimental study found that an educational website about sex trafficking increased youth participants' knowledge and moderately improved attitudes (Murphy et al., 2016). Though this was designed for the

general adolescent population, future research can examine the effects of modifying sex trafficking prevention websites to be accessible for youth with IDD. While several sex trafficking prevention experts mentioned student engagement issues when implementing programming online, adaptations using best practices can make virtual learning a potential venue for programming. Franchino-Olsen et al. (2021) identified the following relevant best practices when synthesizing the online learning and violence education literatures: (a) use flexible assessment tools (e.g., participation in group discussion, completing a graphic organizer), (b) incorporate interactive activities (e.g., physical movement, online games), and (c) adopt a fluid teaching practice (e.g., lecture, anonymous polling).

Disclosures and Referrals in the Context of Sex Trafficking Prevention

There was consensus among participants regarding the essential role of professional training in coordinating a systems-level response to sex trafficking, which has been reported in the literature as an existing deficit (Preble et al., 2020). With the increase in sex trafficking awareness training provided to child welfare workers (Harmon-Darrow et al., 2023), medical providers (Lutz, 2018), and law enforcement (Renzetti et al., 2017), there is an additional need for said training to adequately address the vulnerability of youth with IDD. Notably, confusion about agency responsibility (e.g., APS, CPS) when handling disclosures from older youth with IDD can negatively impact referral processes. Although most service providers spoke generally about the importance of developing referral protocols, only one participant specified CACs as the ideal setting to receive referrals after the initial disclosure. In some states, cross-sectoral collaboration is unavoidable when handling disclosures due to policies requiring reports to CPS in the context of school-based sex trafficking prevention (Chesworth et al., 2020). Whether sex trafficking prevention education for youth with IDD is provided in schools or community

settings, it is paramount that reporting protocols are developed and refined according to state statutes and the survivors' support needs. Lastly, two crucial components of a coordinated systems response to sex trafficking of youth with IDD is accessible communication and predictability. An underlying factor in these components is obtaining and maintaining trust; distrust between youth survivors of sex trafficking and systems such as law enforcement has been identified as a disclosure barrier (Lavoie et al., 2019). For youth with IDD, this entails validation upon disclosure and affirmation of verbal or behavioral challenges as reactions to potential trauma.

Limitations and Strengths

As with most qualitative research, the use of non-probability sampling to garner participant perspectives precludes the ability to generalize findings to all sex trafficking prevention experts and disability service providers. Moreover, the sampling frame excluded professionals from other relevant fields such as healthcare and education. However, this study is one of the first to intentionally recruit disability service providers and acknowledge their contribution to sex trafficking prevention. Many service providers also had competence or previous professional experience in both fields, though over one-third were employed by their current organization for less than a year. Given the flexible nature of thematic analysis, the use of alternative coding methods (e.g., affective methods such as values coding that assesses attitudes and beliefs) could generate alternative themes. In this regard, a strength of the study was the selection of coding methods and integration of an accessibility theoretical framework that could aid in providing a descriptive account of challenges and recommendations to developing sex trafficking prevention programming for youth with IDD. Additional efforts to increase rigor

included double-coding, iteratively searching for and reviewing themes, and documenting coding decisions.

Implications for Practice, Policy, and Research

Stakeholders (e.g., youth, parents, researchers, providers) can form partnerships with schools and community organizations to develop and/or adapt sex trafficking prevention programming for youth with IDD. Findings from this study suggest that practitioners should diligently consider what accommodations are needed and available for youth receiving sex trafficking prevention programming. In practice, this can include offering multiple formats such in-person and online learning or programming that youth and caregivers can complete together. Moreover, practice-related research should examine the role of other professionals who interface with youth with IDD (e.g., medical practitioners, teachers) in prevention implementation. This includes training that confronts biases towards disabilities and addresses misconceptions about sex trafficking, thereby enhancing screening practices and preparedness to respond to disclosures. Organizational policies can require such training, as well as clarify their role in providing prevention education or responding to disclosures of sex trafficking. Additionally, governmental policy should clarify how sexual violence or sex trafficking prevention funds can be utilized, with particular attention to eligible agencies and how at-risk populations are defined. Finally, while service providers' perspectives should continue to be sought after, future research must incorporate the voices of parents and youth with IDD, ideally via a critical qualitative approach which interrogates power struggle concerns raised by participants in this study. Evaluation research is also needed that focuses on testing accessibility, feasibility, and efficacy of sex trafficking prevention for youth with IDD.

Conclusion

This study is one of the first to determine how sex trafficking prevention programming can be sufficiently adapted for youth with IDD. Service providers acknowledged the value of adapting sex trafficking prevention programming to meet the needs of youth with IDD despite anticipated barriers. Family involvement and normalization of pertinent concepts (e.g., consent, boundaries) across the lifespan can weaken competing narratives of infantilization and compliance of youth with IDD. Additionally, sex trafficking prevention content and delivery strategies already identified in the literature appear to be relevant and modifiable for youth with different learning styles and support needs. Professional training, cross-sectoral collaboration, and a structured disclosure process can inform protocol development and produce efficient responses to reports of sex trafficking. Service providers' recommendations in this study can influence guidelines for sex trafficking prevention that it is developed and implemented in a manner that balances safety and empowerment of youth with IDD.

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PAPER THREE: USING SOCIAL NETWORK ANALYSIS TO EXPLORE ORGANIZATIONAL COLLABORATION AND COORDINATION AMONG SIX SERVICE SECTORS

Introduction

More than two decades since the passing of the Trafficking Victims Protection Act (2000), a community-wide coordinated response to sex trafficking remains a priority in social work policy, research, and practice. Sex trafficking is defined as the receipt of persons (e.g., recruiting, harboring, transporting) via force, coercion, or fraud (e.g., false promises) for the purpose of commercial sexual exploitation (Trafficking Victims Protection Reauthorization Act, 2017). For youth victims of sex trafficking under 18 years of age, proof of force, coercion, or fraud is not required. Despite challenges to estimating the true prevalence of sex trafficking, cases of sex trafficking have been identified across the United States (Polaris Project, 2020). Sex trafficking is associated with numerous negative outcomes, including depression and anxiety, bodily injury, and sexually transmitted infections (Le et al., 2018; Levine, 2017; Muftić & Finn, 2013).

Research has highlighted disparities regarding who is most affected by sex trafficking with vulnerability to sex trafficking being associated with several marginalized identities. For example, research suggests that LGBTQ+ and racial/ethnic minority groups are more likely to experience sex trafficking compared to those without these identities (Gerassi et al., 2021; Harper, 2013). Recently, there has been growing attention to the increased risk of sex trafficking experienced by individuals with physical and intellectual or developmental disabilities (IDD; Franchino-Olsen et al., 2020; Reid, 2018). In addition to being at greater risk of experiencing sex

trafficking, such groups may also be less likely to receive culturally responsive and inclusive prevention and response services (Kruger et al., 2013; Marburger & Pickover, 2020; Walker & Ieva, 2022). This is further complicated by the fact that preventing and responding to sex trafficking—particularly among youth with IDD—necessitates a collaborative approach involving multiple different organizational sectors, including anti-violence agencies, disability-serving organizations, healthcare organizations, legal and law enforcement agencies, mental health organizations, and organizations with specialized populations or services (e.g., housing instable, food insecure).

The current study explores collaboration among organizations that would be required to work together to best prevent and respond to sex trafficking among youth with IDD. In particular, this study focuses on aspects of collaboration and coordination—i.e., cross-sector referrals, information and resource sharing, training and educational opportunities, and trust—among organizations identified as key stakeholders. Thus, this study addresses Todres's (2010) call to consider the role of stakeholder collaboration and coordination in efforts to address sex trafficking.

Sex Trafficking Among Youth with IDD

Youth with IDD are at an increased risk of experiencing sex trafficking. One study utilizing data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) concluded that boys with IDD were 2.80 times more likely to report exchanging sex for money or drugs than boys without IDD, while another study analyzing Add Health data found that girls with IDD were 4.86 times more likely to trade sex than girls without IDD (Franchino-Olsen et al., 2020; Franchino-Olsen et al., 2022). Additionally, Carrellas et al. (2021) found that, among youth with prior child welfare involvement, youth who scored lower on the Kaufmann Brief

Intelligence Test (K-BIT) had higher odds of exchanging sex for money. Though there is a dearth of clinical research pertaining to the service needs of sex trafficking victims with IDD, youth with IDD who are victims of sexual abuse or sexual assault experience trauma and negative mental health (e.g., depression, anxiety) similarly to youth victims without IDD (Reid et al., 2018; Soylu et al., 2013). However, youth with IDD may present with different trauma symptoms than youth without IDD, notably self-injurious behavior, agitation and aggression, and noncompliance in activities (Mevissen & de Jongh, 2010; Reid et al., 2018). Given these nuances, it is important to consider the types of organizations that might be involved in preventing, identifying, or responding to sex trafficking among youth with IDD. For instance, indicators of sex trafficking may appear during routine medical evaluations which merits the inclusion of healthcare organizations in a coordinated response (Nazer, 2017; Scott, 2020). Additionally, in order to access a myriad of specialized services (e.g., housing), youth with IDD who are victims of sex trafficking may require advocates who understand support needs related to both sexual victimization and disability, thus warranting the involvement of violence prevention and response and disability-serving organizations.

Organizational Collaboration

Gulati et al. (2012) classify organizational coordination as an underlying facet of organizational collaboration, defining it as an alignment of organizations' actions to accomplish the same goals. Coordination can ensure a fair division of labor and help manage uncertainties that arise from an external environment, with a recent example being the COVID-19 pandemic (Grizzle et al., 2020; Gulati et al., 2012; Puranam & Raveendran, 2013). In the context of a coordinated response to sex trafficking, a core feature is the involvement of multiple organizations within and across service sectors (Jones, 2023; Nixon-Cream, 2019). Specific

coordination activities among these sectors include cross-sector referrals, sharing information and resources, and training or education opportunities (Todres, 2010).

Cross-sector Referrals

Cross-sector referrals are critical to sex trafficking prevention and response. In terms of prevention, youth receiving education on sex trafficking may disclose experiences of exploitation during or after learning about relevant terminology and resources (Chesworth et al., 2020). This might require referrals between schools, CPS, and law enforcement agencies. In terms of response, individuals seeking services related to sex trafficking may experience multiple needs. For example, immediate needs might include access to emergency medical care and crisis shelters, whereas ongoing and long-term needs might include transitional housing and life skills training (Macy & Johns, 2011). Addressing these multiple needs would require coordination and referrals across multiple sectors, including medical healthcare, mental healthcare, and specialized services (e.g., vocational, housing).

The effectiveness of a referral network for sex trafficking survivors with IDD is influenced by the availability and accessibility of services. A survey conducted by the National Human Trafficking and Disability Working Group (NHTDWG) of anti-human trafficking professionals (n = 20) and disability service providers (n = 29) found that 45% of anti-human trafficking professionals screened for disabilities and 10% of disability service providers screened for human trafficking (Bovat et al., 2022). Additionally, 34% of disability service providers knew who to contact if they identified someone experiencing human trafficking, and 65% of anti-human trafficking professionals knew who to contact if a client had a disability. Todres (2010) describes organizations' "open channels of communication" and awareness of other entities' work as essential to preventing vulnerable youth from failing to receive services

(p. 46). As such, building referral networks should involve ongoing communication and documentation of common scenarios or issues encountered when handling disclosures, thereby supporting a coordinated response to sex trafficking (Nichols et al., 2023).

Sharing Information and Resources

Notably, lack of information-sharing across agencies can present as a challenge for collaboration in general and making referrals specifically, particularly for determining trauma histories and maintaining client confidentiality (Fraser-Barbour, 2018). Information sharing is the inter-organizational exchange of knowledge or data and is a key component of coordination (Gulati et al., 2012; Kembro et al., 2014). Reluctance to share data or other relevant and pertinent information with other organizations can lead to unnecessary duplication of services, thereby impacting allocation of resources (Colvin et al., 2021). Closely related to information-sharing, resource-sharing involves the distribution of material (e.g., building space, equipment), financial (e.g., funding), and personnel (e.g., staff) assets, often in response to service demand or cost reduction needs (Shah et al., 2016). Budget and time resources may be expended in order to acquire information (e.g., compensating organizations that may hesitate to share information) (Yang & Maxwell, 2011). Negotiating resources in the form of clear agreements is particularly important; otherwise, organizational relationships may deteriorate and hinder future collaboration (Colvin et al., 2021). For complex societal problems, such as reducing sex trafficking vulnerability among youth with IDD, both information and resource sharing can lead to innovative solutions and generate better outcomes (Nezami et al., 2023).

Training and Education

Todres (2010) notes the importance of training and education in improving collaboration and service coordination among stakeholders. In terms of sex trafficking prevention and response

for youth with IDD, this can range from general knowledge or awareness (e.g., warning indicators of sex trafficking, negative outcomes associated with sex trafficking) to clinical skills and specialized techniques (e.g., treating trauma in youth with IDD, questioning techniques when youth with IDD disclose sex trafficking). In particular, for stakeholders to make referrals related to sex trafficking for youth with IDD, it is important that they are knowledgeable about sex trafficking, are able to recognize and screen for sex trafficking among youth with IDD, are able to respond appropriately to disclosures of sex trafficking, and are knowledgeable of community organizations and resources and how to make referrals to these key stakeholders.

Trainings focused on increasing general knowledge and awareness about sex trafficking have been found to improve self-efficacy in responding to sex trafficking among both child welfare workers (Harmon-Darrow et al., 2023) and healthcare professionals (Lo et al., 2022). Research also suggests that disability service providers want training on human trafficking, and likewise, human trafficking professionals recognize the importance of and desire training on disabilities (Bovat et al., 2022). Equally important are specialized and applied trainings that go beyond knowledge and awareness. In particular, it is important that key stakeholders receive specialized training on working with youth with IDD. A survey of mental health professionals demonstrated strong competence in disability awareness, but less competence in assessment skills and case conceptualization skills for working with clients with disabilities (Strike et al., 2004).

Cross-sector training for pre-service and in-service professionals can potentially lead to further organizational collaboration and improve outcomes for service recipients. For example, Margolis et al. (2013) surveyed nutrition, public health, pediatric dentistry, social work, and disability program graduates about their attitudes and skills pertaining to cross-sector

partnerships after completing interdisciplinary training education. The authors found that, compared to their peers who did not participate in the interdisciplinary training education as students, trained graduates reported more positive attitudes (e.g., value the contributions of other disciplines to work, providing services as an interdisciplinary group gets better results for consumers than working as single disciplines) and skills application (e.g., resolve conflicts in interdisciplinary groups, critically evaluate information from other disciplines) (Margolis et al., 2013). Additionally, cross-sector trainings have increased professionals' knowledge and confidence in providing services to individuals with autism (Bono et al., 2022), community-dwelling older adults (Rowan et al., 2009), and adults experiencing homelessness accompanied by mental illness or justice involvement (Roy et al., 2023). In addition to creating a referral network, cross-sector training has been identified as a benefit of anti-sex trafficking coalition collaboration (Gerassi et al., 2017). However, cross-sector training and other forms of coordination that are characterized by tense or fractious relationships, namely mistrust, can lead to fragmentation.

Inter-organizational Trust

Todres (2010) identifies mistrust among organization as an obstacle to a coordinated response to sex trafficking, particularly concerning competition for funding. While prior research has focused on mistrust between sex trafficking survivors and systems, such as law enforcement (Lavoie et al., 2019) and healthcare (Richie-Zavaleta et al., 2020), less is known regarding mistrust between systems or organizations that serve confirmed and potential survivors of sex trafficking. Despite this, trustworthy relationships within and between organizational sectors are important to the success of anti-sex trafficking interagency collaboration (Jones, 2023; Nixon-Cream, 2019). Inter-organizational trust is widely considered to be integral to achieving

outcomes in the organizational science literature (Zaheer et al., 1998). In Valaitis et al.'s (2020) qualitative research on coordination between primary care and community-based health and social services, inter-organizational trust was recommended to improve system navigation for older adults. Similarly, communication frequency and trust were the strongest predictors of organization coordination in a suicide prevention network (Menger et al., 2015). Trust is a key relational driver and precursor to effective organizational collaboration, particularly knowledge sharing (Chen et al., 2014; Ouakouak & Ouedraogo, 2019). Therefore, enhancing trust may improve referrals, information and resource sharing, and training opportunities that can, in turn, inform collective action to prevent and respond to sex trafficking.

Current Study

One promising approach for examining collaboration among organizations that are relevant to sex trafficking prevention and intervention is social network analysis (SNA) (Gest et al., 2011). As Prell et al. (2009) note, SNA "can supplement qualitative information" by examining strong (or weak) ties among organizations in addition to identifying prominent "actors" (e.g., agencies or community members who are well connected) (p.506). This methodology is underutilized in social work and as a means to detect potential opportunities for collaborative violence prevention and response. Two notable exceptions include Menger et al.'s (2015) work to strengthen suicide prevention in a Colorado community and Cook-Craig's (2010) analysis of capacity-building teams for sexual violence prevention and response in a southeastern state.

This study seeks to address the following research questions:

1) Which organizations/types of organizations have the most coordination (i.e., are in the core of the network) and which have the least coordination (i.e., are in the periphery of the network)?
2) Which organizations/types of organizations primarily engage in one-way coordination (e.g., only sending referrals, information sharing) and which engage in two-way coordination (e.g., both sending/receiving referrals)?
3) Is there an association between relationship strength (i.e., communication frequency, reliability, and trust) and types of coordination?

Methods

Study methods were reviewed and approved by the Office of Human Research Ethics at the University of North Carolina at Chapel Hill (#23-0481). The study was guided by consultation with a community advisory group (CAG) which consisted of service providers and content experts with knowledge of or practice experience in either: (a) educating or providing services to youth with IDD, and/or (b) providing sex trafficking prevention programming or intervention services.

Participants and Procedures

Participants were identified using a combination of two sampling strategies—expert sampling and snowball sampling. As a form of purposive sampling, expert sampling solicits information from stakeholders with expertise or topical knowledge and can be used for SNA research when a complete list of organizations is difficult to obtain (Keszi et al., 2014). Snowball sampling is a form of convenience sampling that relies on initially selected participants to recommend other potential participants who fit the research criteria (Parker et al., 2019). Often used together with purposive sampling strategies, snowball sampling is a hallmark feature of

SNA in which social networks are built based on referrals and existing relationships (Contandriopoulos et al., 2019).

The sampling frame consisted of 190 organizations in a southeastern state, and the principal investigator consulted with the CAG to identify relevant organizations for the sampling frame. Organizations were limited to statewide organizations or those located in one of four counties in the central part of the state. The decision to focus the sampling frame in this way was based on feasibility constraints and the impact of geographic proximity on the likelihood of organizational collaboration (Jasny et al., 2019). The principal investigator identified organizations using the Google search engine by pairing terms for each of the four counties and key sectors (e.g., "urgent care", "mental health services", "disability services"). The first 10 pages were searched, and contact information was obtained directly from websites or resource directories provided by governmental agencies or task forces (e.g., state human trafficking commission).

Participants were recruited from (and asked about their collaboration practices with) six sectors: (a) disability services (n = 47), (b) legal services and law enforcement (n = 14), (c) mental healthcare (n = 38), (d) medical healthcare (n = 42), (e) violence prevention and response (n = 25), and (f) other specialized populations or services (e.g., housing, food insecurity; n = 24). Selection of these six sectors was based on the needs and services most commonly identified in the sex trafficking prevention and response literature (Macy & Johns, 2011; Munro-Kramer et al., 2020) as well as the disability research and practice literature (Smith et al., 2020; Verdugo et al., 2020). Some organizations offered multiple types of services (e.g., a disability rights legal organization could be classified as disability services or legal services and law enforcement); the

principal investigator arranged and consolidated organizations into categories according to their overall mission and activities and received feedback on categorization from CAG members.

Of the 190 organizations in the initial sampling frame, 34 medical healthcare organizations did not have readily available email or telephone contact information. Therefore, a total of 156 organizations were recruited to participate in the study. Recruitment and survey administration occurred between June 2023 and September 2023. Contact information (e.g., email addresses, telephone numbers) for organizational representatives was extracted from websites and resource directories identified in the web search and imported into a Microsoft Excel (Microsoft Corporation, 2017) spreadsheet for recruitment purposes. In an email invitation to participate, organizational representatives were provided information about the purpose of the study as well as a link to the survey. Four reminder emails were sent over the course of the recruitment phase, and telephone calls were made to organizational representatives after the second and third email reminders. At the end of the survey, participants were offered a $15 Amazon gift card for their participation and given a link to a separate survey to provide their email address. A total of 47 organizations completed the survey (30% response rate).

Survey

Participants were invited to complete an online, 15-20 minute survey programmed using Qualtrics survey software (Qualtrics Labs, Inc., 2020). The survey was developed and refined based on prior research examining organizational collaboration and coordination in violence prevention and response, primarily building on the work of Cook-Craig (2010) and Menger et al. (2015). Additionally, the principal investigator consulted with three methodological experts who provided feedback on adapting the survey to SNA sampling and data analysis techniques. The study-developed, roster-based survey included seven sections: (1) disability services, (2) legal

services and law enforcement, (3) mental healthcare, (4) medical healthcare, (5) violence prevention and response, (6) specialized populations or services, and (7) demographic and work history. The first six sections focused on stakeholder coordination (Part A of Sections 1 through 6) and relationship strength (Part B of Sections 1 through 6) within and across the six sectors. Participants were presented with a roster of all the organizations in the initial sampling frame and asked to select all the organizations that their organization had collaborated with during the past 24 months. To gather information about collaboration and coordination, participants were then presented with an abbreviated list based on their selections, and were asked whether any of the following indicators of general collaboration and coordination had occurred between their organization and each of the organizations on the list, within the past 24 months: (a) sent referrals, (b) received referrals, (c) shared information or resources, and (d) coordinated trainings. Possible responses included *yes*, *no,* and *unsure*. Affirmative responses were coded as 1; both *no* and *unsure* were coded as 0.

Participants were also asked about the relationship strength, specifically (a) how many times their organizations communicated within the past 6 months, (b) their degree of confidence that they can rely on the selected organization to keep promises, and (c) their degree of trust that the selected organization can serve clients appropriately. Communication frequency was limited to six months to prevent recall issues associated with longer time references (Kobayashi & Boase, 2012), and possible responses were *never* (coded as 0), *1-5 times* (coded as 1), *6-10 times* (coded as 2), *11-15 times* (coded as 3), *16-20 times* (coded as 4), and *more than 20 times* (coded as 5). Possible responses for participants indicating their confidence in organizations keeping promises and trust in organizations to serve clients appropriately were *strongly disagree* (coded as 0), *disagree* (coded as 1), *neutral* (coded as 2), *agree* (coded as 3), and *strongly agree* (coded

as 4). The survey item pertaining to confidence in organizations keeping promises was adapted from an inter-organizational trust measurement instrument developed by Zaheer et al. (1998). The survey item pertaining to trust in organizations to serve clients appropriately was developed for the current study based on its prominence in the social work literature, as well as the effect of trust in service provision on health outcomes (Thiede, 2005; Turner et al., 2023).

The final section featured questions pertaining to participant demographic and work history information. These questions included (a) age, (b) race/ethnicity, (c) gender identity, (d), educational background, (e) years of experience in providing services related to current role, (f) level of knowledge regarding minor sex trafficking dynamics and warning signs, and (g) level of knowledge regarding youth with intellectual and developmental disabilities and associated risks of experiencing sex trafficking.

Data Analysis

Data were exported from Qualtrics into Microsoft Excel for data management and then imported into the SNA software UCINET (Borgatti et al, 2002) for analysis of network properties, bivariate analyses, and network visualization. Stata 15.1 (StataCorp, 2017) was used for univariate analysis of demographic and work history data. All matrices representing the networks were undirected except for two matrices—sending referrals and receiving referrals. To handle missing data from organizations that did not complete the survey, the principal investigator transposed (i.e., interchanged rows and columns) each undirected matrix such that if Organization A (matrix row) indicated a tie existed with Organization B (matrix column), but Organization B did not complete the survey, then a tie was imputed between Organization B (matrix row) and Organization A (matrix column). The two directed matrices were transposed using their relational inverse (e.g., missing values were imputed into the receiving referrals

matrix using the transpose of the sending referrals matrix). Additionally, to ensure consistency in responses, all undirected matrices were symmetrized such that either the average valued tie was used for interval data (i.e., communication frequency, organizational reliability to keep promises and trust to serve clients appropriately) or the maximum value of 1 was used for binary data (i.e., training coordination, sharing information and resources, and two-way referrals).

To answer the first and second research questions, the principal investigator examined network properties using several techniques, including: (a) density (i.e., network connectivity measured via the proportion of present ties between organizations compared to all possible ties); (b) degree centrality (i.e., the extent to which organizations are connected to others); and (c) betweenness centrality (i.e., the amount of times an organization appears on the shortest path between otherwise disconnected organizations) (Borgatti et al., 2018). Visualizations of overall networks (i.e., all six sectors) and subnetworks (i.e., two to three sectors) were completed using the NetDraw feature available in UCINET. Subnetworks of violence prevention and response organizations and disability organizations were visualized given their relevancy to coordination of a response to sex trafficking among youth with IDD. To determine if organizations from other sectors (i.e., legal and law enforcement, medical healthcare, mental healthcare, and specialized populations or services) could serve as bridges (i.e., connection between segregated groups or clusters), these subnetworks were modified by selectively adding each of the four sectors to the visualizations.

Bivariate Analyses

Three bivariate analyses (one monadic, two dyadic) were conducted. For each analysis, permutation tests were used given the violation of statistical assumptions regarding independence of observations and random sampling, as is typical with social network data.

Monadic (Organization-level) Analysis with Analysis of Variance (ANOVA). To answer the second research question, a series of one-way ANOVA models were conducted to test the mean difference of stakeholder coordination activities between organization types. Specifically, the mean degree (i.e., number of ties connecting organizations) of each stakeholder coordination activity was compared across the six sectors. To generate better estimates of standard error, 20,000 permutations were performed (Borgatti et al., 2018).

Dyadic (Relationship-level) Analysis with Correlation. To answer the third research question and test the association between relationship strength and stakeholder coordination networks, the Quadratic Assignment Procedure (QAP) correlation was used to compute Pearson's correlation coefficients between corresponding cells of two data matrices. Then, the correlation was recomputed with 50,000 permutations to determine the proportion of times that a random correlation coefficient is larger than or equal to the correlation coefficient originally computed (Borgatti et al, 2002). To test the association between organizational similarity and either the stakeholder coordination or relationship strength networks, the organization type vector with values representing each of the six sectors was transformed into a binary matrix in which organization type matches were coded as 1 and non-matches were coded as 0. This meant that, if Organization A and Organization B were classified as the same organization type (e.g., disability services), the tie or cell was coded 1. If Organization A (e.g., disability services) was different from Organization C (e.g., legal services), the tie or cell was coded as 0.

Dyadic (Relationship-level) Analysis with Regression. Based on statistically significant correlation results, the Double Dekker Semi-Partialling Multiple Regression QAP (MRQAP) was used to regress stakeholder coordination matrices on relationship strength matrices and the organizational similarity matrix. Similar to the QAP correlation procedure, a standard regression

was performed across the corresponding cells of the depending and independent matrices. The regression was then recomputed with 50,000 permutations to estimate standard errors for the statistics of interest; UCINET counts the proportion of random permutations that yielded a coefficient as extreme as the one originally computed (Borgatti et al, 2002).

Results

Descriptive Statistics

Descriptive information about participants and their organizations are presented in Table 3.1 and Table 3.2, respectively. Most survey participants identified as women (*n* = 25, 76.09%) and ranged in age from 25 to 77 years (*M* = 47.23, *SD* = 11.3). Participants most likely identified as White/Caucasian (*n* = 32, 69.57%) and chose social work as their professional background (*n* = 13, 28.26%). Participants had a range of 1 to 51 years of experience working in their current organizations (*M* = 15.49, *SD* = 10.87). Most participants represented disability organizations (*n* = 16, 34.04%) and organizations that have operated for over 25 years (*n* = 29, 63.04%). Although the majority of organizations offered services for youth and adults with IDD (*n* = 36, 76.6%), only ten organizations (21.28%) offered services related to sex trafficking prevention. Nine organizations (19.1%) offered services for both. Participants reported that they were very knowledgeable (*n* = 7, 15.22%), somewhat knowledgeable (*n* = 22, 47.83%), somewhat unknowledgeable (*n* = 9, 19.57%), and very unknowledgeable (*n* = 8, 17.39%). When participants were asked about their level of knowledge regarding youth with IDD and associated risks of experiencing sex trafficking, participants reported that they were very knowledgeable (*n* = 6, 13.04%), somewhat knowledgeable (*n* = 23, 50%), somewhat unknowledgeable (*n* = 10, 21.74%), and very unknowledgeable (*n* = 7, 15.22%).

Stakeholder Collaboration and Coordination

Network properties and monadic (organizational-level) analyses are discussed below according to each type of stakeholder coordination (i.e., referrals, information and resource sharing, and training coordination); per recommendation of Borgatti et al., 2018, betweenness centrality was only calculated for symmetric networks. Density ties for each stakeholder coordination activity according to organization type are presented in Table 3.3.

Referrals

Sending Referrals. More than 77% (n = 147) of organizations sent referrals within the past 24 months (see Figure 3.1), and the density for the network was 0.53. The one-way ANOVA results showed that average degree significantly differed across organization type, $F(5, 184) = 2.62$, $p < .05$. On average, organizations sent referrals to approximately three organizations as indicated by the mean degree centrality (M = 3.71, SD = 0.50). A violence prevention and response organization and mental health organization sent the most referrals, with 38 ties and 31 ties, respectively. The third highest number of ties came from a disability organization (28 ties). Twenty-eight ties connected 53 disability and violence prevention and response organizations in a network restricted to these two sectors; more referrals were sent from violence prevention and response organizations to disability organizations (19 ties) than from disability organizations to violence prevention and response organizations (9 ties) (see Appendix 3A). According to Table 3.3, 61.3% of possible ties existed from violence prevention and response organizations to disability organizations and 28.1% of possible ties existed from disability organizations to violence prevention and response organizations.

Receiving Referrals. Most (77%, n = 147) organizations received referrals within the past 24 months (see Figure 3.2), and the density for the network was 0.52. The one-way ANOVA

model comparing organization types' average degree was statistically significant, $F(5,184) = 3.95$, $p < .01$. The mean degree centrality ($M = 3.63$, $SD = 0.50$) indicated that the average organization received referrals from approximately three organizations. The same mental health organization that sent the second highest number of referrals received the most referrals (30 ties), while a disability organization had the second highest ties (27 ties). When examining the network restricted to 53 disability organizations and violence prevention and response organizations, 28 ties connect the two sectors (see Appendix 3B). Disability organizations received 19 referrals from violence prevention and response organizations while violence prevention and response organizations received 9 referrals from disability organizations. Density ties between these two sectors was the inverse for sending referrals, with 28.1% of referral ties existing from violence prevention and response organizations to disability organizations and 61.3% of referral ties existing from disability organizations to violence prevention and response organizations.

Two-way Referrals. Nearly 65% (n = 123) of organizations engaged in two-way (i.e., sending and receiving referrals) coordination (see Figure 3.3). Only 3.1% of possible ties existed in this network. The one-way ANOVA results indicate that there was a statistically significant difference in average degree among the organization types, $F(5,184) = 2.91$, $p < .05$. Calculation of the mean degree centrality ($M = 2.51$, $SD = 0.17$) showed that organizations had, on average, two bidirectional referral ties. The highest number of ties was for a mental health organization (30 ties), followed by a violence prevention and response organization (25 ties). The mental health organization had a betweenness centrality of 1948.18, which was higher compared to the average betweenness centrality for the network ($M = 85.34$, $SD = 249.24$). The disability organization with the second highest number of referral ties had the highest number of

bidirectional ties within the disability sector (20 ties). The network of 43 disability organizations and violence prevention and response organizations shows only three ties connecting these sectors, with only 0.5% of possible ties existing (see Appendix 3C and Table 3.3).

Sharing Information and Resources

Over 75% (n = 143) of organizations engaged in sharing information and resources as shown in Figure 3.4. Of all possible ties, 78.8% were present. Results from the one-way ANOVA indicated that there was a statistically significant difference in average degree among organization type, $F(5, 184) = 7.22$, $p < .001$. According to the mean degree centrality ($M = 5.64$, $SD = 0.41$), organizations had about five ties, on average. The same violence prevention and response organization and mental health organization that had the highest number of two-way referrals also participated in the most information and resource sharing, with 39 ties for the violence prevention and response organization and 34 ties for the mental health organization. The highest number of ties for a disability organization was 24 ties. The betweenness centrality for the average organization in the overall network was 88.44 ($SD = 215.64$), and the aforementioned violence prevention and response organization had a betweenness of 1880.50. Fifty-four disability and violence prevention and response organizations engaged in sharing information and resources with 23 ties connecting these two sectors (see Appendix 3D). Most disability and violence prevention and response organizations exchanged information and resources with 71.9% of possible ties present. When examining the panels in Figure 3.5, the presence of specialized, mental healthcare, and legal organizations appear to establish more indirect ties between disability and violence prevention and response organizations.

Training Coordination

Over 59% (n = 113) of organizations engaged in training coordination as depicted in Figure 3.6. The density of the network is 0.30, suggesting that a little under one-third of all possible ties existed. A one-way ANOVA revealed that at least two organization types significantly differed in the average degree or number of training coordination ties, $F(5, 184) = 4.49$, $p < 0.01$. When calculating degree centrality, on average organizations had approximately two ties ($M = 2.17$, $SD = 0.46$) with the highest degree centrality for a mental health organization (25 ties) followed by the same violence prevention and response organization that had the most information and resource sharing ties (24 ties). The highest number of ties for a disability organization was 15 ties. These three organizations also had, in the same order, the highest betweenness centrality; while the proportion of times the average organization appeared in the shortest path between others was 79.11 ($SD = 234.90$), the proportion of times the aforementioned mental health organization appeared in the shortest paths was 1818.45. Forty disability and violence prevention and response organizations engaged in training coordination with four ties connecting these two sectors (see Appendix 3E). As noted in Table 3.3, 12.5% of possible training coordination ties existed between disability organizations and violence prevention and response organizations. Visual inspection of each network in Figure 3.7 shows that the presence of specialized and legal organizations established more indirect ties between disability and violence prevention and response organizations.

Relationship Strength

Findings for each relationship strength indicator (i.e., communication frequency, confidence in organizational promises, and trust to serve clients appropriately) for the overall network and the six organizational sectors are presented below.

Communication Frequency

The majority of organizations (78.4%, n = 149) in the network communicated at least once within the past 6 months; 55 organizations in a subnetwork of disability organizations and violence prevention and response organizations communicated at least once in this timeframe (see Figure 3.8). On average, organizations communicated approximately either one to five times or six to ten times (M = 1.76, SD = 1.36). Over one-third of the network (38.4%, n = 73) engaged in communication at least 11 times in the past 6 months; there was only one communication tie at this frequency between the disability organizations and violence prevention and response organizations (see Appendix 3F). In contrast, violence prevention and response organizations communicated more at this frequency with mental health organizations and legal organizations; one specialized organization (Latino-serving agency) and one legal organization (police department) served as ties connecting the disability and violence prevention and response sectors.

Confidence in Organizational Promises

On average, organizations tended to have confidence that others in the network could reliably keep promises (M = 2.94, SD = 0.93). Only 16 organizations had negative ties (i.e., never, strongly disagreed, or disagreed that others were reliable), with one violence prevention and response organization having four ties characterized as negative (see Figure 3.9). When restricting the network to the 112 organizations that had very positive ties (i.e., strongly agreed that others were reliable), disability organizations and medical healthcare organizations were the least likely to have very positive ties with other sectors; only two very positive ties existed between disability organizations and violence prevention and response organizations.

Organizational Trust to Serve Clients

Organizations generally agreed that they trusted others in the network to serve clients appropriately ($M = 3.05$, $SD = 0.92$). Very few ($n = 15$) organizations had negative ties (i.e., never, strongly disagreed, or disagreed that others were trustworthy), with the same aforementioned violence prevention and response organization having three negative ties (see Figure 3.10). Visual inspection of the network consisting of 119 organizations with very positive ties (i.e., strongly agreed that others were trustworthy) shows that disability organizations had very positive ties primarily with mental health organizations. Three very positive ties connected the disability and violence prevention and response sectors, including the same two strong ties pertaining to organizational reliability.

Dyadic Analyses

For the first dyadic (relationship-level) analysis, Pearson correlations between the matrices for the stakeholder coordination, relationship strength indicators, and organizational similarity are presented in Table 3.4. The only relationship strength indicator that was significantly correlated with all of the stakeholder coordination activities was communication frequency, in particular training coordination ($r = 0.506$, $p < .05$) and two-way referrals ($r = 0.457$, $p < .001$). Unsurprisingly, the three referral networks were significantly associated with one another; otherwise, there were no significant associations between stakeholder coordination activities. The two-way referral network was significantly correlated with all stakeholder coordination and relationship strength networks, as well as organizational similarity. Although organizational similarity was not significantly associated with stakeholder coordination beyond two-way referrals, it was significantly associated with all three relationship strength indicators.

Reliability on organizational promises and organizational trust to serve clients appropriately were the only significant associations among relationship strength networks.

For the second dyadic (relationship-level) analysis, each stakeholder coordination activity was regressed on communication frequency and organizational similarity (see Table 3.5). Two-way referrals were regressed on all three relationship strength indicators and organizational similarity. Communication frequency was a statistically significant predictor for all forms of stakeholder coordination. When removing the non-significant predictors in each regression model, the adjusted R^2 values suggest that communication frequency can explain the following amount of variation in each outcome: (a) 25.4% in training coordination, (b) 10.1% in sharing information and resources, (c) 9.7% in sending referrals, (d) 9.6% in receiving referrals, and (e) 20.8% in two-way referrals.

Discussion

The purpose of this study was to understand how organizations from various service sectors engage in collaboration via three main coordination activities (i.e., making referrals, information and resource sharing, and training coordination), as well as the impact of relational factors on coordination. The six sectors (i.e., disability services, legal services and law enforcement, mental healthcare, medical healthcare, violence prevention and response, and specialized populations or services) featured in this study were selected given their relevance in coordinating a community-wide response to sex trafficking for individuals with IDD. Though the literature has largely focused on individuals with disabilities as a unit of analysis and their perspectives regarding service inaccessibility following sexual assault or domestic violence (Chirwa et al., 2020; Robinson et al., 2021; Stern et al., 2020), this innovative study focused on service organizations as a unit of analysis and employed SNA to explore their engagement in

specific forms of collaboration and coordination. Prior research suggests that identifying and enhancing inter-organizational collaboration may improve service accessibility and thus subsequent health outcomes of individuals with IDD (Roberge et al., 2016). Key findings and implications of this research are discussed below.

Properties of Coordination Networks

For each stakeholder coordination activity, several of the same organizations (one mental health, one disability, and one violence prevention and response) had the highest degree centrality, meaning that they possessed the most ties to other organizations. These three particular organizations may be best positioned to garner buy-in from others when forming a coalition or task force (Brown et al., 2010). Violence prevention and response organizations sent more referrals to disability organizations than the inverse. While the nature of these referrals is unknown, it is possible that (a) clients required disability-related services as a result of violence, or (b) practitioners affiliated with violence prevention and response organizations lack expertise in providing services to clients with disabilities. Additionally, previous studies have found that sexual assault survivors with disabilities are more likely than survivors without disabilities to be referred to victim services by social service organizations and other formal sources (e.g., law enforcement); at the same time, survivors without disabilities are more likely to disclose to and be referred by friends (Campbell et al., 2021; Grossman & Lund, 2008). It is important for disability, legal, and specialized organizations to recognize their role in securing services for violence victims with IDD as they are less likely to self-refer or seek assistance from informal networks. To improve the referring relationship in a coordinated response to sex trafficking, organizations must know how to identify victimization and which organizations in the community provide services accordingly.

The highest amount of stakeholder coordination was for sharing information and resources, which complements the findings of Menger et al.'s (2015) research on organizational collaboration in a suicide prevention network. While the high density of ties between disability and violence prevention and response organizations indicates a well-connected subnetwork, all others sectors (though less so for medical healthcare) appeared as conduits of information and resource flow in network visualizations. In other words, mental healthcare, legal and law enforcement, and specialized organizations can connect disability and violence prevention and response organizations via information and resource sharing. Of all stakeholder coordination activities, training coordination was the least reported by the overall network as well as the subnetwork of disability organizations and violence prevention and response organizations. Recent studies have highlighted training gaps in law enforcement agencies (Railey et al., 2020) and medical settings (Sapp et al., 2021) regarding the service needs of individuals with disabilities. Though less has been published about disability training needs among violence prevention and response organizations, visual representations of the training coordination network in the current study suggest that specialized and legal organizations can serve as potential brokers. Brokers are facilitators that can link disconnected organizations and are vital to information flow between groups (Long et al., 2013 Reus et al., 2023). It should be noted that, while cross-sector training was not as widely reported as other types of coordination, does not mean that organizations are not receiving training internally or from other sources. Nevertheless, cross-sector training in anti-sex trafficking initiatives has been shown to benefit communities' responses to sex trafficking, particularly the actualization of shared goals and improved communication (Jones & Lutze, 2016; Nichols et al., 2023).

Two interesting findings were the statistically significant and non-significant associations for organization type and organizational similarity, respectively. The average degree or number of connections with others was significantly associated with organization type (i.e., organizations belonging to any one of the six sectors), but stakeholder coordination and relationship strength were not significantly associated with organizational similarity (i.e., organizations' match in organization type). Although organization type may be associated with degree or number of connections with others, it does not appear that organizations belonging to the same service category engage in more stakeholder coordination than organizations that provide different services. That is, just because violence prevention and response organizations may engage in more information and resource sharing than legal organizations does not mean that more information and resource sharing occurs between violence prevention and response organizations and other violence prevention and response organizations. This finding is encouraging as it demonstrates the possibility of interdisciplinary collaboration.

Relationship Strength and Coordination

Another prominent finding was the significant effect of communication frequency on all forms of coordination. Results from the regression models suggest that how often organizations communicate with one another was related to their engagement in coordination, particularly for training coordination and two-way referrals. This aligns with Menger et al.'s (2015) findings in that communication frequency was significantly correlated with the information and resource sharing, making referrals, and training coordination. Communication frequency also was a significant predictor of training coordination in regression analyses (Menger et al., 2015). In the current study, violence prevention and response organizations and disability organizations rarely engaged in high frequency communication with each other. In fact, the network visualization

showed high frequency within the disability sector, whereas violence prevention and response organizations were more integrated with other sectors. Considering the contribution of communication frequency to general coordination, it would befit disability organizations to determine if lack of communication with other sectors is expected due to the nature of their work, or a problem to be addressed.

The only two relationship indicators that were significantly correlated with each other were organizations' trust in others to serve clients appropriately and confidence in others' keeping promises. Both survey items provide a nuanced understanding of trust and appear to align with definitions posed by Gulati and Sytch (2008). Namely, trust to serve clients may be described as dispositional trust (i.e., expectations about other organizations' general trustworthiness) while reliability of promises may be described as relational trust (i.e., trust that another organization can reliably fulfill its obligations; Gulati & Sytch, 2008). However, in contrast to Menger et al.'s (2015) findings, trust was not significantly associated with any of the coordination activities. Prior research suggests that a longer history of interaction between organizations leads to a higher level of trust (Gulati & Sytch, 2008) Information that was not collected in this study was length of time that organizations had been engaged in various coordination activities. Future research may require a more robust disentanglement of trust with consideration for its antecedence.

Limitations and Strengths

This explorative study is not without several limitations. An education sector was not included in the sampling frame and survey. Within the scope of sex trafficking prevention, schools play a critical role in providing prevention programming and identifying students who are at-risk (Rizo et al., 2019; Walker & Ieva, 2022). However, four agencies that provide special

education services to youth were included in the study as disability-serving organizations. In light of recent research that examines the role of special education staff in sex trafficking prevention efforts (Jackson et al., 2022), public schools and other educational institutions should be included in research that investigates their coordination patterns with other professional sectors. The survey had low response rates, and another limitation was the low participation among healthcare organizations which was largely due to recruitment challenges. Despite this, the use of matrix transposition to impute missing values allowed for the opportunity to determine how healthcare organizations engage in stakeholder coordination with other sectors and is a strength of SNA. Notably, the classification of organization types was a subjective process, particularly for organizations providing services across various sectors. Input from a diverse group of stakeholders in the form of a community advisory group sought to address this limitation.

Implications for Practice, Policy, and Research

One notable practice-related implication of this study is the importance of organizations dedicating job positions to inter-organizational collaboration in the form of boundary spanners. Boundary spanners are individuals whose professional role involves engaging in multi-agency and multi-sectoral activities and processes; in social and healthcare services, these are typically case managers (Gittell & Weiss, 2004; Huang et al., 2016; Williams, 2011). Organizations should engage in ongoing evaluation to determine existing gaps in inter-organizational coordination in conjunction with client needs, thereby delegating specific tasks to the boundary spanner. For example, a social worker in a medical setting may request information and resources from a disability-serving organization upon an influx of clients with comorbid IDD and chronic illnesses (Findley, 2014). Moreover, identification of boundary spanners also has

implications for the selection of key personnel for task forces and coalitions. This is particularly relevant to a coordinated response to sex trafficking considering the interdisciplinary nature of these partnerships (Miller et al., 2016).

In regards to policy-related implications, the analysis revealed that organizations engaged in training coordination the least in comparison to making referrals and sharing information and resources. Organizations can modify training requirements to ensure that staff gain knowledge and skills in navigating professional relationships across service sectors. Organizations should also clarify in their mission statements and action plans the extent to which they practice collaboration with other agencies and its role in enhancing client well-being. Part of this clarification may involve an organizational culture and value assessment, as cultural differences between organizations and disagreement over shared values or goals can obstruct effective coordination (Gulati et al., 2012).

There are several research-related implications of this study. While survey questions asked participants to reflect on organizational coordination over a 24-month timeframe, any reported coordination was cumulative and data points were cross-sectional. Future investigations can utilize other SNA techniques such as exponential random graph models (ERGMs) to track changes in coordination activity engagement and organizational relationship strength over time. For instance, ERGMs can dynamically illustrate the impact of the selection of key partners and changes in coordination activities before and after the formation of an alliance (Gulati et al., 2012). Furthermore, when asked about the relationship strength of their organizations, very few participants disagreed that other organizations were distrustful or unreliable. Only two questions pertaining to trust were included to reduce survey burden. However, organizational trust is a multi-faceted construct (Zaheer et al., 1998), and further research is needed to understand how

different forms of trust are positively or negatively associated with coordination. Lastly, as previously acknowledged, boundary spanners are invaluable to organizational collaboration and suggests that interpersonal networks can also be informative. Future research can explore the influence of interpersonal ties on inter-organizational coordination (Huang et al., 2016).

Conclusion

A well-coordinated approach to youth sex trafficking prevention and response involves multiple community partners, trust building, and ongoing communication and collaboration (Nichols et al., 2023). Following these recommendations, this study sought to examine organizational collaboration across six service sectors, specifically their engagement in various coordination activities and the effect of communication, trust, and reliability. Communication frequency was strongly associated with making referrals, sharing information and resources, and coordinating trainings. Future research endeavors should explore how organization coordination informs coalition building and changes over time. Findings from this study can influence development of a cohesive community response to sex trafficking that is simultaneously responsive to the service needs of youth with IDD.

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CONCLUSION

Despite an increasing awareness of the vulnerability of youth with IDD to sex trafficking, there has been limited research and practice focused on understanding the needs of these youth. The purpose of this dissertation was to further the field of sex trafficking prevention by exploring current efforts as well as recommendations for educating youth with IDD about sex trafficking. The first paper (systematic review) provided an overview of the extent to which youth with IDD experience dating violence (DV), sexual violence (SV), and sex trafficking (ST), as well as current efforts to educate youth with IDD about these forms of interpersonal violence. The second paper (qualitative study) described professionals' perceptions regarding challenges to educating youth with IDD about sex trafficking, as well as recommendations for providing such education and responding to disclosures. The third paper (social network analysis study) examined coordination among organizations from six sectors that are relevant to sex trafficking prevention and intervention, as well as the impact of relationship strength on coordination activities. Ultimately, these three papers advance our knowledge of: (a) the prevalence and risk of experiencing sex trafficking among youth with IDD, (b) promising practices to enhance the accessibility of sex trafficking prevention education for youth with IDD, and (c) factors relevant to developing a multi-sector, coordinated approach to preventing and responding to sex trafficking among youth with IDD.

Research Findings

A critical finding from Paper 1 was that youth with IDD generally experience violence at higher or similar rates to youth without IDD. Importantly, risk of DV, SV, and ST may depend

on IDD diagnosis. For instance, McDonnell et al. (2019) and Sullivan & Knutson (2000) found that, while youth with intellectual disabilities were more likely than their neurotypical peers to experience SV, youth with autism were not more likely than their neurotypical peers to experience SV. These findings are elucidating in light of prior systematic reviews that investigated victimization among individuals with disabilities more broadly. Specifically, although individuals with IDD are more likely than individuals without IDD to experience SV, risk and prevalence is higher for those with sensory impairments (e.g., vision loss, deafness) (Fang et al., 2022; Mailhot Amborksi et al., 2022). Another key finding from Paper 1 was that none of the prevention studies included in the systematic review focused on sex trafficking; the few studies retained from the search focused on sex education, SV prevention, and DV prevention. Common topics in this programming included healthy boundaries, reproductive anatomy, and safe dating and sex practices. Additionally, when mapping sex education, SV prevention, and DV prevention delivery strategies onto UDL principles and guidelines, programming typically used representation methods (e.g., multiple forms of sensory; simplified language) and engagement methods (e.g., reward system; facilitators with disabilities).

In Paper 2, service providers emphasized the importance of including healthy boundaries and reproductive anatomy in sex trafficking prevention programming. However, in contrast to Paper 1, consent was another topic prominently mentioned by service providers, especially its generalization and reinforcement across settings for youth with IDD. Service providers noted that caregivers may be less accepting of sex trafficking prevention programming due to discomfort with topics and infantilization or perceived asexuality of youth with IDD. A scoping review of parent perceptions of sex education for youth with IDD supports the finding that caregivers are generally uncomfortable discussing sex with their youth; however, the authors

found that parents generally held positive attitudes about sex education and believed that youth with IDD had sexual desires (Strnadová et al., 2022). To improve acceptability of sex trafficking prevention education, service providers suggested that (a) caregivers be educated about sex trafficking alongside other caregivers of youth with IDD, and (b) topics (e.g., boundaries, consent) be introduced in early childhood using strategies that emphasize safety promotion. Recommendations for enhancing the accessibility of sex trafficking prevention education for youth with IDD included engagement through interactive activities, making programming available virtually, and using a person-centered approach by individualizing program components (e.g., pictures of safe and supportive persons in one's life). Additional key findings from Paper 2 pertained to how systems can sufficiently respond to reports of sex trafficking involving youth with IDD that are made in the context of prevention education. Service providers suggested that professional training in sex trafficking and the IDD population, cross-sector collaboration (e.g., information sharing), and structured disclosure and referral processes can improve how systems respond to reports of sex trafficking involving youth with IDD.

Using social network analysis (SNA), Paper 3 examined collaboration among six service sectors relevant to preventing and responding to sex trafficking among youth with IDD. Across three types of coordination (i.e., referrals, information and resource sharing, and training coordination), organizations engaged the most in sharing information and resources. Although organizational representatives were asked about their engagement in this coordination activity more broadly, information sharing was endorsed by service providers in Paper 2 as essential to responding to disclosures of sex trafficking. An information sharing concern raised by service providers in Paper 2 was the maintenance of client confidentiality; future SNA research can determine how organizations engage in this specific type of information sharing, as well how

specific resources (e.g., funding, equipment) are utilized. Training coordination was the least reported coordination activity, particularly between violence prevention and response and disability organizations; this result is interesting considering the importance of cross-sector training in anti-sex trafficking coalition building (Gerassi et al., 2017). Although cross-sector training in the needs of youth with IDD and their vulnerability to sex trafficking has not been extensively studied, cross-sector training has been shown to improve professionals' knowledge and confidence in providing services to clients with IDD (Smith et al., 2022). Another Paper 3 finding was the association between communication frequency and coordination activities. While this converges with Menger et al.'s (2015) research on a suicide prevention network, trust was not associated with coordination activities (in contrast to the findings of Menger et al., 2015). More research is needed to determine how trust as a multi-faceted construct and other relational factors impact coordination activity.

Limitations and Strengths

The first paper of this dissertation is one of the first studies to synthesize the literature pertaining to the (a) prevalence of sex trafficking, SV, and DV among youth with IDD, and (b) sex trafficking, SV, and DV prevention education developed or adapted for youth with IDD. Additionally, application of UDL principles and guidelines to sex education, SV prevention, and DV prevention provides a summary of methods for making programming that is relevant to sex trafficking prevention accessible to youth with IDD. However, only six prevention studies were retained from the systematic literature search, making it difficult to fully explore factors related to program implementation such as facilitation (e.g., professional-led vs. self-guided) and format (e.g., individual vs. group learning, in-person vs. virtual learning). It is also possible that not all relevant articles were identified and that some study methods and findings were misinterpreted

during the abstraction process. The search strategy was developed in consultation with a reference librarian, and articles were revisited on a recurring basis following data synthetization.

The second paper of this dissertation features perspectives from sex trafficking prevention experts and IDD service providers, the latter of who are largely missing in research on sex trafficking prevention. Furthermore, this study builds on prior research on sex trafficking prevention education (Lesak et al., 2021) by summarizing recommendations for developing or adapting this programming for youth with IDD. Notably, despite anticipated challenges, participants recognized the value and importance of providing sex trafficking prevention education to youth with IDD. The narrow sampling frame meant that professionals from other relevant sectors (e.g., medical, law enforcement) were not included, in addition to other important stakeholders such as youth with IDD and their caregivers. It is possible that the interview guide was not comprehensive or that the analysis did not unearth all possible findings. The sampling frame and interview guide were reviewed by a community advisory group, and a qualitative descriptive approach was chosen to provide straightforward summaries of professionals' recommendations for prevention programming delivery.

The third paper of this dissertation expands on prior research that explores organizational collaboration in the context of sex trafficking prevention and intervention (Gerassi et al., 2017). This study fills a gap in the literature by determining the ways in which disability organizations engage in coordination with five other service sectors. As an underutilized method in social work, SNA can make up for shortcomings in traditional survey research by examining coordination *about* non-respondents in the absence of information *from* them. Nevertheless, a limitation of this study was the exclusion of other sectors relevant to a coordinated response to sex trafficking such as schools. Additionally, though some organizations featured in the sample

provided multiple services, they were categorized into six mutually exclusive sectors. A community advisory group reviewed the sampling frame and these categorizations to address the subjectivity of the classification process.

Implications for Practice, Policy, and Research

In terms of practice implications, findings from this three-paper dissertation can help guide the development and adaptation of sex trafficking prevention education for youth with IDD. Specifically, developers can integrate relevant topics identified in the sex education, SV prevention, and DV prevention literature, as well as those recommended by service providers, into sex trafficking prevention education content. This includes basic sex education, boundaries, consent, context/social rules, healthy relationships, and safety. Offering flexibility in format (e.g., in-person, virtual) can improve program accessibility for youth with IDD. Moreover, developers should be aware of potential challenges to program implementation and strategies to address these challenges. For instance, caregivers' concern with program content may lessen with deliberate family involvement and acknowledgement of their desires to protect youth with IDD from exploitation. Developers are also encouraged to apply UDL principles and guidelines to prevention programming to accommodate multiple learning styles. Additionally, programming should incorporate a trauma-informed, person-centered approach, especially important for at-risk youth who may experience sex trafficking alongside other forms of victimization (Franchino-Olsen et al., 2022; Rothman et al., 2015). Evidence suggests that youth with IDD are at-risk of experiencing polyvictimization (Hellström, 2019; Lapshina & Stewart, 2021), making it imperative for facilitators to know how trauma reactions to content may differ between youth with and without IDD (Mevissen & de Jongh, 2010; Reid et al., 2018).

In regards to policy implications, there is a need for legislation that clarifies if and how school-based sex trafficking prevention is made accessible to youth with IDD. Additionally, more funding is necessary to develop, implement, and evaluate sex trafficking prevention programs for youth with IDD. There is also a need to determine the extent to which policies such as Family First Prevention Services Act (FFPSA) enable child welfare agencies to provide services to systems-involved youth with IDD who have experienced, or are at-risk of experiencing, sex trafficking (Murphy, 2021). Furthermore, organizational policy can articulate agencies' responsibilities for responding to disclosures of sex trafficking and making referrals for services. This should be in accordance with state requirements (e.g., filing a report with CPS) as well as expertise, such as referrals made to professionals with knowledge in both trauma and child development (e.g., forensic interviewers affiliated with a child advocacy center). Lastly, it is paramount for pre-service and in-service mental health and medical professionals to receive cross-sector training in sex trafficking and the support needs of youth with IDD, as these professionals can serve as primary contacts in reported cases of sex trafficking or act as boundary spanners (e.g., establish relationships with other organizations) and secure appropriate services. Organizational policies should clarify when training is offered and the frequency (e.g., during onboarding, on an annual basis, incentives for participating, and whether it is mandatory for specific staff (Scantlebury et al., 2018).

There are several research implications based on the findings of this dissertation. To continue our understanding of the scope of prevalence and risk of sex trafficking among youth with IDD, there is a need for comprehensive screening and intake assessments across various youth-facing settings (e.g., juvenile justice facilities, pediatric hospitals). Future research should also address concerns with temporality (i.e., whether disability precedes victimization) via

longitudinal designs. Sex trafficking prevention education development can benefit from qualitative investigations of the experiences and viewpoints of youth with IDD and their caregivers. It is also important to include youth with IDD as program recipients in evaluations when implementing this programming. Finally, more research is needed to understand if and how relationship factors besides communication frequency may be associated with organizational coordination, as well as how change in coordination over time positively affects change in service outcomes for sex trafficking victims with IDD.

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Table 1.1

Study Characteristics of Prevalence and Prevention Studies

Location & setting	Prevalence studies (N=40) *n* (%)	Prevention studies (N=6) *n* (%)
Geographical Region[a]		
Midwest	7 (17.5)	1 (16.7)
Northeast	5 (12.5)	1 (16.7)
South	4 (10)	1 (16.7)
West	6 (15)	-
National or multiregional	17 (42.5)	1 (16.7)
Setting or Population[b]		
Residential facility	3 (7.5)	-
Child welfare-involved youth	5 (12.5)	-
College students	9 (22.5)	1 (16.7)
Developmental services agency	2 (5)	-
General population	10 (25)	4 (66.7)
Outpatient mental health	3 (7.5)	1 (16.7)
Victim services agency	4 (10)	-
Other	4 (10)	-
Sample Characteristics	***M* (SD) or *n* (%)**	
Size	22–2,977,758	9-84
Age[c]		
Youth	*14.76* (4.83)	*17.3* (2.1)
Adult	*39* (6.22)	-
Disability		
ADHD	18 (45)	2 (33.3)
ASD	8 (20)	6 (100)
ID	10 (25)	2 (33.3)
LD	8 (20)	1 (16.7)
Developmental delay	7 (17.5)	
Racial/ethnic Group[d]		
Majority White & Non-Hispanic	26 (65)	5 (83.3)
Majority Non-White (Hispanic or Non-Hispanic)	11 (27.5)	-
Gender		
Female	36 (90)	6 (100)
Male	29 (72.5)	4 (66.7)
Nonbinary/gender non-conforming	2 (5)	2 (33.3)
Transgender	3 (7.5)	-
Research Characteristics	***n* (%)**	
Sampling methods[e]		
Census data	3 (7.5)	-

Convenience sample	11 (27.5)	6 (100)
Nationally representative	14 (35)	-
Purposive sample	11 (27.5)	-
Traditionally random sample	2 (5)	-
Study Design		
Cross-sectional	33 (82.5)	6 (100)
Longitudinal	7 (17.5)	-
Victimization Type		
DV	5 (12.5)	1 (16.7)
ST	6 (15)	-
SV	31 (77.5)	1 (16.7)

Note. ADHD = attention-deficit hyperactivity disorder. ASD = autism spectrum disorder. ID = intellectual disability. LD = learning disability. DV = dating violence. ST = sex trafficking. SV = sexual violence. [a] Regions are based on U.S. Census Bureau, and not all studies disclosed geographic location. [b] Other populations were a girls' summer camp sample (Briscoe-Smith et al., 2006; Guendelman, Ahmad et al., 2016; Guendelman, Owens et al., 2016) and a cohort of female nurses (Roberts et al., 2015). [c] Four prevalence studies featured adult samples retrospectively reporting sexual violence. [d] Not all studies reported race/ethnicity information, and one study (Kim, 2015) had an equal percentage of White & Non-White participants. [e] McDonnell et al. (2019) utilized convenience and traditionally random sampling.

Table 1.2

Prevention Program Delivery Strategies Mapped onto Universal Design for Learning (UDL) Principles

Study	Representation			Action and expression			Engagement		
	Perception	Language and symbols	Comprehension	Physical action	Expression and communication	Executive functions	Recruiting interest	Sustaining effort and persistence	Self-regulation
Hentoff 2017	X	X	X	X	X	X	X	X	X
Moyher 2018	X	X	X			X		X	
Pugliese 2020	X		X			X	X		
Rothman 2021					X			X	
Rothman 2022							X	X	
Schmidt 2019	X	X	X	X		X	X	X	

Table 1.3

Critical Findings of Prevalence and Prevention Studies

Prevalence
Overall, youth with IDD experience rates of sexual and dating violence that are comparable to or higher than neurotypical youth. In samples of child-welfare involved youth who have experienced sex trafficking, 13% to 28% were diagnosed with IDD. In nationally representative samples, youth with IDD were more likely than neurotypical youth to experience sex trafficking. Studies with dating violence prevalence estimates only featured youth with ADHD or LD, while studies with sex trafficking prevalence estimates primarily featured youth with ID or developmental delays.
Prevention
None of the studies included in the review focused on sex trafficking prevention for youth with IDD. Common prevention program content included healthy boundaries, reproductive anatomy, safe dating and sex practices, and legal consequences of violence. Prevention programs were informed by social thinking theory (Hentoff, 2015), behavior modification and learning theory (Moyher, 2018), and Accessible Sexuality Education Theory (Schmidt, 2019). Rothman, Bair-Merritt et al. (2021) modeled curriculum development on the ADAPT-ITT framework (Wingood & DiClemente, 2008).

Table 1.4

Implications for Practice, Policy, and Research

Practice	Victim services agencies and developmental service agencies can incorporate comprehensive measures of disability and victimization, respectively. When possible, multiple informants or data sources should be included to explore discrepancies in self- and proxy-reporting of victimization.
Policy	States' legislation should clarify how healthy relationships curricula, sexual health education, and violence prevention programming in schools must meet the learning and access needs of youth with IDD. The nuance of dual victim/perpetrator status should be considered when mandating or recommending treatment for youth with IDD who have committed violence.
Research	Future research should incorporate longitudinal study designs to address temporality (i.e., if one's disability preceded or followed victimization). Research on violence prevention programming for youth with IDD should include samples diverse in terms of race/ethnicity, sexuality, and gender.

Table 2.1

Recommendations to Improve Accessibility of Sex Trafficking Prevention for Youth with IDD

Domain	Participant Recommendations
Acceptability of Sex trafficking Prevention Education	
Acceptability	• Encourage family involvement in programming (e.g., offer caregivers sex trafficking prevention education) • Acknowledge caregivers' concerns (e.g., purpose of sex trafficking prevention is framed as form of protection) • Introduce relevant topics (e.g., boundaries, healthy relationships) in early childhood • Provide programming for all youth and, if possible, mixed ability groups
Programming Considerations	
Content	• Include topics such as basic sex education, basic sex trafficking, boundaries, consent, safety, and context/social rules • Maximize engagement through scenarios, role plays, and art/expressive activities
Delivery	• Offer flexibility in format (e.g., in-person, virtual) and settings (e.g., school, community) • Provide learning in groups when possible, or individually if youth with IDD have history of sexual trauma • Choose facilitators based on qualities (e.g., compassionate) and skills (e.g., classroom management), and training (e.g., trauma-informed) • Facilitate in teams with mixed professional expertise (e.g., social work, special education), consultation with content experts, and with flexibility in reflection of audience's needs/prior experiences
Approaches and Accommodations	• Incorporate person-centered and empowerment-based approaches • Use plain language and realistic visuals • Generalize and reinforce concepts across settings • Scaffold material (e.g., break down content or activities into smaller tasks)
System Involvement in the Disclosure and Referral Processes	
Disclosures and Referrals	• Train professionals in signs of sex trafficking and behaviors that youth with IDD may present when in distress • Designate specific personnel to respond to disclosures or make referrals • Collaborate with organizations from relevant sectors (e.g., law enforcement, healthcare) to develop referral protocols and policies, including when and how information is shared • Expand communication options for making disclosures or referrals, including use of an entrusted advocate or support person • Ensure disclosure process is clearly explained and predictable

Table 3.1

Descriptive Statistics for Survey Respondents

Variable	Frequency (N)	Percent (%)
Age		
25 – 34 years	5	11.63
35 – 49 years	24	55.81
50 – 64 years	11	25.58
65 years and older	3	6.98
Gender		
Man	10	21.74
Non-binary	1	2.17
Woman	35	76.09
Race/Ethnicity		
Asian	2	4.35
Black/African American	9	19.57
Latinx/Hispanic	3	6.52
Native American	1	2.17
White/Caucasian	32	69.57
Multi-racial	1	2.17
Professional Background		
Education	9	19.57
Law	6	13.04
Medicine	3	6.52
Public Health	4	8.70
Psychology	9	19.57
Social Work	13	28.26
Sociology	1	2.17
Other	16	34.78
Time with Organization		
1 – 10 years	20	43.48
11 – 20 years	11	23.91
21 – 30 years	13	28.26
31 – 40 years	1	2.17
41+ years	1	2.17

Note. $N = 46$ for all variables except Age ($N = 43$).

Table 3.2

Descriptive Statistics for Organizations

Variable	Frequency (N)	Percent (%)
Organization Type		
Disability	16	34.04
Medical healthcare	1	2.13
Legal/law enforcement	6	12.77
Mental healthcare	9	19.15
Specialized	8	17.02
Violence prevention/response	7	14.89
Length in Time of Existence		
1 to 5 years	4	8.70
6 to 10 years	2	4.35
11 to 15 years	6	13.04
16 to 20 years	4	8.70
21 to 25 years	1	2.17
More than 25 years	29	63.04
Serve Individuals with IDD		
Yes	36	76.6
No	11	23.4
Unsure	0	0.00
Sex Trafficking Prevention		
Yes	10	21.28
No	34	72.34
Unsure	3	6.38

Note. $N = 47$ for all variables except Length in Time of Existence ($N = 46$).

Table 3.3

Density or Proportion of Ties Present Between and Within Organization Types

	D	H	L	M	S	V
			Training Coordination			
D	0.291	0.083	0.280	0.029	0.452	0.125
H		0.000	0.000	0.150	0.400	0.571
L			0.321	0.317	0.235	0.395
M				0.297	0.483	0.417
S					0.333	0.516
V						0.517
			Sharing Resources			
D	0.713	0.667	0.538	0.529	0.795	0.719
H		0.000	1.000	0.750	0.700	0.857
L			0.933	0.878	0.824	0.953
M				0.784	1.000	0.917
S					0.905	1.000
V						0.897
			Sending Referrals			
D	0.496	0.333	0.654	0.358	0.406	0.281
H	0.583	0.500	0.111	0.950	0.500	0.857
L	0.240	0.222	0.280	0.268	0.529	0.651
M	0.521	0.800	0.415	0.757	0.586	0.694
S	0.469	0.700	0.353	0.828	0.524	0.677
V	0.613	0.571	0.605	0.806	0.419	0.603
			Receiving Referrals			
D	0.460	0.583	0.240	0.493	0.469	0.613
H	0.333	0.500	0.222	0.800	0.700	0.571
L	0.654	0.111	0.280	0.390	0.353	0.581
M	0.358	0.950	0.293	0.757	0.828	0.778
S	0.406	0.500	0.529	0.517	0.524	0.419
V	0.281	0.857	0.674	0.694	0.677	0.603
			Two-way Referrals			
D	0.075	0.000	0.012	0.016	0.013	0.005
H		0.000	0.004	0.039	0.011	0.013
L			0.048	0.030	0.014	0.121
M				0.084	0.031	0.051
S					0.038	0.042
V						0.116

Note. D = Disability. H = Medical Healthcare. L = Legal and Law Enforcement. M = Mental Healthcare. S = Specialized Populations or Services. V = Violence Prevention and Response.

Table 3.4

Correlation Coefficients for Coordination, Relationship Strength, and Organizational Similarity

	1	2	3	4	5	6	7	8	9
1. TC	1.000	0.321	0.207	0.208	0.314***	0.506*	0.264	0.182	0.031
2. SI		1.000	0.154	0.146	0.207***	0.320*	0.175	0.117	-0.015
3. SR			1.000	0.344*	0.685***	0.313*	0.087	0.082	-0.001
4. RR				1.000	0.686***	0.312*	0.093	0.078	-0.015
5. TR					1.000	0.457***	0.212***	0.177***	0.113***
6. CF						1.000	0.301	0.269	0.112**
7. RP							1.000	0.827***	0.133***
8. TS								1.000	0.183***
9. OS									1.000

Note. CF = Communication Frequency. OS = Organizational Similarity. RP = Organizational Reliability on Promises. RR = Receive Referrals. SI = Sharing Information and Resources. SR = Send Referrals. TC = Training Coordination. TR = Two-way Referrals. TS = Organizational Trust to Serve Clients.
* p <.05. ** p <.01. *** p <.001.

Table 3.5

Regression of Coordination on Relationship Strength and Organizational Similarity

Outcome	Predictor	b	SE	β
Training Coordination [a]	Constant	0.011***	0.000	
	Communication Frequency	0.171***	0.013	0.509
	Organizational Similarity	-0.028	0.033	-0.029
Sharing Information [b]	Constant	0.635***	0.000	
	Communication Frequency	0.097***	0.011	0.327
	Organizational Similarity	-0.045	0.031	-0.053
Sending Referrals [c]	Constant	0.338***	0.000	
	Communication Frequency	0.116***	0.012	0.317
	Organizational Similarity	-0.036	0.031	-0.035
Receiving Referrals [d]	Constant	0.331***	0.000	
	Communication Frequency	0.116***	0.012	0.317
	Organizational Similarity	-0.050	0.031	-0.048
Two-way Referrals [e]	Constant	-0.029***	0.000	
	Communication Frequency	0.149***	0.014	0.429
	Organizational Similarity	0.004	0.036	0.004
	Reliability on Promises	0.045	0.033	0.087
	Trust to Serve Clients	-0.004	0.033	-0.008

Note. [a] Adjusted- $R^2 = 0.254$. [b] Adjusted- $R^2 = 0.103$. [c] Adjusted- $R^2 = 0.098$. [d] Adjusted- $R^2 = 0.098$. [e] Adjusted- $R^2 = 0.206$.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 1.1

PRISMA Flowchart for Study Selection

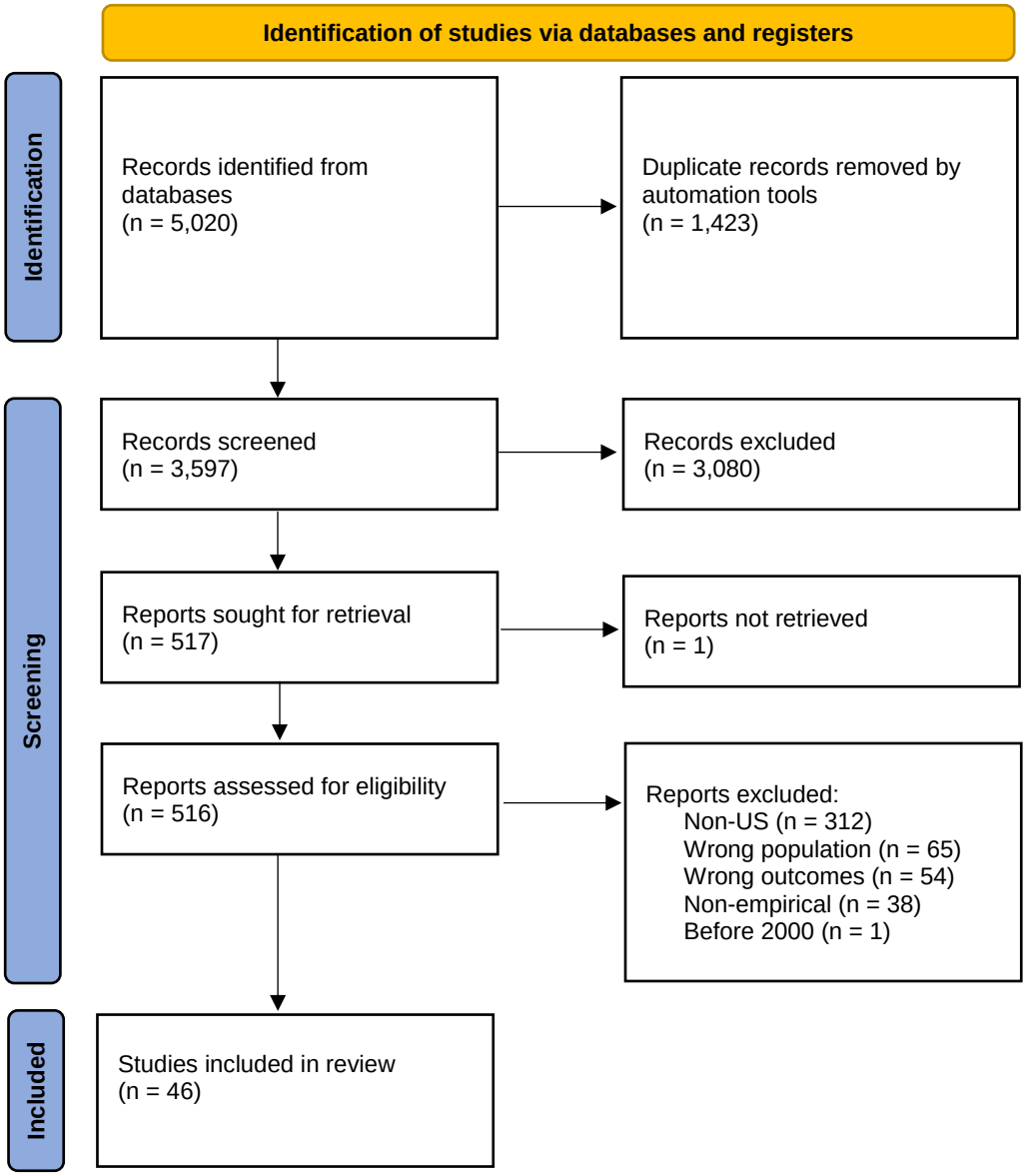
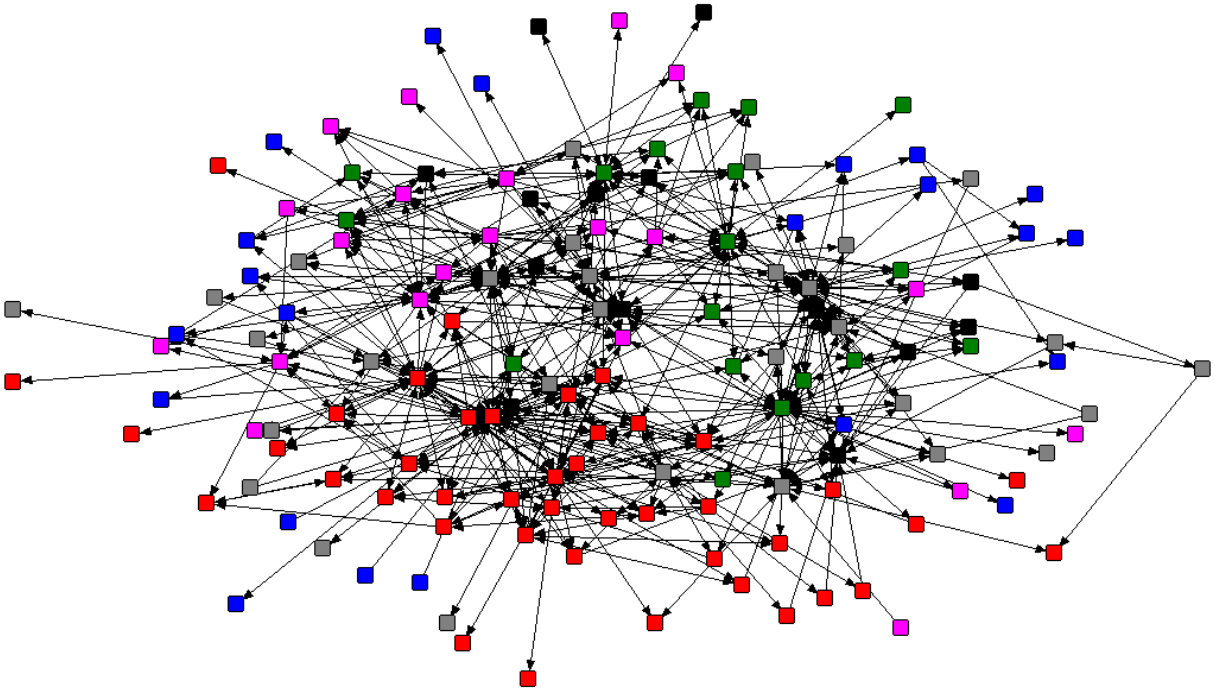


Figure 3.1

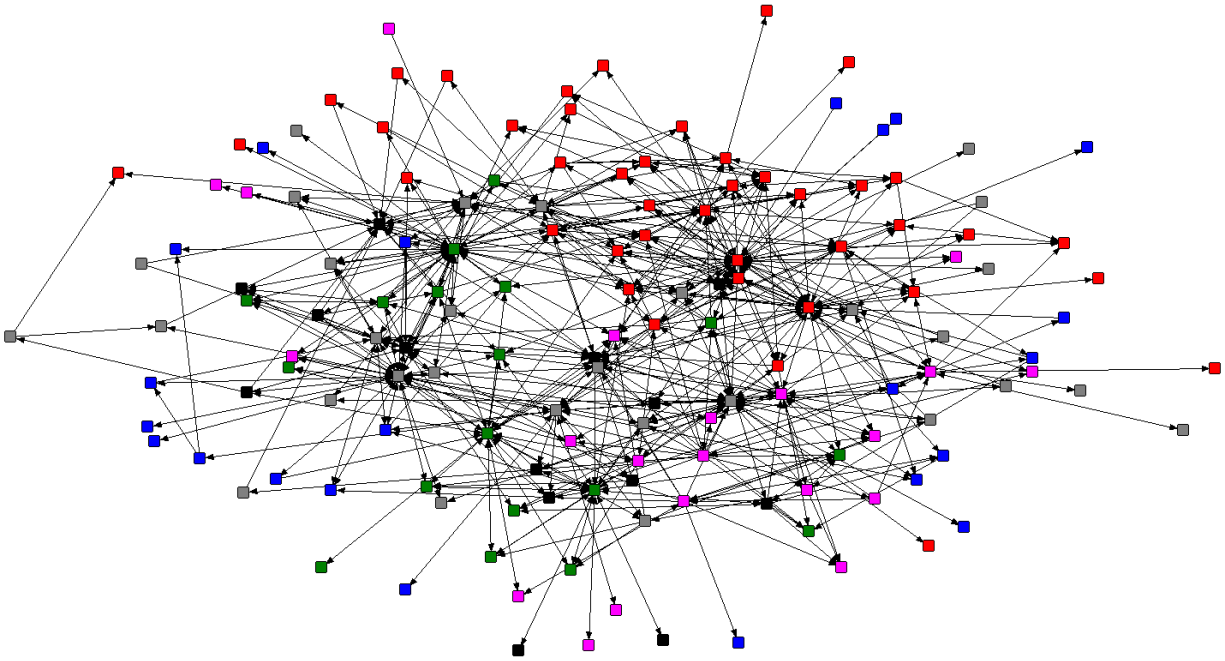
Sending Referrals – Overall Network



Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.2

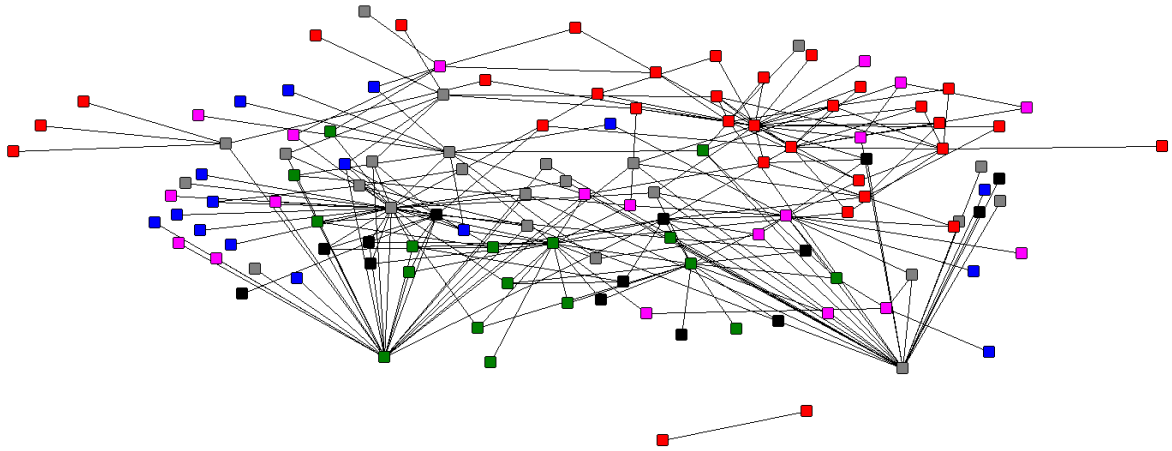
Receiving Referrals – Overall Network



Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.3

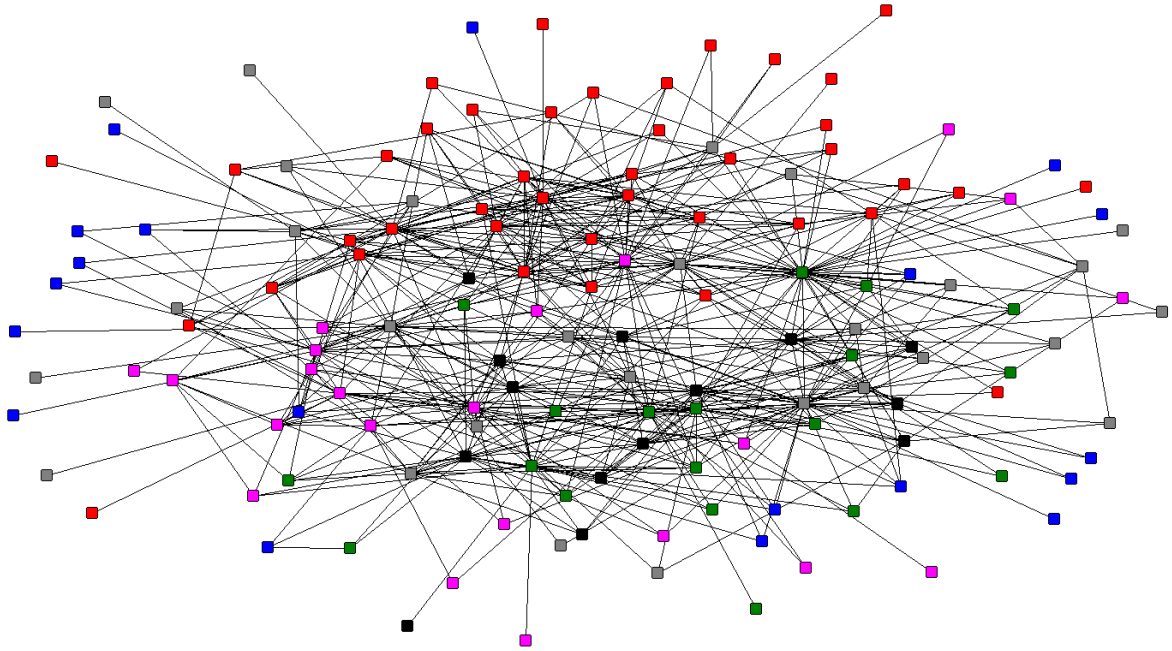
Two-way Referrals – Overall Network



Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.4

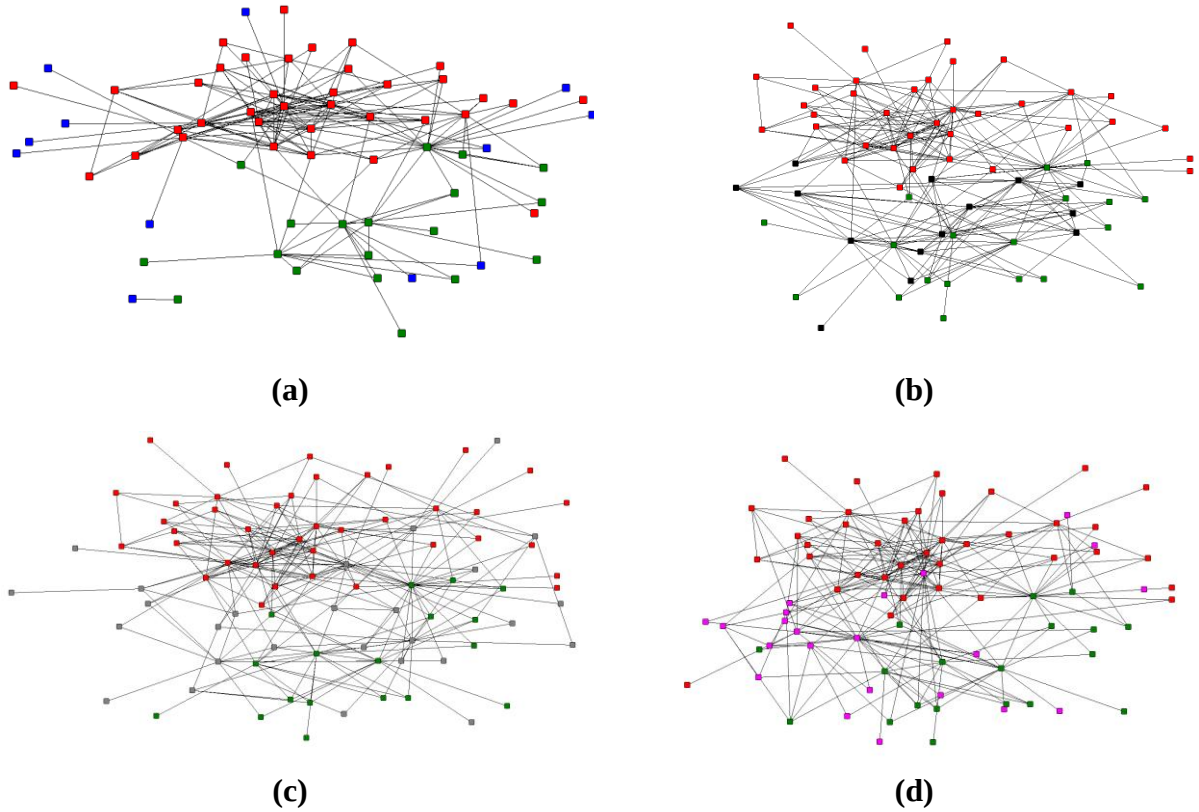
Sharing Information and Resources – Overall Network



Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.5

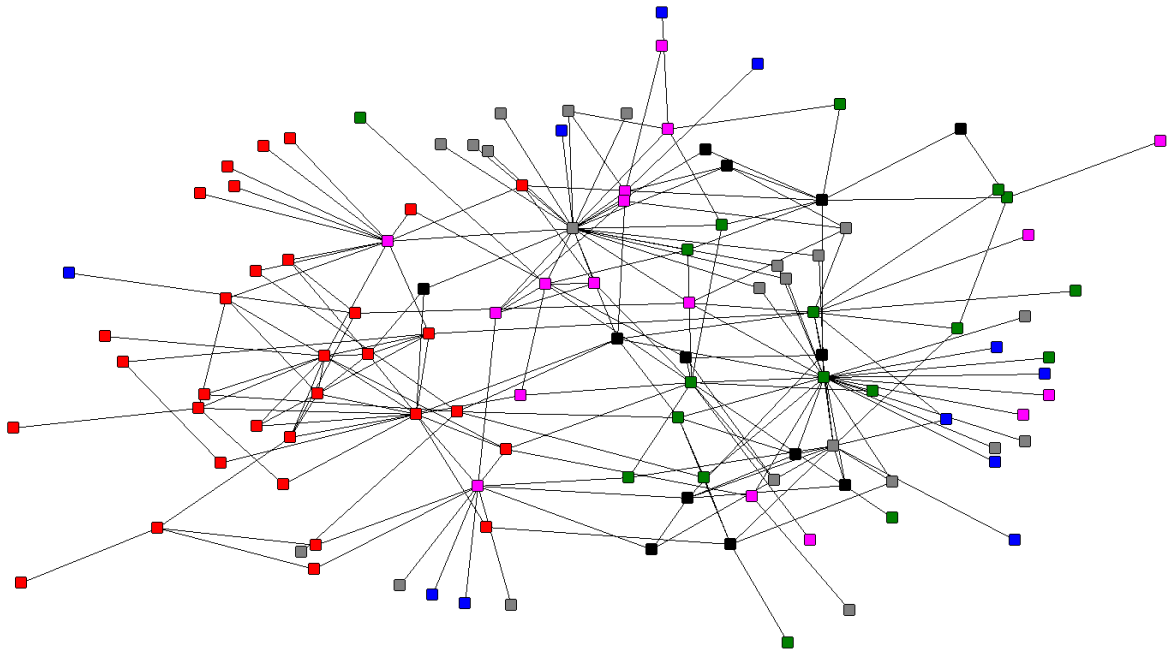
Sharing Information and Resources – Violence Prevention and Response and Disability Subnetworks



Note. **(a)** Subnetwork with Medical Healthcare. **(b)** Subnetwork with Legal and Law Enforcement. **(c)** Subnetwork with Mental Healthcare. **(d)** Subnetwork with Specialized Populations or Services. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.6

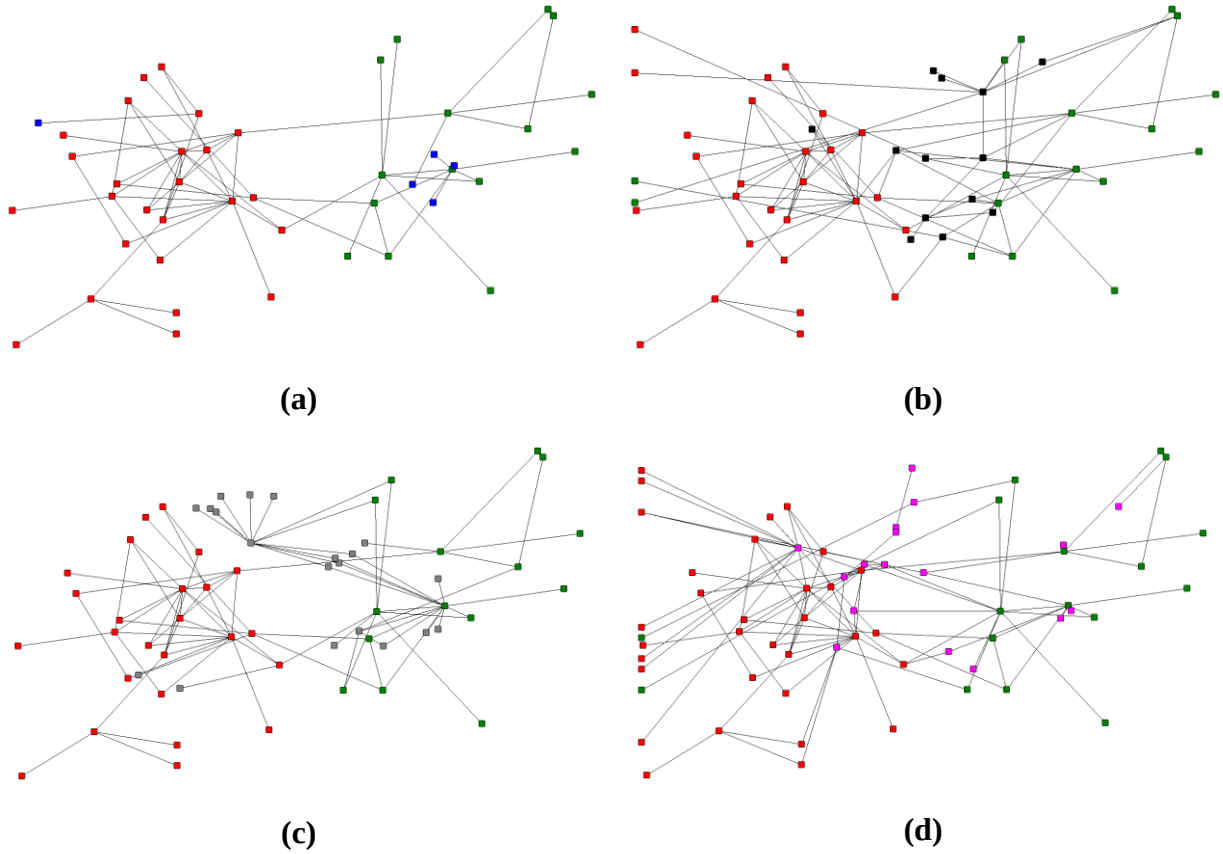
Training Coordination – Overall Network



Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.7

Training Coordination – Violence Prevention and Response and Disability Subnetworks



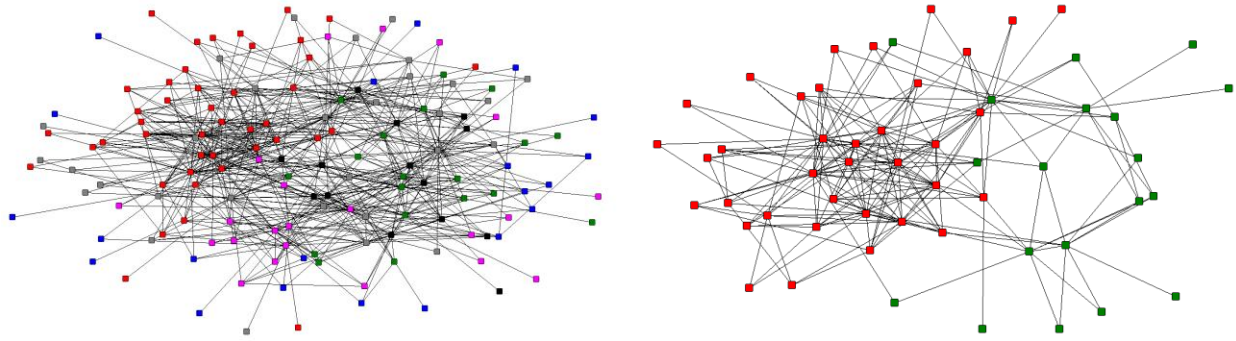
(a) **(b)**

(c) **(d)**

Note. **(a)** Subnetwork with Medical Healthcare. **(b)** Subnetwork with Legal and Law Enforcement. **(c)** Subnetwork with Mental Healthcare. **(d)** Subnetwork with Specialized Populations or Services. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.8

Communication Frequency - At Least Once in 6 Months

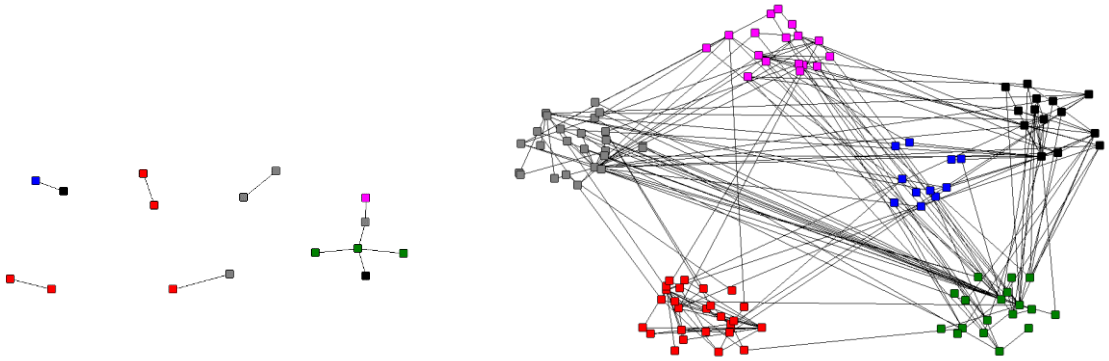


(a) **(b)**

Note. **(a)** Overall Network. **(b)** Subnetwork with Violence Prevention and Response and Disability. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.9

Confidence in Organizational Promises

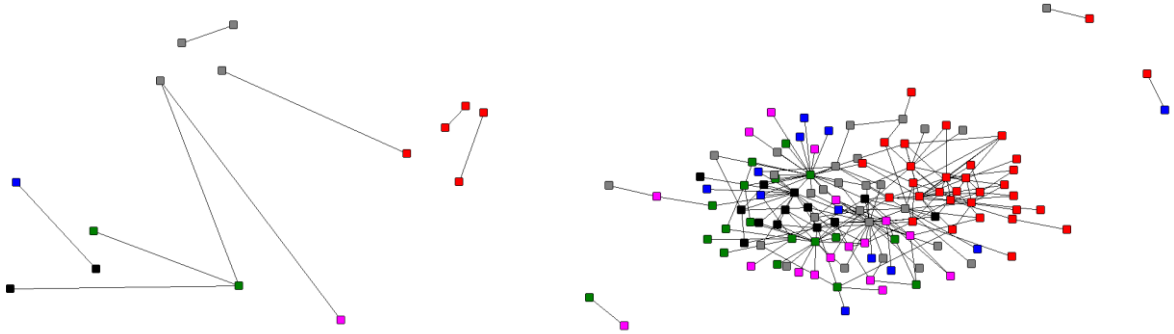


(a) **(b)**

Note. **(a)** Negative ties (i.e., never, strongly disagree, or disagree). **(b)** Very positive ties (i.e., strongly agree). Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

Figure 3.10

Organizational Trust to Serve Clients Appropriately



(a) **(b)**

Note. **(a)** Negative ties (i.e., never, strongly disagree, or disagree). **(b)** Very positive ties (i.e., strongly agree). Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).

APPENDIX 1A: SEARCH STRATEGY TERMS

Search String: (sexual maltreatment OR sexually maltreated OR sexual harassment OR sexual coercion OR sex* assault* OR sexual violence OR sexual violation OR sexually violated OR rape OR dating violence OR dating aggression OR dating abuse OR partner violence OR domestic violence OR sexual exploit* OR sexually exploit* OR sex traffick* OR human traffick* OR domestic servitude OR commercial sexual exploitation of children OR CSEC OR prostitu*) AND (intellectual disabilit* OR development* disorder* OR cognitive impairment* OR cognitive disabilit* OR developmental disabilit* OR developmental delay OR learning disabilit* OR borderline intellectual functioning OR mental disabilit* OR mentally disabled OR mental* handicap* OR mental* retard* OR autism OR autistic OR asperger*) AND (prevention OR intervention OR program* OR training* OR educat* OR awareness OR curricul* OR knowledge OR prevalence OR incidence OR rate OR risk OR number OR estimate OR total)

Controlled Vocabulary for EBSCO Databases (CINAHL, ERIC, and PsycInfo)

CINAHL (CINAHL Subject Headings): (Sexual Harassment OR Dating Violence OR Dating OR Intimate Partner Violence OR Rape OR Human Trafficking) AND (Developmental Disabilities OR Child Development Disorders, Pervasive OR Autistic Disorder OR Intellectual Disability) AND (Violence Prevention and Control OR Sexual Abuse Prevention and Control OR Intimate Partner Violence Prevention and Control OR Dating Violence Prevention and Control OR Human Trafficking Education OR Human Trafficking Prevention and Control OR Knowledge OR Health Knowledge OR Curriculum OR Risk Factors OR Statistics OR Prevalence OR Incidence)

ERIC (ERIC –Thesaurus): (Rape OR Sexual Harassment OR Sexual Abuse OR Family Violence OR Dating (Social) OR Slavery OR Victims of Crime) AND (Intellectual Disability

OR Mild Intellectual Disability OR Moderate Intellectual Disability OR Severe Intellectual Disability OR Developmental Disabilities OR Pervasive Developmental Disorders OR Autism) AND (Special Education OR Sex Education OR Health Education OR Health Promotion OR Prevention OR Crime Prevention OR Intervention OR Curriculum OR Training OR Risk OR Incidence OR At Risk Persons)

PsycInfo (APA Thesaurus of Psychological Index Terms): (Sexual Violence OR Dating Violence OR Intimate Partner Violence OR Sex Trafficking OR Sexual Harassment OR Rape OR Sexual Coercion) AND (Neurodevelopmental Disorders OR Intellectual Development Disorder OR Developmental Disabilities OR Autism Spectrum Disorders OR Cognitive Impairment) AND (Violence Prevention OR Health Education OR Sex Education OR Health Literacy OR Health Information OR Health Awareness OR Health Promotion OR Intervention OR Training OR Curriculum OR Statistical Estimation OR Statistical Measurement OR Statistical Data OR Population (Statistics) OR Risk Assessment OR At Risk Populations OR Risk Factors) CINAHL (CINAHL Subject Headings) Subjects SU

Controlled Vocabulary for ProQuest Databases: (ASSIA, Sociological Abstracts, Social Services Abstracts, and ProQuest Criminal Justice)

Applied Social Sciences Index and Abstracts Thesaurus (ASSIA): (Sexual violence OR Dating OR Domestic violence OR Sexual assault OR Rape OR Abusive relationships OR Sexual harassment OR Trafficking OR Human trafficking OR Violent Crime OR Slavery OR Exploitation OR Child prostitution OR Prostitution) AND (Learning disabilities OR Mental retardation OR Verbal disability OR Developmental disorders OR Neurodevelopmental disorders OR Autism OR Pervasive developmental disorders OR Cognitive impairment) AND (Prevention OR Crime prevention OR Prevention programs OR Preventive strategies OR Health

education OR Education OR Sexual health education OR Health information OR Health promotion OR Sexual health promotion OR Intervention OR Training OR Curriculum OR At risk OR Risk factors OR Prevalence OR Incidence OR Estimates)

Sociological Abstracts and Social Services Abstracts Thesaurus: (Sexual Harassment OR Sexual Assault OR Partner Abuse OR Coercion OR Sexual Coercion OR Dating (Social) OR Intimate partner violence OR Rape OR Slavery OR Exploitation OR Prostitution OR Trafficking OR Human Trafficking) AND (Developmental Disabilities OR Mentally Retarded OR Autism OR Intellectual disabilities OR Cognitive impairment) AND (Prevention OR Prevention programs OR Crime Prevention OR Intervention OR Training OR Curriculum OR Health Education OR Sex Education OR Risk OR Risk Factors OR Rates OR Estimation OR Sampling OR Population)

ProQuest Criminal Justice Database Thesaurus: (Sexual harassment OR Intimate partner violence OR Domestic violence OR Dating—Social OR Rape OR Human trafficking OR Sex Trafficking OR Prostitution OR Slave trade OR Slavery) AND (Disabled children OR Developmental disabilities OR Intellectual disabilities OR Autism) AND (Prevention OR Crime prevention OR Prevention programs OR Health education OR Health literacy OR Health promotion OR Education OR Sex education OR Intervention OR Curricula OR Estimates OR Risk OR Risk Factors OR At risk youth OR Statistical data OR Criminal statistics OR Meta-analysis OR Sampling OR Population)

Controlled Vocabulary for PubMed (MeSH): (Human Trafficking OR Enslavement OR Rape OR Intimate Partner Violence OR Sex Offenses OR Domestic Violence OR Sexual Harassment OR Sex Work) AND (Disabled Children OR Disabled Persons OR Persons with Mental Disabilities OR Intellectual Disability OR Developmental Disabilities OR Neurodevelopmental

Disorders OR Autism Spectrum Disorder) AND (Primary Prevention OR Preventive Health Services OR Health Education OR Health Promotion OR Sex Education OR Education of Intellectually Disabled OR Education, Special OR Psychosocial Intervention OR Curriculum OR Prevalence OR Incidence OR Risk)

Controlled Vocabulary for Social Care Online Subject: (rape OR sexual harassment OR domestic violence OR violence OR partner abuse OR harmful sexual behaviour OR prostitution OR human trafficking OR modern slavery) AND (disabilities OR severe disabilities OR autistic spectrum conditions OR autism OR Aspergers syndrome OR learning disabilities OR severe learning disabilities) AND (prevention OR crime prevention OR intervention OR education OR health education OR training OR population OR sampling methods OR risk)

Controlled Vocabulary for ProQuest Dissertations & Theses Global: (Exact("rape" OR “sexual harassment” OR “domestic violence” OR “human trafficking” OR “slavery” OR “prostitution” OR "disability” OR “intellectual disabilities” OR “developmental disabilities” OR “autism” OR “prevention” OR “crime prevention’ OR “prevention programs” OR “health education” OR “education” OR “intervention” OR “health promotion” OR “estimates” OR “risk factors”))

APPENDIX 1B: PREVALENCE STUDY FINDINGS

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
Ballan 2014; New York City, NY	Retrospective chart review; Convenience sample	Female survivors of domestic violence with physical, psychiatric, sensory, and developmental disabilities in Secret Garden program (N=886); Developmental disability: n=74 (8.4% of overall sample)	M=43.4 years (SD= 11.3), range = 19-81 years	SV (CSA)	• IDD: Developmental disability (medical documentation or self-reported disability diagnosis) • SV: measure not specified	Developmental Disability: • Experienced SV: n=16 (38.1%)[a]
Briscoe-Smith 2006; San Francisco Bay Area, California	Cohort study; Purposive sample	Girls with and without ADHD attending summer camp (N=228); ADHD: n=140 (61.4% of overall sample)	ADHD: M=9.7 (SD=1.7) years Comparison: M=9.4 (SD=1.6) years	SV	• IDD: ADHD (Child Behavior Checklist [CBCL], Swanson, Nolan, and Pelham Rating Scale [SNAP], parent-administered Diagnostic Interview Schedule for Children, Version IV [DISC-IV])	Experienced SV: • ADHD: n=10 • Comparison: n =2

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					• SV: hot sheet based on Child Protective Services (CPS) reports and clinical notes from staff	
Carrellas 2021; 83 counties in nine geographic areas in the United States	Cohort study; Nationally representative sample	Transitioning youth who were subjects of investigation by CPS (N=334)	18 - 19.5 years	SV and ST	• IDD: ID (Kaufmann Brief Intelligence Test [K-BIT]) • SV ("In the past 12 months, has someone victimized you sexually?") • ST ("In the past 6 months, have you been paid for having sexual relations with someone?")	Intellectual ability and SV: • B=0.02 (SE=0.01), p-value=.108, OR:1.02, 95% CI [1.00— 1.04] Intellectual ability and ST: • B=-0.09 (SE=-3.03), p-value=0.002, OR: 0.92, 95% CI [0.86— 0.97]
Dye 2021; New Hampshire	Retrospective chart review; Convenience sample	Clients with IDD of developmental services agency (N=41); Mild ID (58.5%), Moderate ID (17.1%), Autism (4.9%), Borderline ID	22-67 years	SV (CSA)	• IDD: diagnoses from records and derived from DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) criteria • SV: Behavioral Risk Factor	Overall IDD: • Molestation: n=16 (39%) • Forced rape: n=12 (29.3%) • Coerced touch: n=11 (26.8%)

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		(4.9%), PDD (4.9%), Down Syndrome (2.4%)			Surveillance System (BRFSS) Adverse Childhood Experiences Questionnaire	
Edinburgh 2006; Midwest	Retrospective chart review; Convenience sample	Clients of hospital-based child advocacy center who experienced SV (N=290) Girls: n=226 (78%) Boys: n=64 (22%)	10-14.99 years Girls: M=12.58 years Boys: M=11.83 years	SV	• IDD: ADHD-prior diagnosis • SV: Medically diagnosed cases of extrafamilial sexual abuse	Experienced SV (Boys): • ADHD: 33.9% Experienced SV (Girls): • ADHD: 9.9%
Escovedo 2020; Los Angeles, CA	Retrospective chart review; Convenience sample	Youth who experienced human trafficking seeking services from Coalition to Abolish Slavery (N=125), sex trafficking: n=110 (88%), labor trafficking: n=12 (10%), both: n=3 (2%)	15-24 years	ST	• IDD: developmental disability (self-reported disability diagnosis) • ST: measure not specified	Experienced human trafficking:[b] • Developmental Disability: n=4 (9%) • Individualized Education Program (IEP) in school: n=11 (25%)

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
Ford 2000; New Hampshire	Retrospective case control design; Convenience sample	Clients of outpatient child psychiatry clinic (N=165) ADHD only (n=50) ODD only (n=27) ADHD/ODD (n=40)	M=12 years, SD=3.4 years ADHD: M=11.5 years, SD=2.3 years ADHD/OD D: M=11.6 years, SD=3.5 years	SV	• IDD: ADHD and ODD (clinical diagnosis using DSM-IV criteria and parent-reported SNAP-IV) • SV: Traumatic Events Screening Inventory - Child (TESI-C) and Parent (TESI-P)	ADHD only: • Experienced SV: 11% ODD only: • Experienced SV: 18% ADHD/ODD: • Experienced SV: 31%
Franchino-Olsen 2020; National	Cohort study; Nationally representative sample	Adolescents in 7th-12th grade (N=5,430) Low cognitive ability (n=82, 1.55%)	12-18 years 25.63% (n=1094) 12-14 years 41.66% (n=2219) 15-16 years 32.71% (n=2117) 17-18 years	ST	• IDD: Low cognitive ability - Add Health Picture Vocabulary Test (AHPVT) • ST: survey item ("given someone sex in exchange for money or drugs" or "exchanged sex with specified partners)	Low cognitive ability: • Experienced ST: (9.7%) High cognitive ability: • Experienced ST (2.16%) OR: 4.86, 95% CI [1.58—14.91]
Goldman 2015; Midwest	Retrospective chart review; Convenience sample	Adolescent survivors of childhood sexual abuse who resided	M=16 years (12-20 years)	SV	• IDD: ID (DSM-IV-R, WISC-IV [Wechsler Intelligence Scale	Experienced SV: • ADHD: n=60 • Borderline Intellectual

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		in a residential facility (N=187)			for Children], WAIS-IV [Wechsler Adult Intelligence Scale], WASI [Wechsler Abbreviated Scale of Intelligence]), ADHD (diagnosis) • SV: admissions interview	Functioning: n=23 • Mild Mental Retardation: n=6
Guendelman, Ahmad 2016; San Francisco Bay Area, California	Cohort study; Purposive sample	Young women with ADHD who previously attended summer camp (N=140) Wave 1: n=140 Wave 2 : n=128 Waves 1 and 2: n=140	Wave 1: M=9.6 (SD=1.7) years Wave 2: M=14.3 (11-18) years Wave 3: M= 19.7 (17-23) years	SV	• IDD: ADHD (childhood diagnosis) • SV: hot sheet based on CPS reports and clinical notes from staff	ADHD: • Wave 1 SV: n=10 (7.1%,) • Wave 2 SV: n=10 (7.1%,) • Waves 1 and 2 SV: n=16 (11.4%,)
Guendelman, Owens 2016; California	Cohort study; Purposive sample	Young women with and without ADHD who previously attended summer camp (N=193) ADHD: n=114	Wave 1 (N = 228; M age = 9.6 years [ADHD n=114, M=9.7, SD=1.7]) Wave 2 N= 210 (92%	DV	• IDD: ADHD (Diagnostic Interview Schedule for Children [DISC-IV] and the SNAP-IV) • DV: Health and Sexual Behavior	ADHD: • Experienced DV: 30.7% Non-ADHD: • Experienced DV: 6.3% χ^2 (1, N = 193) = 16.87 OR: 6.56,

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
			retained; M age = 14.2 years, range = 11 to 18 years) Wave 3N=216 (95% retained; M age = 19.6 years, range = 17 to 24)		Questionnaire, "In any chosen sexual relationship you've had, has there been physical violence (pushing, punching, slapping)?"	95% CI [2.44—17.63]
Hartmann 2019; National (mainly East Coast)	Cross sectional study; Purposive sample	Dyads (N=200) consisting of young adults with autism (n=100) and their parents (n=100)	M=22 years (SD=3)	SV	• IDD: ASD (Autism Quotient 10) • SV: Sexual Experiences Survey, victimization; includes situations of deceit or threats (e.g., partner said things they didn't mean, threatened to end relationship)	ASD: • Self-report SV: 62% • Parent-report SV: 54%
Helton 2018; National	Cross sectional study; Nationally representative sample	Youth who are subjects of investigation by CPS (N=2033)	LD: M=12 years (SE=0.3) Non-LD:	SV	• IDD: LD (parent-reported; told by education or health professional that had specific LD)	Sexual abuse allegation: • LD: 21% (SE=4.8)

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
			M=9.9 years (SE=0.1)		• SV: CPS caseworker reported	• Non-LD: 10% (SE=1.4) Substantiated Sexual abuse: • LD: 27% (SE=4.7) • Non-LD: 22% (SE= 1.6) OR: 9.39, SE: 4.59, p<.01
Jefferson 2020; National	Cross sectional study; Nationally representative sample	Male college students (N= 34,876); n=995 w/ cognitive disabilities	M= 22.67 (SD=5.90) years 18-24 (79%) 25-30+ (20.9%)	SV	• IDD: Cognitive/intellectual disability (self-report that a learning disability has affected the participant's academic performance--: "Within the last 12 months, have any of the following affected your academic performance? [e.g., lower grade on exam or in course, dropped course, being diagnosed	Cognitive disability: • Experienced SV: n=92 (9.6%) Non-Cognitive disability: • Experienced SV: n=1258 (4.8%) OR: 2.09

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					with a learning disability in one's lifetime]" • SV: survey item "Within the last 12 months, were you sexually touched without your consent? Was sexual penetration attempted (vaginal, anal, oral) without your consent? Were you sexually penetrated (vaginally, anal, oral) without your consent?"	
Kim 2015; National	Cohort study; Nationally representative sample	Young adults in a panel of children born between 1984 and 1997 (N=1,726); n=822 for ADHD and SV outcome		SV	• IDD: ADHD (mother-reported hyperactive problem behaviors) • SV: (ever been raped between ages 13-18)	Overall sample: • SV cumulative prevalence by age 23: 12% Individual effects: • ADHD and SV without mother fixed effect: B=0.002 (SE=0.000), R=0.056, p<.01

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
						• ADHD and SV with mother fixed effect: B=0.002 (SE=0.001), R=0.070, p<.05 Comorbidity (with antisocial, depression, and headstrong behaviors): • ADHD and SV without mother fixed effect: B=0.001 (SE=0.001), R=0.058, ns • ADHD and SV with mother fixed effect: B=0.001 (SE=0.001), R=0.067, p<.10
Mandell 2005; National	Retrospective chart review; Convenience sample	Children with autism receiving community-based mental health services	M=11.6 years (SD= 3.8)	SV	• IDD: Autism or Asperger's diagnosis (DSM-IV criteria)	ASD: • Experienced SV only: 12.2%

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		(Comprehensive Community Mental Health Services for Children and their Families Program) (N=156)			• SV: caregiver clinical interview asked "has (child's name) ever been sexually abused?"	• Experienced SV and physical abuse: 4.4%
McCarthy 2020; Not specified	Retrospective chart review; random sampling (patients randomly selected by alphabetical order of their last names)	Adolescents with intellectual impairment and psychiatric disorders in residential treatment facility (N=98)	M=15.26 years, SD= 1.65 in text, (M=16.06 in abstract)	SV	• IDD: Intellectual impairment (IQ M=62.26, SD=9.01; 95% of sample IQ was below 75); WISC-IV, WASI, WAIS-III • SV: documented abuse report at admission	ID: • Experienced SV: n=46 (46.9%)
McDonnell 2019; South Carolina	Case control study; convenience sampling (IDD) and random sampling (non-IDD) Randomly selected population control (state birth certificate records matched to South Carolina Autism	Children born in 1992, 1994, 1996, and 1998 in 23 counties in South Carolina (N=4,988) ASD only (n=316) ID only (n=1,280) ASD+ID (n=291) Population	Birth year 1992: ASD only: n=69 ASD+ID: n=85 ID only: n=183 PC: n=788	SV	• IDD: Autism (DSM-IV-TR), ID (standardized cognitive test score <70) Autism+ID; school (special education within past two years) and clinic records	Each reference is PC (based on 4953 subsample) SV and ASD only: • Report Adjusted OR: 1.09, 95% CI [0.33—3.62], ns

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
	and Developmental Disabilities Monitoring Network)	control (PC) (n=3,101)	Birth year 1994: ASD only: n=65 ASD+ID: n=74 ID only: n=397 PC: n=717 Birth year 1996: ASD only: n=72 ASD+ID: n=46 ID only: n=330 PC: n=599 Birth year 1998: ASD only: n=110 ASD+ID: n=86 ID only:		• SV: Department of Social Services (DSS) records of reports and substantiations	• Substantiation Adjusted OR: 0, ns SV and ID only: • Report Adjusted OR: 2.76, 95% CI [1.75—4.37], p<.000 • Substantiation Adjusted OR: 2.40, 95% CI [1.01—5.71], p=.048 SV and ASD+ID: • Report Adjusted OR: 3.13, 95% CI [1.51—6.50], p=.002 • Substantiation Adjusted OR: 3.48, 95% CI [0.92—13.21], ns

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
			n=370 PC: n=997			
McGrath 2007; Vermont	Retrospective chart review; Convenience sample	Recipients of community-based services for adult male sex offenders with intellectual disabilities (N=103)	M=34.6 years (SD=12.5; range 18 to 70)	SV (CSA)	• IDD: ID (DSM-IV-TR criteria) • SV: measure not specified	ID: • Experienced SV: n=38 (36.9%)
Ngo 2018; Michigan	Cross sectional study; Purposive sample	7th-12th graders in public middle and high schools (Secondary Student Life Survey) (N=4665); clinically significant ADHD: 4.7%	(Only grade level reported) 7th grade or 8th grade: 26.2% 9th or 10th grade: 31.3% 11th or 12th grade: 42.7%	SV	• IDD: ADHD (Youth Self Report (YSR/11-18 uses DSM-IV criteria) • SV: frequency during past 12 months of being stared at in a sexual way, being teased in a sexual way, receiving unwanted sexually obscene phone calls, receiving unwanted sexual messages, receiving unwanted kisses, hugs, and touching, and being made to	Females: • ADHD and SV: OR: 1.72, 95% CI [1.17—2.54] Males: • ADHD and SV: OR: 1.54, 95% CI [1.04—2.29]

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					have unwanted sexual intercourse	
Nichols 2018; Michigan	Qualitative research; Purposive sample	Female college-aged SV/DV victims living with a mental health and/or behavioral disability (N=27)	19-24 years	SV and DV	• IDD: ADHD (self-report diagnosis) • SV/DV: asked whether subjects had ever been forced to participate in a sex act against their will, whether subjects had been threatened, coerced, or physically forced into sexual contact that did not result in intercourse, and whether subjects had every been physically hurt by an intimate partner or acquaintance since turning eighteen	Experienced SV/DV: • ADHD: n=5 (18.5%)
Ouyang 2008; National	Cohort study; Nationally	Adolescents in grades 7 through	M=21.8 years (18-	SV	• IDD: ADHD (survey items using DSM-IV criteria,	ADHD: • Experienced SV: 9%,

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
	representative sample	12 (N=14322); 8.3% ADHD	28) at Wave 3		self-reported symptoms between 5 and 12 at Wave 3) • SV: frequency before sixth grade of contact sexual abuse (touching the child in a sexual way, forcing the child to touch the parent or caregiver in a sexual way, or forcing the child to have sexual relations) at Wave 1	Non-ADHD: • Experienced SV: 4% p<.001 SV and all ADHD: • OR: 2.31, 95% CI [1.64—3.24], p<.001 SV and inattentive: • OR: 2.61, 95% CI [1.52—4.48], p<.001 SV and hyperactive/impulsive: • OR:1.55, 95% CI [0.88—2.73], ns SV and ADHD combined: • OR: 2.90, 95% CI [1.69—4.95], p<.001
Perrigo 2018; National	Cohort study; Nationally representative sample	Young children referred to child protective services (N=2683)	Baseline: M=35.7 months (95% CI [34—37.4 months])	SV	• IDD: Developmental delay: (1) language ability based on the Preschool Language Scale-3; (2) daily living adaptive	No differences were found between children with and without delay in sexual maltreatment allegation

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					skills using the Vineland Adaptive Behavior Scale Screener-Daily Living Skills; (3) social adaptive skills using the Vineland Adaptive Behavior Scale Screener-Socialization Skills; (4) cognitive ability based on the Battelle Developmental Inventory, 2nd Edition or the Kaufman Brief Intelligence Test (depending on age) • SV: sexual abuse allegation based on CPS report	
Reid 2018; Southern and Central Florida	Mixed methods; Purposive sample	Female youth who have experienced sex trafficking prior to age 18 (N=54)	Age at initial exploitation Full sample: M= 14.22 years (SD=2.52),	ST	• IDD: ID (WICS-IV, Woodcock-Johnson Test of Cognitive Abilities, CBCL scales for activities, social relations,	Experienced ST: • ID: n=15 (28%)

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
			5-17 years W/ ID: M= 15.08 years (SD=1.50), 13-17 years		school, and total competence, clinician statements indicating limited cognitive abilities) • ST: youth self-report, caregiver report, official report by law enforcement, and/or records provided by child protective services	
Reyns 2019; National	Cross sectional study; Nationally representative sample	Young adults enrolled in undergraduate degree programs (Full sample: N=40,387 No disability: n=32,968 LD: n=3653)	18-25 years Full sample: M=19.85, SD=1.63 LD: M=20.16, SD=1.76	SV	• IDD: LD (including ADHD; asked if "have any of the following disabilities or medical conditions") • SV: "Within the last 12 months: (a) Were you sexually touched without your consent? (b) Was sexual penetration attempted (vaginal, anal, oral) without	Full sample: • Experienced SV: n=2,923 (7.24%) No disability: • Experienced SV: n=2,040 (6.19%) LD: • Experienced SV: n=235 (11.17%)

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					your consent? and (c) Were you sexually penetrated (vaginal, anal, oral) without your consent?"	
Roberts 2015; National (14 populous U.S. states)	Cohort study; Convenience sample	Female nurses who are mothers (N= 1,077) Quintile 1: fewest ASD symptoms (N=211) Quintile 2 (N=224) Quintile 3 (N=220) Quintile 4 (N=209) Quintile 5: most ASD symptoms(N=213)	Birth year median: Autistic Quintile 1, 3-5: 1958 Autistic Quintile 2: 1957	SV (CSA)	• IDD: ASD (Social Responsiveness Scale); spouse/partner or close relative report • SV: unwanted sexual touching by an adult or older child and forced or coerced sexual contact by an adult or older child before age 12 or between ages 12 and 17	Highest ASD traits: • Experienced SV: 40.1% Lowest ASD traits: • Experienced SV: 26.7% OR=1.81, 95% CI [1.20—2.74); Wald χ^2 p<0.01
Rothman 2021; National	Cross sectional study; nationally representative	Undergraduate and graduate students (N= 219,633); n=1,411 autistic	Autistic: 18-22 (74.7%), 23-25 (14.4%) Non-autistic: 18-22	SV	• IDD: ASD (self-report, healthcare professional diagnosed you with ASD, Aspergers or PDD Not Otherwise	ASD: • Experienced SV: 9.3% Non-ASD: • Experienced SV: 9.0%

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
			(69.3%), 23-25 (11.7%)		Specified, write-in responses) • SV: "In the past 12 months, has anyone had unwanted sexual contact with you? Please count any experience of unwanted sexual contact [e.g., touching of your sexual body parts, oral sex, anal sex, sexual intercourse, and penetration of your vagina or anus with a finger or object] that you did not consent to and did not want to happen regardless of where it happened."	
Sacchetti 2017; Midwest, Mountain West, and	Cross sectional study; Purposive sample	College students primarily from psychology department participant pool N=176	18-19 years (79%)	DV	• IDD: ADHD (Barkley Adult ADHD Rating Scale [BAARS-IV])	ADHD and DV: • r=.11 (ns) • DV predictor: b=7.39 (SE=6.84), 95%

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
Mid-Atlantic		n=31 ADHD/ADD (17.6%)			• DV: Revised Conflict Tactics Scale Short Form	CI (-6.22, 20.99), ns ADHD symptomology did not significantly predict DV victimization; instead, the significant effect was driven by antisocial personality trait (no betas shown) ANCOVA of DV and Elevated vs. Low ADHD symptoms: Elevated ADHD: • DV: M=4.48, SD=8.66 Low ADHD: • DV: M=2.73, SD=4.97 F= 0.08, η^2=.007, ns
Scherer 2011; National	Cross sectional study; Nationally	Undergraduate students (N= 20,486); n=1,461 (ADHD	Full sample: M=19.6 (1.56) years	SV	• IDD: LD- Do you have any of the following	Students w/o a disability are the reference groups

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
	representative sample	[n=1,048] and LD [n=698] combined)			disabilities or medical conditions? (ADHD or LD) • SV: within the last 12 months: 1) was the respondent sexually touched without his/her consent; 2) was sexual penetration attempted [vaginal, anal, oral] without the respondent's consent; or 3.) was a respondent sexually penetrated [vaginal, anal, oral] without his/her consent	Overall LD: • Sexual assault: n=171 (11.73%) Z-test: 1.85, p<.05 • Sexual touch w/o consent: n=151 (10.39%) Z-test: 1.57, p<.05 • Rape (attempted or completed): n=68 (4.67%) Z-test: 0.91, ns ADHD: • Sexual assault: n=125 (11.95%) Z-test: 1.70, p<.05 • Sexual touch w/o consent: n=110 (10.55%) Z-test: 1.43, ns • Rape (attempted or completed): n=56 (5.36%), Z-test: 1.12, ns LD: • Sexual assault: n= 86 (12.37%) Z-test: 1.58, p<.05

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
						• Sexual touch w/o consent: n=77 (11.11%) Z-test: 1.40, ns • Rape (attempted or completed): n=33 (4.75%) Z-test: 0.69, ns
Scherer 2016; National	Cross sectional study; Nationally representative sample	Undergraduate students (N=20,486) n=17,422 w/o disability n=1,083 LD	M=19.63 years (SD=1.56)	DV	• IDD: LD (Do you have any of the following disabilities or medical conditions? ADHD or LD) • DV: within the last 12 months they had been in an intimate (coupled/partnered) relationship that was (a) psychologically abusive (e.g., called derogatory names, yelled at, ridiculed), (b) physically abusive (e.g., kicked, slapped, punched), and/or (c) sexually abusive	Students w/o a disability is reference group LD: • Total DV: n=246 (16.86%) OR: 1.39, 95% CI [1.16, 1.65], p<.05 • Psychological DV: n=223 (15.32%) • Physical DV: n=67 (4.60%) • Sexual DV: n=39 (2.69%)

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					(e.g., forced to have sex when respondent did not want it, respondent was forced to perform an unwanted sexual act, or an unwanted sexual act was performed on respondent;	
Smith 2011; Alameda County, California	Retrospective chart review; Convenience sample	Children in foster care who have experienced sexual exploitation (N=75)	M=15.3 years (8-18 years)	ST	• IDD: Developmental delay (clinician reported believed intellectual disability or cognitive ability test) • ST: clinician interview with child and foster parent or case manager	Experienced ST: • Developmental Delay: 13%
Snyder 2015; National	Cross sectional study; Nationally representative sample	Female college students (Full sample: N=14,816) ADHD: 4.4%	M=19.6 years (SD=1.6), 18-24	SV	• IDD: ADHD (whether they had any of several disabilities or medical conditions)	Students w/o ADHD are reference group ADHD:

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		SV subsample: n=1,552			• SV: whether they had been a victim in the past 12 months of unwanted sexual touching and attempted or completed rape	• Combined SV: n=108 (16.5%) Z-test: 5.0, p<.05 • Unwanted Sexual Touch: n=96 (14.8%) Z-test: 4.7, p<.05 • Rape: n=56 (8.6%) Z-test: 5.6, p<.05
Sullivan 2000; Omaha, Nebraska	Census-based citywide cohort study	Children in public and Archdiocese schools in Omaha (N=40,211) n = 3,262 (disability)	0 to 21 years	SV	• IDD: Autism, LD, ID (multidisciplinary evaluation team) • SV: archival victimization records of Nebraska DSS, Nebraska Foster Care Review Board, and law enforcement agencies	ID: 4.0 relative risk LD: 1.8 relative risk Autism: no risk
Turner 2011; National	Cross sectional study; Nationally representative sample	Children in the contiguous United States (N= 4,046) ADHD: 6.7% Developmental/LD: 6.4%	2-17 years M=9.6 years	SV	• IDD: caregiver asked whether the child had ever received a diagnosis of ADD/ADHD or Developmental/LD;	ADHD: • Experienced SV: 6.7%, Non-ADHD: • Experienced SV: 6.7%

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
					only children whose diagnosis occurred at least 1 year prior to the interview's past-year victimization period • SV: Juvenile Victimization Questionnaire	χ^2: 0.0, ns Developmental/LD: • Experienced SV: 5.1% Non-Developmental/LD: • Experienced SV: 6.8% χ^2: 1.11, ns
Uguru 2022; California	Cross sectional study; Purposive sample	Adolescents who experienced commercial sexual exploitation and academic difficulties (N=22); IQ 72 to 115 (M = 85.1, SD = 11.2)	14 to 18 years (M= 16.1; SD= 1.2)	ST	• IDD: ADHD and LD (diagnosis), and executive functioning (Boston Qualitative Scoring System [BQSS] Organization measure of the Rey-Osterrieth Complex Figure [ROCF]) • ST: measure not specified	Experienced ST: • ADHD: n=6) • Learning disorder: n=21 BQSS scores significantly lower than standardized population
VanHorne 2015; Texas	Census-based statewide cohort study	Children born in Texas between 2002 and 2009 (N=2 977 758);	4 days - 2 years	SV	• IDD: Down syndrome (coded using the CDC modification of the British Pediatric	Down syndrome: • Experienced SV: 1.4%, Non-birth defect:

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		Down syndrome (n=3743)			Association Classification of Diseases and International Classification of Diseases) • SV: sexual abuse substantiation based on CPS report	• Experienced SV: 0.4% RR= 3.09, 95% CI [0.43—21.74]
VanHorne 2018; Texas	Census-based statewide cohort study	Children born in Texas from 2002-2009 (N= 2,902,385); Down syndrome (n=3503)	2 years - 10 years	SV	• IDD: Down syndrome (coded using the CDC modification of the British Pediatric Association Classification of Diseases and International Classification of Diseases) • SV: sexual abuse substantiation based on CPS report	Down syndrome: • Experienced SV: 1.0%, Non-birth defect; • Experienced SV: 6.0% RR: .17, 95% CI [.02—1.19]
Walters 2009; Pennsylvania	Cross sectional study; Purposive sample	Adolescent sexual offenders in residential treatment facility	15 to 20 years (M=17.90)	SV	• IDD: High Functioning Autism and Asperger's Disorder (1) a detailed	Adolescents w/o ASD are reference group ASD:

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		(N=41) HFA/AD (n=25)			developmental history (taken from the participant, collateral data, contact with parents when possible, and facility staff) ; 2) an enhanced clinical interview assessing current symptoms ; and 3) the Asperger's Syndrome Diagnostic Scale (ASDS); • SV: sexual abuse (Childhood Trauma Questionnaire [CTQ])	• Experienced SV: 56% Mann-Whitney U = 135, Z=-1.23, ns
Walters 2019; National	Cohort study; Nationally representative sample	Adolescents and young adults responding to 2008-2016 survey (N= 16,969)	12 to 26 years	SV	• IDD: Cognitive limitations (measure not specified) • SV: rape/sexual assault (measure not specified)	Cognitive limitations and SV: OR: 3.47, 95% CI [2.70—4.45])
Wymbs 2017; Midwest	Cross sectional study; Purposive sample	College students 18 to 25 (N=433) 11% previously	M = 19.10, SD = 1.28 years	DV	• IDD: ADHD (Conner's Adult Attention	ADHD and psychological DV: r=.14, p<.01

Study and Location	Study design and sampling methods	Sample description	Age (range or M[SD])	Violence Form	IDD and violence (measures or data sources)	Estimate(s)
		diagnosed with ADHD			Deficit/Hyperactivity Rating Scale Self-Report Long Form [CAARS]) • DV: Conflict Tactics Scale (CTS-II)	ADHD and physical DV: r=.08, ns

Note. ADHD = Attention Deficit Hyperactivity Disorder. ASD = Autism Spectrum Disorder. CSA = Childhood Sexual Abuse. DV = Dating Violence. IDD = Intellectual and Developmental Disability. ID = Intellectual Disability. LD = Learning Disability. ODD = Oppositional Defiant Disorder. PDD = Pervasive Developmental Disorder. ST = Sex Trafficking. SV = Sexual Violence. [a]Percentage of valid responses. [b]Sex trafficking estimates were not reported separately from labor trafficking estimates.

APPENDIX 1C: PREVENTION STUDY FINDINGS

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
Hentoff 2015 (National or multi-region)	Formative Mixed methods survey	Professionals with experience with the intended program population (i.e., adolescents and/or young adult women with autism)	13-22 years (intended program recipients)	Sexual health and relationships education for adolescent and young adult females with high functioning autism	• Content: social thinking, verbal communication, boundaries, dating, body parts, puberty, sexual behavior, consent. • Component: Manual for licensed mental health and medical professionals and a corresponding workbook for parents. 20 weekly 1-2 hour group psychoeducation sessions for adolescent/young adult females with autism and three parent sessions.	Guide content needs: accessibility (19.44%, n=7; concrete factual information, visual components, reading non-verbal cues), safety (11.11%, n=4; sexual health/safety, safety issues, birth control), sex (19.44%, n=7; sexual expression, safe sex, masturbation, abstinence), self (8.33%, n=3; self-concept, self-advocacy, self-care), emotional issues (8.33%, n=3; dating, permission to be scared or confused), understanding (5.56%, n=2), relationships (8.33%, n=3), gender preferences (8.33%, n=3), boundaries (5.56%, n=2), everything in a normal/neurotypical guide (5.56%, n=2) Psychoeducation group needs: safety (10.42%, n=5; contraception, safe dating practices, and safe sex practices), social (18.75%, n=9; cliques, social cues and rules), sex (10.42%, n=5; sexuality, sexual health, and healthy sexual

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
						relationships), health (6.25%, n=3; overall health and wellness and sexual health), emotion (10.42%, n=5; fear, anxiety), skills (8.33%, n=4; problem-solving, conflict resolution), physical (8.33%) emotional (10.42%) changes and needs, understanding (n=2), self (n=2), intimacy (n=2), boundaries (n=2) (4.17%). Component: 89.47% strongly agree or agree feasible to do in therapeutic setting; best setting would be outpatient therapy clinic (18.88%, n=4), group therapy (27.27%, n=6), individual therapy (13.33%, n=4), school (22.73%, n=5), social skills program (9.09%, n=2), residential (9.09%, n=2)
Moyher 2018 (South)	Outcome Single-subject, multiple probe across	Women with IDD enrolled in a four-year postsecondary program	19.1 - 27 years	Training to teach sexual harassment prevention to women with IDD in the employment setting.	• Content: private body parts, good touch and bad touch, five types of relationships (i.e., family, friend, acquaintance, helper, and/or stranger), sexual behavior,	Upon visual analysis, all participants responded at a higher level, trend, and low variability using all four-chain components after presented with a lure scenario. Six participants identified lure types without a scenario during post-intervention and post-maintenance interviews.

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
	participants				sexual harassment and its impact, three types of lures (bribery, secrets, and threats), the right to work • Components: Powerpoint, scenario of character being lured, visual checklist that listed the four-chain components (no, leave, tell who, tell what). Participants randomized to one of three tiers within three groups. 4 to 8 sessions; 20 to 45 minutes. Facilitation by BCBA.	All participants gained knowledge in sexual harassment and identified social significance of training.
Pugliese 2020 (Not specified)	Formative and Outcome Pretest-posttest randomize	Youth with autism and their parents randomized to either facilitator-led, self-guided, or	9-18 years (M =13.10, SD = 2.18)	Supporting Teens with Autism on Relationships (STAR) program, a parent-mediated	• Content: Parent Curriculum: Puberty (e.g. reproductive maturity, hygiene), Relationships (e.g. friendships, attraction, and interest in others),	Within the combined STAR group, paired-samples t-tests showed significant improvements from baseline to endpoint on parent sexuality knowledge ($t(55) = 5.55$, $p < 0.0001$, Cohen's $d = 0.75$), parental confidence in discussing sexuality on the PSES ($t(55) =$

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
	d controlled	attentional control (drug and alcohol education) condition		sexuality education program for autistic youth without ID	Sexual Feelings and Behavior (e.g. masturbation, shared sexual behavior), and Maintaining Sexual Health (e.g. STIs, sexual orientation, gender identity, sexual harassment). Youth Game: Area 1 (peer communication, personal hygiene, making friends), Area 2 (friendships vs. romantic relationships and boundaries), Area 3 (puberty, sexual behavior, avoiding harassment) • Components: Charting the Course (four chapter parent curriculum [six, 90 minute, biweekly psychoeducational with small-group discussions, role-play exercises,	6.09, $p < 0.0001$, Cohen's $d = 0.94$), positive parental outcome expectancy in discussing sexuality on the POES ($t(55) = 4.20$, $p < 0.0001$, Cohen's $d = 0.56$), youth sexuality knowledge ($t(55) = 6.80$, $p < 0.0001$, Cohen's $d = 0.91$), and youth social knowledge on the VVSAT ($t(55) = 4.10$, $p < 0.0001$, Cohen's $d = 0.55$), with medium to large effect sizes. No significant differences between facilitator-led and self-guided groups. The STAR program increased youth knowledge related to sexual health and development to a greater extent than the attentional control. Youth and parents found Boardwalk Adventure instructions to be easy to understand and moderately enjoyable.

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
					discussion of worksheets]) and Boardwalk Adventure (youth interactive computer game with three game and quiz "areas"; played 30 min per week)	
Rothman 2021 (Northeast)	Formative and Outcome Mixed methods Pretest-posttest single-group	Autistic adolescents ages 15-19	M=16 years	Safer Dating for Youth on the Autism Spectrum, for autistic adolescents with strong verbal skills (high-functioning autism)	• Content: (1) The difference between healthy and unhealthy/controlling dating behavior; (2) Dating online safely; (3) Recognizing when someone is being controlling; (4) Warning signs of an unhealthy relationship and having healthy breakups; (5) Communicating what you need in relationships and respecting boundaries; and (6)	Non-significant improvement in attitudes toward dating violence according to Dating Abuse Perpetration Acts Scale Participants liked Zoom chat function, Zoom features to doodle or fidget. Some participants felt material too basic/elementary, talking order difficult to figure out

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
					Getting help when in a relationship, and giving help to friends who need it. • Components: curriculum, two co-facilitators, online six 1.5 hr sessions	
Rothman 2022 (Not specified)	Formative Qualitative	Autistic youth and young adults	16-22 years	HEARTS (Healthy Relationships on the Autism Spectrum) workshop for autistic young adults to support healthy peer relationships	• Content: (1) Defining healthy versus unhealthy relationships; (2) Relationship challenges; (3) Relationship anxiety and neurohealth; (4) Establishing new relationships; (5) Communicating boundaries; and (6) Ending relationships • Components: six session workshop	Five key themes about challenges in maintaining healthy peer relationships were identified. These included that youth found it challenging to (1) remain motivated to make and maintain friendships; (2) overcome anxiety about making social overtures or continuing relationships, rooted in prior bad experiences with friends; (3) take emotional risks; (4) cultivate reciprocity in relationships; and (5) identify, communicate, and respect sexual and emotional boundaries 56% want mixed gender group, 20% want single gender group, 12% offer choice, 12% no opinion; some felt single gender is too exclusionary of non-binary

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
						63% neurotypical-autistic team facilitation, 33% autistic facilitator
Schmidt 2019 (Midwest)	Formative and Outcome Mixed methods Pretest-posttest single-group	Adolescents and young adults with IDD	Study 2: 15-19 years (14.3%) 20-24 years (71.4%) 25-30 years (14.3%) Study 3: 15-19 years (56%) 20-24 years (33%) 25-30 years (11%)	Community-based sexual health education program for young people with IDD	• Content: male/female anatomy, puberty, STIs and HIV/AIDS, pregnancy, reproduction and family planning, contraceptives, Gender Unicorn, sexual identity, healthy relationships, consent • Components: Biweekly, five-week 90-minute program, video (male/female anatomy sourced from Planned Parenthood, pregnancy, reproduction and family planning and identity sourced from disabled actors from local theater, healthy relationships	Study 2: Overall, participants found the gender unicorn, virtual reality script, identity video, puberty video, STI infographic, family planning video, and dating video acceptable. Puberty visuals needed improvement in all three areas, whereas the primary concern with the contraceptive's infographic was usability. The majority of participants did not demonstrate any changes or had minimal changes in sexual health knowledge after interacting with the learning activities. SSKAAT-R data predominantly remained unchanged due to many participants achieving relatively high pretest scores on each section Study 3: The program was deemed feasible given high recruitment rates (90%), retention rates (77.8%), attendance rates (98.2%) Most participants reported

Study and location	Research type	Sample description	Age (range or M[SD])	Program focus	Content and components	Findings
					sourced from Wellcast), visuals (puberty changes), infographic (STIs and HIV/AIDS, contraceptives sourced from Centers for Disease Control and Prevention)	communication was their favorite topic (57.1%) and puberty and adolescent development was their least favorite topic (42.9%). Most would not prefer a one-on-one program (71.4%) Data suggests that the treatment protocol needs to be updated. Specifically, only 47% of the suggested timeframe was spent on interactive learning activities, 67% of the suggested timeframe was spent on direct, explicit content, 27% of the suggested timeframe was spent on question and answers and 53% of the suggested timeframe was spent on review and reminders

APPENDIX 2A: INTERVIEW GUIDE

[Definition of sex trafficking]: Sex trafficking is defined at the federal and state legislative levels as the receipt of persons (e.g., recruiting, harboring, transporting) via force, coercion, or fraud (e.g., false promises) for the purpose of commercial sexual exploitation. Federal and state legislation also extends special protections to minors in that the means of a situation (i.e., force, coercion, or fraud) does not have to be proven. Youth who engage in survival-based sex (e.g., exchange sex for money or food without a third party trafficker) are still considered victims of sex trafficking.

For the following questions, please note that: (a) youth includes children and young adults between the ages of 0 and 24 years of age, and (b) intellectual and developmental disabilities (hereafter IDD) is an umbrella term for neurodevelopmental disorders that affects learning, behavior, social, and/or physical development.

Sex Trafficking Prevention Education

Content

1) What topics are important to include in sex trafficking prevention education, particularly for youth with IDD?

2) What existing resources can inform sex trafficking prevention education for youth with IDD?

3) What concerns, if any, do you have regarding youth with IDD's acceptability of sex trafficking prevention education content?

4) What concerns, if any, do you think that parents of youth with IDD might have regarding the acceptability of sex trafficking prevention education content?

Implementation

5) What recommendations do you have for methods used to deliver sex trafficking prevention education to youth with IDD?
    a) Follow-up questions:
        i) What settings would be most effective for providing sex trafficking prevention education for youth with IDD? For example, should prevention education be provided through schools, community-based programs, a combination of both, or by other means?
        ii) What educational background and professional qualities would an ideal prevention program facilitator possess?
        iii) What format should such be used to educate youth with IDD about sex trafficking prevention? For example, should this prevention education be provided via in-person learning, virtual learning (like on a computer or on an app), a combination of both, or by other means?
        iv) What modality should such be used to educate youth with IDD about sex trafficking prevention? For example, should prevention education be provided via group learning, individual learning, a combination of both, or by other means?

v) How can activities or delivery of content be developed to maximize engagement?

6) What challenges exist that prevent youth with IDD's access to sex trafficking prevention education?
   a) Follow-up questions:
      i) What recommendations do you have for addressing these access-related challenges?
      ii) What supports would enhance youth with IDD's ability to engage in sex trafficking prevention education?

7) What types of funding streams do you envision for developing and delivering sex trafficking prevention education for youth with IDD?

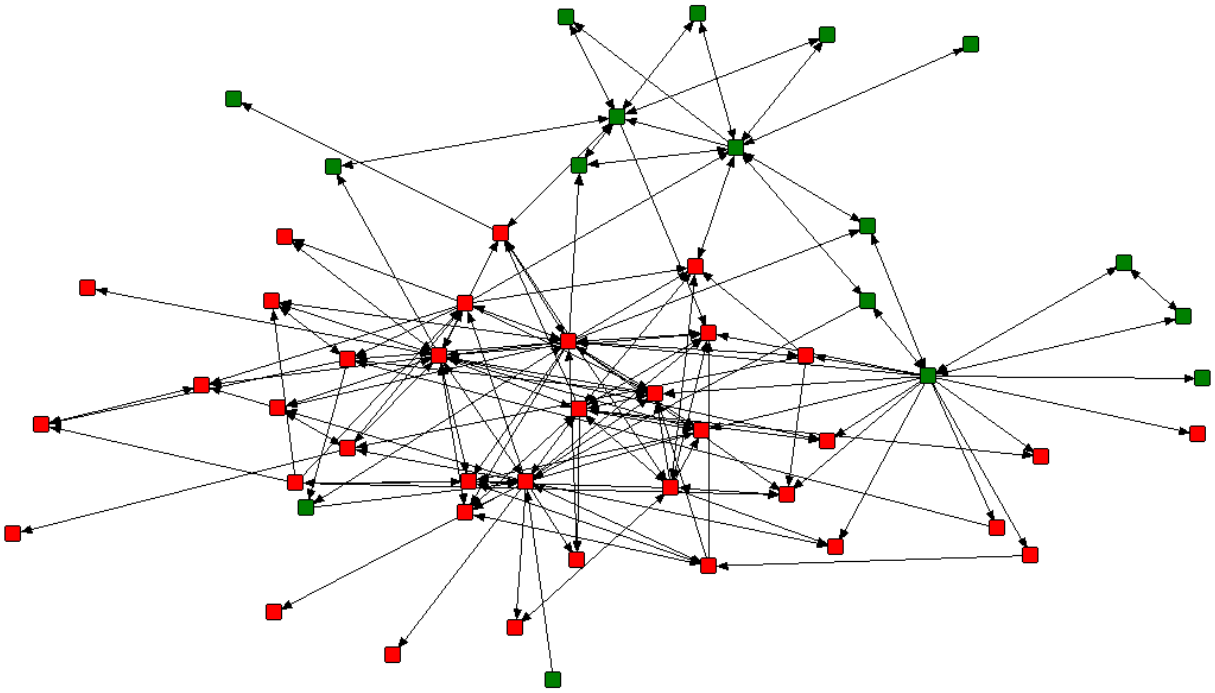
Disclosures and Referral Process

8) What recommendations do you have for addressing disclosures of sex trafficking made by youth with IDD in the context of a prevention education program?
   i) Prompt: What would be the appropriate referral protocol for responding to disclosures made during or after a prevention education program?

9) What challenges exist for a systems-level response to youth with IDD's disclosure of sex trafficking?

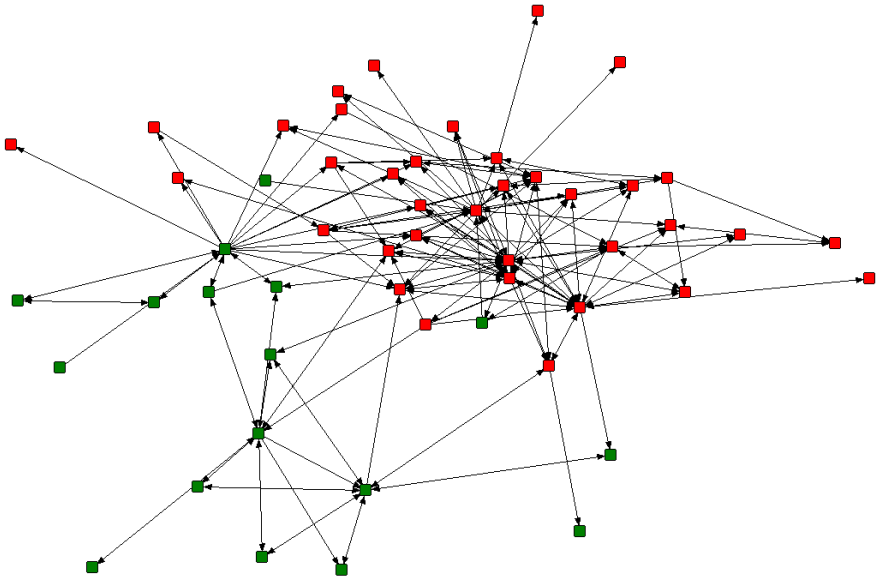
10) What recommendations do you have for addressing these challenges?

APPENDIX 3A: SENDING REFERRALS – VIOLENCE PREVENTION AND RESPONSE AND DISABILITY SUBNETWORK



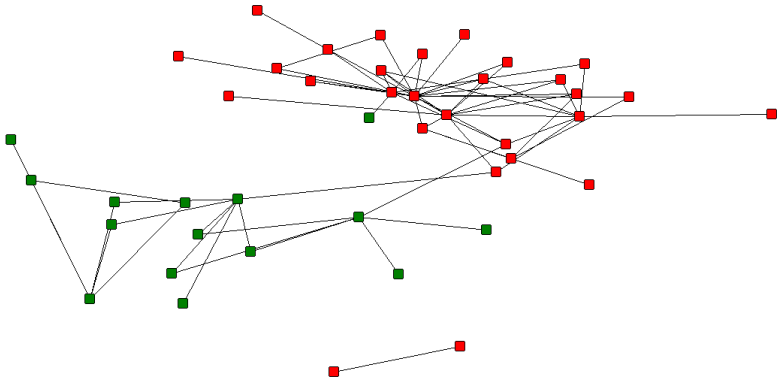
Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response).

APPENDIX 3B: RECEIVING REFERRALS – VIOLENCE PREVENTION AND RESPONSE AND DISABILITY SUBNETWORK



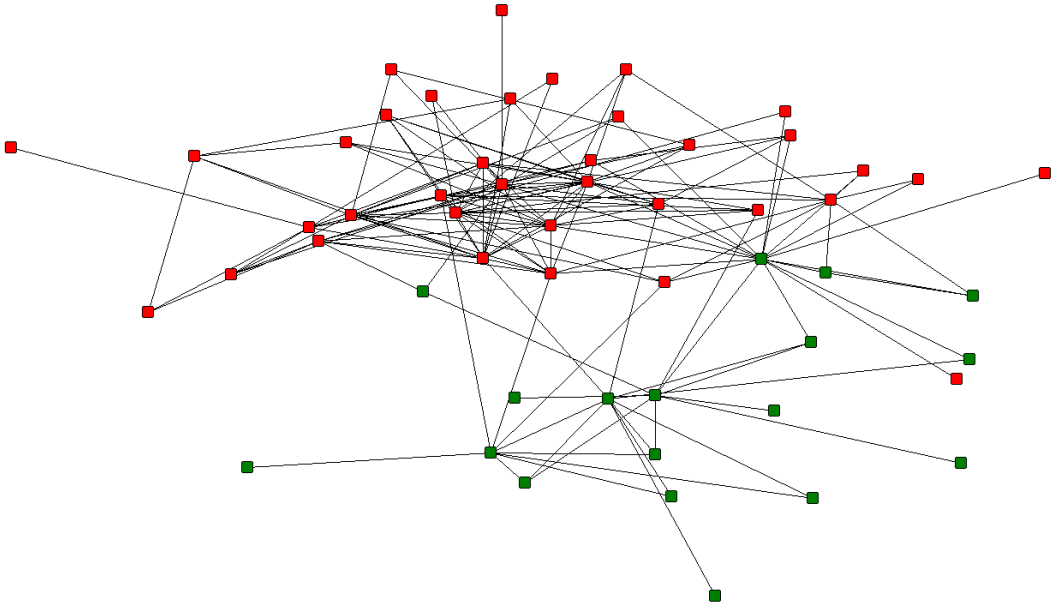
Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response).

APPENDIX 3C: TWO-WAY REFERRALS – VIOLENCE PREVENTION AND RESPONSE AND DISABILITY SUBNETWORK



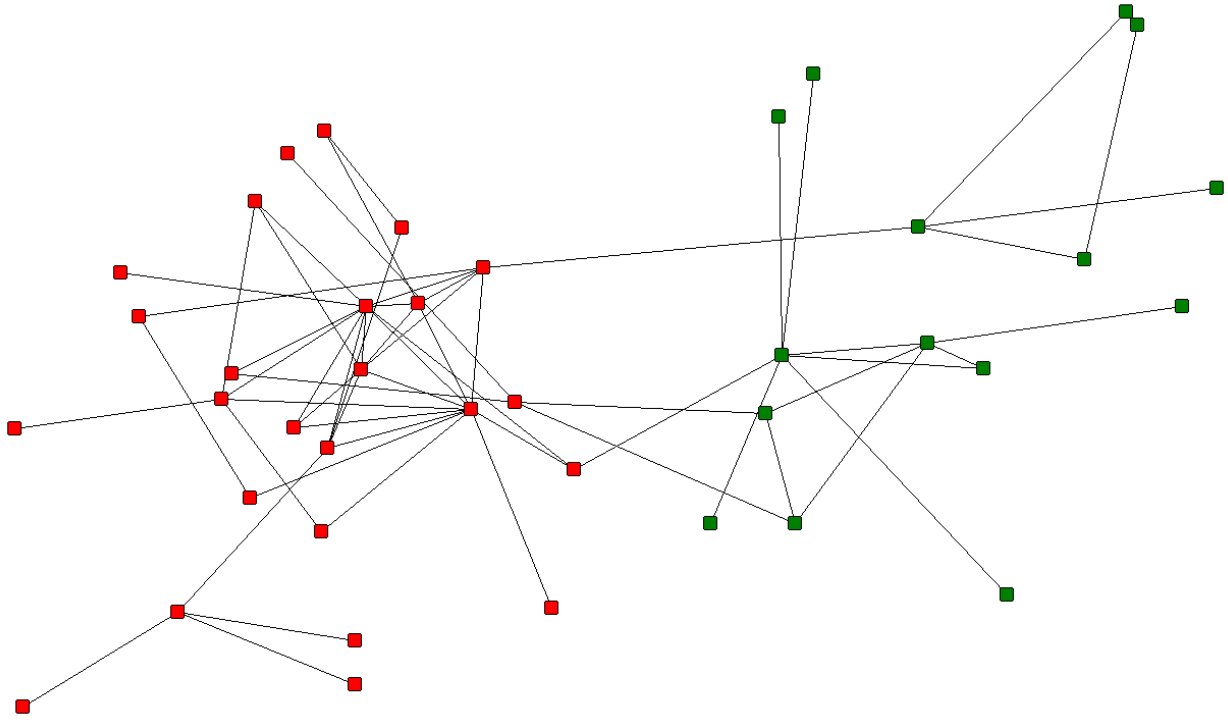
Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response).

APPENDIX 3D: SHARING INFORMATION AND RESOURCES – VIOLENCE PREVENTION AND RESPONSE AND DISABILITY SUBNETWORK



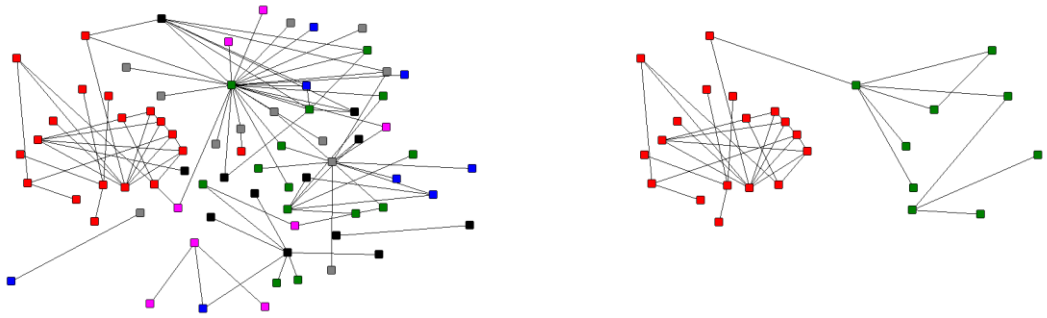
Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response).

APPENDIX 3E: TRAINING COORDINATION – VIOLENCE PREVENTION AND RESPONSE AND DISABILITY SUBNETWORK



Note. Node color: Sector (Red = Disability; Green = Violence Prevention and Response).

APPENDIX 3F: COMMUNICATION FREQUENCY - AT LEAST 11 TIMES IN 6 MONTHS



(a) **(b)**

Note. **(a)** Overall Network. **(b)** Subnetwork with Violence Prevention and Response and Disability. Node color: Sector (Red = Disability; Green = Violence Prevention and Response; Blue = Medical Healthcare; Purple = Specialized Populations or Services; Gray= Mental Healthcare; Black = Legal or Law Enforcement).