The Effects of Child Sexual Abuse on Children with Austim

Octavia Daniels-White, Joanna Odom, Mariela Wilthew

Graduate School of Social Work, Stephen F. Austin State University

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Dr. Jose Carbajal

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Abstract

The purpose of conducting this research was to understand the effects of Child Sexual Abuse (CSA) on children with autism, and how behaviors attributed with CSA easily get mistaken as behaviors attributed with autism, leaving them more vulnerable to CSA. The research question used in this study is: How does Child Sexual abuse affect children with autism? This paper is a systematic review, which entailed using a sampling of professional and scholarly articles published in recent years to answer a question or understand a subject matter, in this context being the effects of CSA, with the focus demographic being children with autism. In searching for related articles, inclusion criteria were used that included topics such as the prevalence of child sexual abuse, the effects, and other related terms, with exclusion criteria being adult sexual abuse (sexual abuse taking place after turning eighteen). During this research, the measurement tools of PRISMA and AMSTAR were used to further assess and ensure the relevance of the articles to this research paper. As a result of the research conducted, it was deduced that children with autism are at a higher risk of being a victim of sexual abuse than a child without due to their functional impairments in social interaction and communication. Furthermore, with these findings, research indicates that individuals with ASD may require additional support, education, and protection that they are currently not receiving. The lack of research regarding the subject matter also indicates the need for more research on the subject of CSA in children with autism, of which this paper hopes to contribute to.

The Effects of Child Sexual Abuse on Children with Autism

In 2019, 73 million children were living in the United States, making up 22% of the population (Children's Defense Fund, 2021). The Centers for Disease Control (CDC) reports that 1,679,000 of those children have been diagnosed with some form of autism (CDC, 2022a). Autism spectrum disorder (ASD) is a neurological and developmental disorder characterized by behaviors that might impair day-to-day functioning and pose difficulties in social interaction and communication (Wills,p.166, 2014). Children with ASD often exhibit repetitive behaviors, self-injurious conduct, and social issues that may make it difficult for them to communicate, express themselves, and engage with others (CDC, 2022b). Children with autism face a wide range of challenges that fall in the context of social interaction and communication, making them more vulnerable and placing them at a higher risk of being victims of child sexual abuse (CSA). CSA is defined as any sexual contact between an adult and a child and affects about 1 in every 4 girls and 1 in every 13 boys in the U.S. (AACAP, 2020). Mandell et al. (2005) found that children with developmental disabilities are at a higher risk of experiencing physical and or sexual abuse. Victims of sexual abuse often experience depression, drug addiction, suicidal behaviors, and PTSD (AACAP, 2020). Therefore, children with autism subjected to sexual abuse may exacerbate a long list of problems autistic children already experience. The topic for this research proposal is child sexual abuse and autism. Understanding the effects CSA has on children with autism can help families, caregivers, and providers understand how to identify children with autism who have been abused. Furthermore, understanding CSA and autism also create an opportunity to develop appropriate interventions. This research study will add to the existing knowledge of the effects of sexual abuse on children with autism.

Statement of the Problem

Surveillance done by the CDC between 2000 and 2018 indicates that cases of autism among children have continuously increased over time. In 2000, 1 in every 150 children had autism; however, this has increased gradually over the years, whereas in 2018, 1 in every 44 children was diagnosed with autism (CDC, 2022a). Children with an autism diagnosis can encounter several problems with daily living such as delayed language skills, delayed social skills, and involuntary repetitive behaviors (CDC, 2022b). Research also shows that children with autism are more likely to experience neglect, leaving their social and emotional needs not met, and their symptoms of autism heightened (Sohn, 2020). Children with autism are more likely to be abused by people who view this as a vulnerability because of these behaviors. Abusers have an unfortunate skill of picking "good victims," usually those who they know will be unable to report them or be believed (Sohn, 2020). Therefore, sexual abuse cases involving autistic children are likely to rise with the increasing number of children being diagnosed with autism. One problem is that when children with autism are abused, they may show signs that are misattributed to their autistic condition instead of possible sexual abuse and unfortunately be ignored (Carbajal & Praetorius, 2020). Despite the high possibility of child sexual abuse occurring, there is limited literature that examines the effects of sexual abuse on children with autism. Therefore, understanding the effects of sexual abuse on this population is important to avoid misattribution and intervene when abuse occurs instead of allowing children with autism to be ignored.

Purpose of the Study

The purpose of this study is to expand the research literature available on the effects of sexual abuse on children with autism. We are looking to add to the existing knowledge of child

sexual abuse of children with autism by identifying clear effects that can be attributed to sexual abuse. Due to the lack of research on the effects of sexual abuse on autistic children, providers, parents, and caregivers often fail to see the signs of abuse. Because children with autism can have social impairments and trouble communicating, they do not always receive help for sexual abuse and the issues are pushed off as symptoms of their autism (Carbajal & Praetorius, 2020). Identifying how children with autism react to child sexual abuse can help parents and teachers recognize the symptoms quicker, prevent further abuse, and receive treatment for this trauma. In addition, providers can improve their assessment skills and knowledge by understanding the symptoms of sexual abuse versus the symptoms of autism to develop appropriate interventions backed by research for these children.

Literature Review

Sexual Abuse Among Children With ASD

This section addresses the higher risk of sexual assault among autistic children with social-emotional and communication issues. Sexual abuse of children has been extensively researched, however, research on sexual abuse of children who have neurodevelopmental disorders is a field that has received insufficient attention. Autism puts a child at a greater risk because of the functional impairments they experience in social interaction and communication (Bhat,2021). The differential diagnosis may be a concern for communication and inventive symbols since the symptoms may resemble autism. In this scenario, the treatment may not be appropriate for the issue. As a result, the warning indications of maltreatment could be misconstrued or considered autistic symptoms. As a result, autistic children exposed to CSA may very seldom show symptoms of obtaining therapy since many professionals do not have the necessary training to interact with patients.

Some sexual predators may specifically target children with autism because they perceive these children to be more helpless and vulnerable than other children. As a result, when children with autism are subjected to sexual abuse, they may display this behavior in ways that are overlooked or incorrectly attributed to autism rather than the possible sexual abuse that they are experiencing. A person who does not have autism spectrum disorder (ASD) has a lower risk of being sexually abused than someone with ASD. Medical professionals believe that this lack of understanding makes people with ASD more likely to be the target of sexual abuse (Cockbain et al.,2017). We must take precautions to prevent the individuals we care for from being victims of physical or sexual assault; however, taking these precautions is even more important for people with autism. The "Centers for Disease Control and Prevention" (CDC) reports that, on average, approximately one in six men and one in four females will experience some form of sexual abuse before the age of eighteen.

According to Brown-Lavoie et al. (2014), those with "autism spectrum disorder" (ASD) are more likely to be sexually abused due to their lack of understanding regarding sexuality (p.2189). This is one reason why people with ASD are at a greater risk of being sexual abuse victims. In their study of people with autism spectrum disorder (ASD) and people without autism, Brown-Lavoie et al. (2014) asked the same questions to all participants regarding personal experiences of sexual victimization, such as “ Have you had sexual intercourse when you didn’t want to because someone used their position of authority to make you?”(p.2188). Seventy eight percent of people involved with ASD said yes, which is significantly greater than the 47.4 percent number of persons without autism who said yes.

Autism causes behavioral, social, and linguistic issues because society is intended for regular people. Some social-emotional and communication problems, when existent, may be

exploited by sexual offenders. Understanding others' emotions can help children recognize safe and unsafe people (Brown et al.,2017). Some self-advocates have a remarkable ability to comprehend and intuit others' feelings, while others struggle.

People with autism may have difficulty understanding the feelings others are trying to convey, particularly if those feelings are being portrayed in a false light. For example, children with autism with high levels of cognitive functioning had a lower ability to recognize facial expressions that illustrated deceptive emotions (Buck et al.,2017). Children with autism have a lower ability to comprehend why an individual would show a misleading facial expression when compared with children of the same age and gender who served as controls. The goal of criminals is to acquire the trust of potential victims, and they frequently accomplish this goal by engaging in deception. Consequently, they may exhibit false emotions, which some children diagnosed with autism may be unable to detect. In addition to having trouble processing emotions, children with autism may also struggle with communication (Weiss,2018). Because of this, sexual predators may view these children as particularly desirable targets because of the belief that they would be unable to report being abused because of their communication difficulties.

According to Roberts et al., (2019), up to fifty percent of children who have autism are completely nonverbal. Even though many children with autism can effectively communicate via alternative and augmentative methods, the seeming incapacity of nonverbal children with autism to interact may enhance the risk that sex offenders may target them for abuse. Children with autism that have communication issues may have trouble reporting abuse. Dahlgren and Sandberg, (2008) studied referential communication in autistic children. Referential communication needs a speaker to be specific enough for a listener to understand. This

competence is extremely vital when disclosing sexual abuse to another person. Dahlgren Sandberg, (2008) observed that children with autism have trouble articulating meaningful referent information. As a result, some autistic children exposed to sexual assault may be unable to do so properly.

According to Gervais and Eagan, (2017), one cognitive strategy that sexual offenders use to "allow" them to commit sexual offenses is the "objectification" of their victims, which means viewing them as things rather than as people. This "allows" the sexual offenders to commit the sexual offenses. Some children with autism may exhibit repetitive or stereotypical behaviors, which may strike other people as odd. As a result, a sexual predator may consider it much simpler to objectify a child who participates in these activities than they would find it to objectify a youngster who is average in their behavior.

Children with autism could also be at a larger risk of becoming sexually assaulted than ordinary youngsters due to their increased interaction with opportunistic abusers who work as service providers. This may put these children in greater danger. More than fifty percent of those who committed crimes against people with developmental disabilities knew at least one of their victims through some disability service in which they were both active (Christoffersen,2019). The precise nature of the perpetrators' involvement with their targets included acting in roles such as foster care providers, transportation providers, and service providers for paid services. Because children with autism frequently require specialized assistance, they are likely to communicate regularly with those with the potential to abuse them (Kenny et al.,2021). In addition, although there are no data specific to autism, people with disabilities who reside in institutional contexts may be at an even greater danger of sexual harassment than those who live with their nuclear family. This is the case even though no data are specific to autism. Again, this

is most likely attributable to the increased interaction with opportunistic offenders within the institutional setting. Because children with autism may be at an increased risk for victimization, it is critical to recognize the signs of sexual abuse when it occurs to protect these children. However, because of the cluster of symptoms linked with autism, children who have autism and are subjected to sexual assault may not be recognized as victims of abuse.

Children who have autism may exhibit a variety of behaviors, including self-stimulatory activities, actions that cause them to harm themselves, stereotypical behaviors, and repetitive behaviors. For example, suppose a child with autism is subjected to sexual abuse. In that case, the kid's attempts to deal with or make sense of the abuse may increase the severity and frequency of the child's autistic behaviors and create new behavior patterns that were not present.

Autism and Trauma

According to the Diagnostic and Statistical Manual of Mental Disorders, “autism spectrum disorders include autism disorder, Asperger’s disorder, pervasive developmental disorder not otherwise specified, and childhood disintegrative disorder” (American Psychological Association, 2013, as cited in Ion P. 188, 2021). As a social worker, understanding the different types of autism spectrum disorders is key when working with a diverse group of clients. One of the most important aspects of working with children who have autism is understanding how to communicate with them (Ion, 2021). Making sure that the message the client is receiving is clear and understandable will help the communication between the social worker and the client be more effective (Ion, 2021). Common symptoms presented by children who are diagnosed with autism do not speak at 16 months or responding to names, having poor eye contact, and does not smile or show emotion. (Ion, 2021). Although some of these symptoms may not automatically connect to ASD, these are some of the few symptoms that are common in

children. Research has shown that autism is shown equally across all ethnicities, cultures, and socio-economic groups (Ion, 2021).

Children who are diagnosed with autism at a young age tend to participate in activities less frequently (Simpson et al, 2017). Research shows that children with autism typically participate less in activities because of their sensory issues (Simpson et al, 2017). Because of sensory issues, results showed that children participated in activities like video games, watching tv, and playing on the computer (Simpson et al., 2017). One can assume that these activities are better for children with autism because they may require less sensory overload. According to Simpson et al., a conclusion can be made that children with autism engage less frequently than children without disabilities (Simpson et al., 2017).

Children with autism or autism spectrum disorder (ASD) are at a higher risk of experiencing traumatic events throughout their lifetime (Fuld, 2018). Trauma that children with autism experience can later lead to poor mental health, worsening the symptoms of ASD (Fuld, 2018). An important area of concern for social workers is the mental health of clients with ASD (Fuld, 2018). This is because children with ASD have a higher probability of experiencing adverse childhood experiences (Fuld, 2018). Fuld reports that children with ASD who reported more than four adverse childhood experiences were two times higher than those without a disability (Fuld, 2018). Creating interventions for clients with ASD who experience adverse childhood experiences would be ideal. However, without the right amount of training and understanding of ASD, interventions may not be beneficial to children with autism. Flud suggests that clinical social workers and other professionals receive training on how to intervene with children or adults who may suffer from ASD (Flud, 2018).

Similar to Flud, Sarahan and Copas express that children with autism have a harder time adjusting to trauma (Sarahan & Copas, 2014). Sixty two percent of Children with autism do not have an intellectual disability (Sarahan & Copas, 2014). Unfortunately, autism may interfere with children's ability to create social relationships throughout their childhood (Sarahan and Copas, 2014). Sarahan and Copas discuss how autism in children can create a "brain-based developmental trauma that blocks social relationships necessary for safety, self-regulation, and positive growth" (Sarahan & Copas, p. 35, 2014). This can later develop into adverse childhood experiences and create lifelong trauma for children with ASD.

Another risk that children with autism suffer from is anxiety. Children with autism may experience a higher sense of anxiety which is noticeable at an early age (Simpson et al., 2020). Parents express that distinguishing the difference between symptoms of anxiety and symptoms of ASD was difficult once their child was diagnosed with autism (Simpson et al., 2020). Researchers note that anxiety disorders are more prevalent in children with autism rather than typically developing children (Simpson et al., 2020). Children who are affected by ASD typically struggle with building peer relationships. However, children who suffer from both ASD and anxiety have a more difficult time with peer and family relationships than the average person (Simpson et al., 2020). These disorders can be linked to later trauma that children may suffer from later on in their lifetime.

Where is Sexual Abuse Occuring

Research conducted by Indiana Center for Prevention has found that nearly 30-40% of children are sexually abused by a family member, while 50% are sexually abused by someone outside of the home that the family trusts (Indiana Center for Prevention, 2022). These statistics make it hard for parents and caregivers to feel comfortable sending their children anywhere with

anyone in today's society. Child sexual abuse has been recorded occurring within schools, foster care, sporting teams/groups, hospitals, and religious institutions (Blakemore et al., 2017). All of these institutions/organizations are places parents or caregivers send their children to gain help or benefit from the services being provided. Furthermore, instead of the child being safe and gaining positive experiences, many children have in turn been victims of childhood sexual abuse, that can occur without being reported. Because Childhood sexual abuse can occur anywhere within or outside of the household, recognizing the behavior and impacts of sexual abuse is important for parents, caregivers, and society as a whole.

Impacts of Sexual Abuse Among Children

In the past couple of years society, and specifically, the media, have begun to focus on childhood sexual abuse and ways to combat or spread awareness on the issue. Children experiencing sexual abuse are burdened with not only adverse effects during childhood but into adulthood (Consequences of child sexual abuse, n.d.). Research shows these adverse effects include but are not limited to psychological, social-wellbeing, physical health, and educational and economic impacts (Blakemore et al., 2017). Children who are victims of sexual abuse have to deal with these adverse effects throughout childhood and continue to see the impact affecting every part of their lives well into adulthood (2017).

A child's mental and physical health is majorly impacted after experiencing sexual assault. Some symptoms include sleep disruptions, nightmares, feelings of isolation, low self-esteem, and depression, along with many others (Harracksingh and Johnson, 2021). These symptoms can negatively impact the child's daily routine causing them to isolate themselves from others in all aspects of their life. Without the necessary services and tools to help these

children overcome these adverse effects, many begin to implement coping mechanisms that could further hurt their physical and mental well-being (2022).

Post-traumatic stress disorder (PTSD) is one of the adverse effects resulting from childhood sexual abuse. A study conducted to analyze the impacts child sexual abuse has on the victims, found that all participants showed signs of PTSD and scored a 17 on the intrusion and avoidance scale. A score of 17 on the intrusion and avoidance scale meets the requirements for one to be diagnosed with PTSD (Harracksingh and Johnson, 2021). While not all children who are sexually assaulted battle PTSD, it is a common adverse effect found among victims.

Children who are victims of sexual abuse often experience trouble with their academic performance after the incident has occurred. This can be linked to a variety of adverse effects including lack of motivation, trouble focusing, lack of sleep, etc. Between all of the effects stemming from sexual abuse, the symptoms tend to impact other parts of the child's life such as school. This is one reason it is so important for society to be aware of the warning signs and symptoms related to childhood sexual abuse (Harracksingh and Johnson, 2021). A child's academic abilities promote one's future success highlighting the importance to recognize these symptoms to help the children being impacted by the adverse effects of sexual abuse.

Depression and emotional scaring continue to impact victims of sexual abuse among children, in a variety of ways. The research found that 60% of children in the study reported feeling ashamed/sad, along with 40% reporting suicidal thoughts (Harracksingh and Johnson, 2021). These statistics are alarming especially when reported among young children as this study focused on. Between the stigma and shame, one feels surrounding sexual abuse many children who have survived sexual abuse feel different or isolated from their peers. This can lead to

deeper levels of depression and emotional scarring if the child lacks access to services or a support system.

Recognizing these signs of sexual abuse that have occurred or are occurring is essential to prevent and help victims of sexual abuse among children. Society and specifically mandated reporters need to be aware of these symptoms and adverse effects to report any early signs among children. Furthermore, these are just a couple of the adverse effects that children experience who have been or are victims of child sexual abuse (2022).

Interventions and Therapy for CSA and CSA for Children with ASD

The treatment of child sexual abuse is essential to explore this topic because, after a trauma, children need an intervention, both with autism and without. While there is limited research on interventions specific to children with autism who have experienced child sexual abuse, we can learn from interventions for child sexual abuse of non-autistic children. After establishing traits that children on the autism spectrum display, some interventions for child sexual abuse can still be effective, even though they are not catered to those with autism. Autism is a spectrum, and child sexual abuse affects children in so many different ways that finding the right intervention therapy will take research for each case, in an effort to find a intervention that can help reduce the severity of symptoms experienced by the individual. One intervention that Romney and Garcia discuss is Trauma-Focused Cognitive Behavioral Therapy also known as TF-CBT (Romney & Garcia 2021). TF-CBT can be used to reduce trauma-related symptoms and is utilized for children and families (Romney & Garcia, 2021). Trauma-Focused Cognitive Behavioral Therapy has many benefits for families who have children that have been diagnosed with ASD or Autism Spectrum Disorder (Romney & Garcia, 2021). Art therapy is a research-based approach to treating those who have suffered from child sexual abuse. This

approach is specially catered to children as it allows them to process their trauma in an age-appropriate way. Music, dancing, drawing, and acting out dramas are all forms of art therapy that are used with children who have experienced sexual assault. Art therapy also helps the client and the therapist build rapport which children would need to disclose this information and begin to work through their adverse experiences (Lev-Wiesel, Goldner, & Daphna-Tekoah, 2022). Communicating traumatic events such as sexual abuse is difficult for children especially, so art therapy allows children to convey their trauma without having to verbalize the words (Lev-Wiesel, Goldner, & Daphna-Tekoah, 2022). As established by other literature (La Valle et al., 2020), children with autism often lack verbal communication skills. By using art therapy for autistic children who have experienced sexual assault, these children may be able to better convey their trauma to a therapist or specialist. A meta-analysis of art therapies being used for child sexual assault found that whenever this event happens to a child, they tend to dissociate when they remember. Art therapy is used to access these memories without forcing the victims of child sexual assault to express them in speech. Another way that children with autism may benefit from research developed for neurotypical children, is the ongoing developments for interventions for victims of child sexual assault who disclose after the event has passed. 'Historical' abuse is a term used when a victim steps forward to reveal abuse months or years after the traumatic event has happened (Hindley & Lord, 2021). Victims of child sexual abuse often never report, or do not report their abuse until years into their adulthood. Children with autism are more likely to be a part of this group that chooses not to disclose for longer periods due to their autism. In this article, authors Hindley and Lord provide a literature guide to professionals about the appropriate ways to handle non-recent disclosures of child sexual abuse (2021). Practitioners are not trained nor educated on non-recent disclosure protocols and often

are unsure how to handle these scenarios. However, it is equally as important to understand treatment for recent and non-recent disclosures as all victims of child sexual abuse have been negatively affected by these events. In recent disclosures of child sexual abuse, an investigation is opened and legal pathways must be taken when treating children who are experiencing this. With non-recent disclosures, there may not be enough evidence left or a statute of limitations may have passed before the victim reveals the abuse to professionals. In these cases, the practitioners who are treating those who have disclosed non-recent abuse have different approaches they may take to treating victims. How a practitioner responds to a person who has experienced child sexual assault, no matter how long ago the abuse occurred, can affect the success of the later treatment. Developing a training program and guidance manual for practitioners such as these authors have done can positively impact those who were too afraid or had not processed their abuse at the time of occurrence (Hindley & Lord, 2021). Hindley and Lord (2021) focuses on older adolescents and adults who have disclosed child sexual abuse, but research shows that many children who experience abuse, autistic and not, will wait to report it. Further research will need to be done in many areas where people with autism who have experienced abuse are concerned, but these interventions are a good stepping stone for practitioners and professionals to use when developing treatment plans for their patients with autism.

Some interventions have been developed especially for children with autism, although they lack the child sexual abuse aspect. While these are not centered around addressing child sexual abuse in autistic children, they are catered to an autistic child's needs and behaviors. One intervention for children with autism and victims of sexual abuse is art therapy. Children with autism respond positively to art therapy as it builds concentration, improves social interactions,

and facilitates their communication (Anjum & Asir Ajmal, 2012). These results are similar to the results of art therapy for victims of child sexual abuse, so using it for children with autism who have experienced child sexual assault may also prove to be effective. Speech, music, play, art, and systemic therapies have all been shown to work individually, but when an autistic child's needs are tailored to their specific needs and these therapies are used simultaneously, there have also been positive effects (Anjum & Asir Ajmal, 2012). Systemic therapy in particular involves the parents of children with autism and helps facilitate the therapy process while limiting disruptions during the therapy sessions (Anjum & Asir Ajmal, 2012). Using a mixed-method approach to any type of trauma can be useful as one method of therapy may not target all of the needs of the client. Autism is a spectrum of disorders that affects each person in different ways, which is also why so many therapies have been specialized for this disorder. Behavior therapies have been shown to decrease problematic behaviors in children with autism (Anjum & Asir Ajmal, 2012). This is also a behavior that when displayed often by autistic children can prevent other signs of sexual abuse from being seen by adults. Therefore this therapy can be helpful before and after suspected child sexual abuse because it will decrease 'bad' behaviors and display clearer signs of abuse, especially for non-verbal autistic children (Anjum & Asir Ajmal, 2012). Therapies like play therapy have been shown to improve appropriate expressiveness in children with autism (Anjum & Asir Ajmal, 2012). Play therapy provides the child freedom to express themselves in any way they would like and to learn to interact with others (Olteanu & Faraj, 2018). As addressed in an earlier section, learning appropriate ways to interact with others is important for children with autism. Learning through play therapy what is and is not appropriate behaviors for their age, may show children that someone has been inappropriate with them which can lead to the disclosure of sexual abuse. However, play therapy is effective for

children with autism when they have shown a predisposition to play on their own (Olteanu & Faraj, 2018). Trying to enforce play therapy on a child with autism will often not have the desired effects as these children enjoy repetitive behaviors that are comfortable to them. Play therapy is seen as an empowerment approach for children with autism (Olteanu & Faraj, 2018). The trauma of child sexual abuse can make victims feel helpless and using an empowering approach like play therapy could equip a child with autism with the skills necessary to work through their adverse experience and move forward in life. Though this is not researched as a method for child sexual abuse and children with autism, it can be a viable option for a specialist dealing with such a client as it addresses the identified effects of autism on children, and symptoms of child sexual abuse are shown to be similar. Child sexual abuse is an adverse experience that exposes children to inappropriate activities for their age and children with autism are often at a lower mental age than their peers, already. This type of therapy advances the understanding and learning of the autistic child. Play therapy allows children with autism to develop their mental age which can help them better process abuse that has happened to them (Olteanu & Faraj, 2018).

There are two types of play therapy and both can be effective interventions for children with autism. Cognitive behavioral play therapy versus child-centered play therapy is different in the goal of the therapy. Cognitive behavioral play therapy (CBPT) focuses on structured play that is designed to address specific problems, while child-centered play therapy (CCPT) allows for more expressive play by the child (Arora, 2021). CCPT can have better results for children with autism who have trouble following directions or paying attention (Schottelkorb, Swan, & Ogawa, 2020). Child-centered play therapy creates a safe space for children and allows them to be in control of their therapy, as opposed to cognitive behavioral play therapy which can cause

frustration for children with autism as they cannot always conform to strict rules (Arora, 2021). CCPT has had research on how it affects children with autism along with other comorbid diagnoses. While child sexual abuse and autism were not one of the comorbidities in this study, this shows that CCPT can be effective when treating autism along with other current problems. Children with autism when they participated in CCPT had decreased behaviors that show poor self-regulation for emotional needs (Schottelkorb, Swan, & Ogawa, 2020). Children with autism regularly struggle with self-regulation, and this type of therapy can help them learn to control their behaviors and emotions. Such research like this, and most research that involves children with autism is that these studies are the first of their kind or there is not much prior research (Schottelkorb, Swan, & Ogawa, 2020).

Social Work Implications

Social workers can advocate and promote the well-being of children who have experienced or are at risk for sexual abuse. Along with being an advocate social workers can spread knowledge and educate others on how to recognize and help victims of sexual abuse among children. There are several different interventions available to help children who are victims of sexual abuse, giving victims and families different options depending on their situation. One study analyzed the treatment outcomes specifically for children lacking the ability to focus, along with the outcomes of two interventions including group play therapy, and trauma-focused treatment programs.

Finding an intervention that works well for a child that has been sexually abused can be difficult and requires great consideration of how it could positively and negatively impact their trauma. One study emphasized the potential battle that a child could have within treatment who has trouble focusing due to the sexual abuse they have experienced. This gives social workers the

job to find an intervention/treatment program that does not involve the child having to constantly pay attention to benefits. Children experiencing attention deficits, as many with Autism Spectrum Disorder do, may not only have trouble paying attention but interacting with others and even processing the abuse (Mii et al., 2020). Furthermore, youth experiencing attention problems were more likely to experience higher levels of depression, and ability to complete tasks (Mii et al., 2020). Analyzing this information and including it within decision-making during practice is essential when working with children who have experienced sexual abuse.

More trauma-focused treatment programs follow a therapy-like aspect that allows the child and family to voice concerns, feelings, and any adverse effects regarding their trauma. A study was conducted on trauma-focused programs and found there were higher-than-expected rates of dropout before completion (Wamser & Wamser-Nanney, 2021). This is a common trend within interventions for children, which studies have yet to analyze why, but this study emphasizes the idea that any amount of participation is beneficial for the child. This is important for social workers to recognize so they can work with clients and their families with any difficulties they may be having with an intervention or program.

While the dropout rates in this specific intervention were higher than expected, 65.75% of children were able to complete the whole program (Wamser & Wamser-Nanney, 2021). Furthermore, children who had experienced severe adverse effects were more likely to complete this type of program. Completion of intervention varies on a variety of factors including accessibility, socioeconomic status, race, and general feelings relating to the intervention (Wamser & Wamser-Nanney, 2021). Because of this, it is important social workers and families work together to find the right interventions for their children.

Another type of intervention frequently discussed concerning child sexual abuse is group play therapy. Group play therapy allows children to connect with others who have gone through the same experiences. This allows children who often feel “different” from their peers to discover that they are not alone in this situation. Building their relationships with other children in the group helps them combat social isolation and secrecy that they may battle because of the sexual abuse. The purpose of therapy is to give one the chance to recognize and talk about their feelings to overcome trauma. Play therapy has the same purpose but allows children to do this through playing, which is a child's natural way of self-expression (Jones, 2020). This allows for these children who may lack the cognitive abilities to explain their feelings to articulate their feelings through “play time”. Furthermore, because it is group play therapy, this allows the children to build trust and develop interpersonal skills they can use to combat their feelings. Implementing group play therapy gives children an outlet to express themselves while building relationships with the therapist and other children, to overcome the adverse effects of sexual abuse.

Synthesis of the Literature

The purpose of psychological theories of autism is to provide an explanation for the characteristic behaviors and modes of thinking in terms of underlying psychological processes. More specifically, these theories attempt to explain how autistic children process information regarding other people and the environment. Nonverbal autistic children experience more behavioral issues. There was an inverse association between self-injurious activities and fluent verbal language abilities in a sample of autistic children. Children with autism who seek to reveal sexual assault may develop behavioral reactions if others can't comprehend them, but these actions may be misconstrued as autism. As a result, the child's sexual abuse may be overlooked.

Misconceptions about children with autism regarding behaviors and sexual development may contribute to the lack of exploration of related child sexual abuse affects on said behavior. Developmentally disabled people were once taught to lack sexual feelings. Nario-Redmond (2010) studied cultural stereotypes of disabled and non-disabled people. Part of her research uncovered which traits of people with disabilities participants, some with and others without, would contribute spontaneously. Nario-Redmond discovered that women and men with impairments were stereotyped as reliant, incompetent, and asexual. Sexualized behaviors may arise at different phases of sexual maturation for normal children, and they may seem more prominent in children with autism since they accomplish developmental milestones later. Although it's usual for preschoolers to explore and excite their bodies, children and teenagers with autism may do so at a later age. If parents believe autistic children are asexual, these behaviors may be perceived as sexual abuse. Sexualized behaviors may suggest sexual abuse, although parents and doctors may mistake them for delayed sexual development. Observed actions may not indicate if a child with autism has indeed been sexually assaulted.

In reviewing the literature, the purpose of this study is to understand the affects of experiencing child sexual abuse for a child with autism, as they are seen as easy targets. This will be done by looking at relevant data on the behavior that makes such children susceptible to child sexual abuse, how these reactionary behaviors are overlooked and other related contributing factors. In autism, environmental factors have led to misconceptions about individuals' capacities. The idea that most autistic people are cognitively impaired, regardless of evidence, is a good example. When communicative, behavioral, or attention issues hindered meaningful intelligence estimates, mental retardation was typically assumed. Researchers would credit low grades to the intellectual capacities of children with autism instead of the reality that the methods

used to measure intelligence were inadequate for the children or that assessors did not account for autistic symptoms when determining intelligence. A child with autism who was sexually assaulted may have their problematic behaviors misattributed to autism.

According to Tager-Flusberg et al. (2020), some autistic youngsters struggle with practical language use and social dialogue. These impairments are more likely to appear in communication, increasing the possibility that certain autistic youngsters won't understand the complexities of reciprocal communication needed to expose sexual assault. In addition, sexual predators who prey on children frequently suffer from cognitive errors that enable them to rationalize their behavior and deny their actions are "bad" or "damaging" to the children they victimize. Cognitive distortions caused by offenders serve the purpose of justifying their criminal activity by downplaying or rationalizing the gravity of their actions.

Method

The purpose of this study is to understand how children with autism are affected by experiencing child sexual abuse (CSA). This is relevant due to the lack of research regarding the implications of CSA in children with autism, despite literature also concluding that the population is more susceptible to said abuse. It is hoped that by understanding the effects of CSA on children with autism, parents and guardians will be able to learn how to identify the signs that their child has been abused. This study also hopes that this contribution to the existing literature will further encourage the development of appropriate interventions in the future. This section of the paper will go into detail on how the research for this study was approached and the reasonings behind the said approach.

Research Design

A systematic literature review will be used to answer the questions and hypothesis of the study. Pati et al. (2018) defines a systematic literature review (SLR) as a systematic way of collecting, critically evaluating, integrating, and presenting findings stemming from a collection of different research studies relating to a particular research question or topic to answer it. This method was first used in the year 1753 in the healthcare field by a Scottish naval surgeon, James Lind, who conducted the first-ever randomized controlled trial (RCT) and saw the systematic literature review as a key component in avoiding bias (Pati et al.,2018). However, it was not until the 1970s that it was formally named at first as a type of meta-analysis, which is a quantitative approach rather than a SLR. That purpose of avoiding bias remains to be a goal of SLR, which aims to incorporate multiple viewpoints on the subject at hand for a broad, never one-sided, understanding of it. In attempting to answer the research question(s), this method offers a way to assess the quality level and amount of existing literature for said topics, where said viewpoints would come from, to ensure there is a broad approach to answering the proposed question (Pati et al.,2018, p.15).

Considering this information, it seems that this study would benefit from SLR to help get a robust and sensible answer to a focus research question by sorting through existing research in the area of interest (Mallett et al, 2012, p.453), for this study being the subjects of children with autism, child sexual abuse and their relationship to one another, and finding articles that can be used to identify knowledge gaps, bring different views or approaches to the table or highlight methodological inconsistencies and weaknesses.

Sampling

The sample for this research consists of both peer-reviewed articles and articles by American governmental or organizational sources ranging from the years 2002 to 2022. The decision to include articles older than 10 years was made after initial difficulties to find literature related to CSA and autism. The terms for the inclusion criteria are as follows: children, adolescents (up to age 18), autism (a neurological and developmental disorder), child sexual abuse (sexual abuse experienced under the age of 18), vulnerability (of a child with autism of experiencing SA), affects of child sexual abuse, prevalence (of abuse) and trauma. The term for the exclusion criteria is adult sexual abuse (sexual abuse taking place after ages above 18). The inclusion of articles is based on the inclusion of studies with children or adolescents with autism who experienced sexual abuse, the prevalence of said abuse in the population, the effects of CSA such as trauma, and the vulnerability of the said population to CSA. The articles must also be written in the English language and must be available to be fully accessed. PRISMA and (AMSTAR) will be used to assess relevant articles found for use. Exclusions towards the data collected will be studies that focus primarily or only on sexual abuse experienced by adults, articles published before 2002, and articles that cannot be accessed fully and are not written in the English language.

Measures

To make a clear and efficient systematic review would require the use of two measurements: the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statements (PRISMA) and A Measurement Tool to Assess Systematic Review (AMSTAR). The PRISMA of 2020 is a seven-section, 27-item checklist (also includes a flow chart) made to be a useful tool when planning and conducting systematic reviews and meta-analyses to ensure that

all recommended information is captured (Page et al.,2021). The PRISMA's purpose is not to assess the conduct or methodological quality of systematic reviews, but to assess the appropriateness of the methods, and therefore the trustworthiness of the findings in the efforts of maintaining a body of evidence that built on empirical evidence and free of bias (Page et al.,2021,p.4).

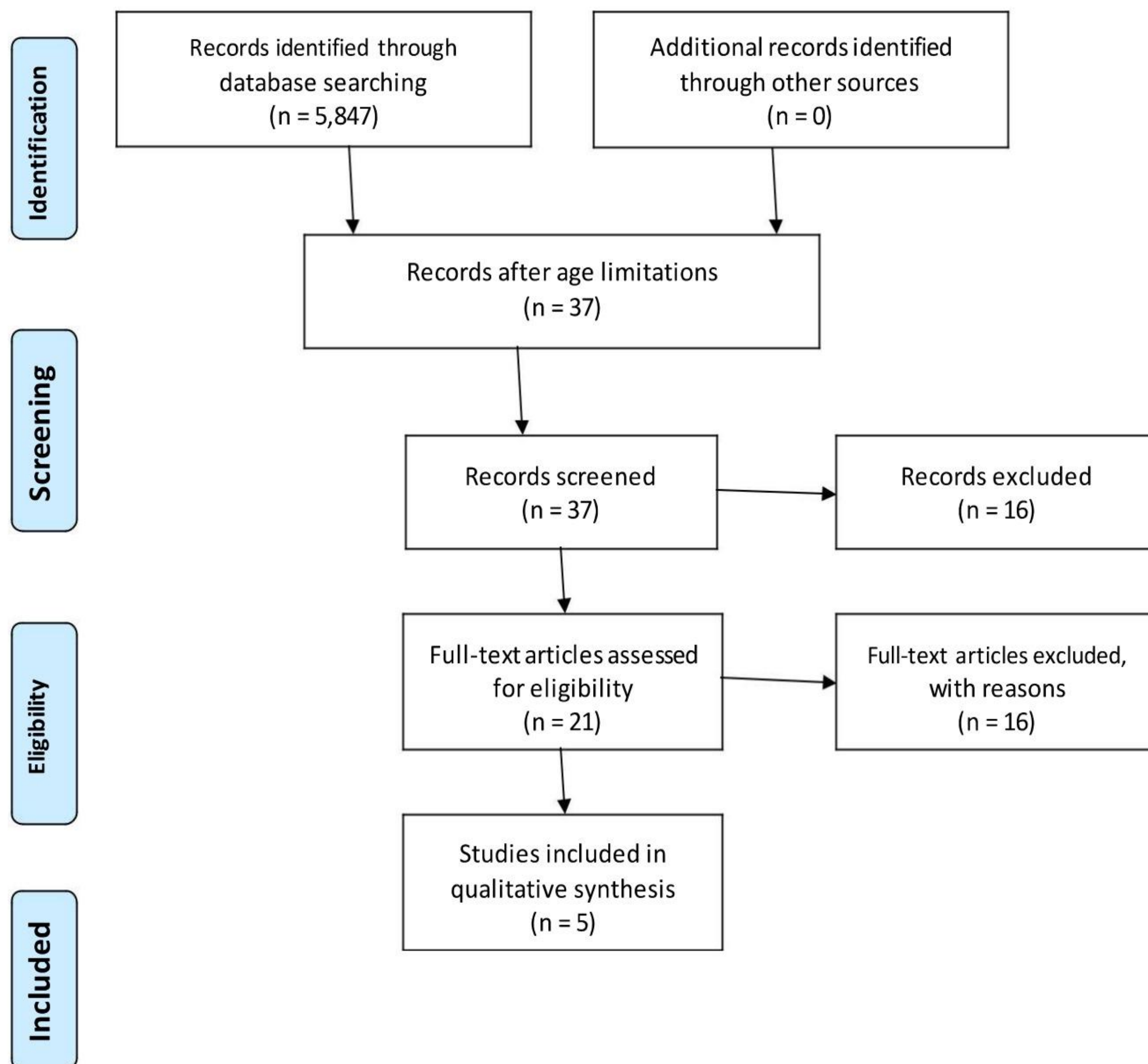
We will use AMSTAR to assess and report the quality of the studies. This tool consists of 11 yes or no questions (similarly a checklist) that are designed to assess the appropriateness of the methods used at different stages of the SLR process (Pollock & Fernandes,2017, p.2). This has been shown to be a reliable, valid, and simple tool to use when assessing the quality of systematic reviews (and non-systematic reviews as of recent), which is important in identifying SRs that could be a poor contribution to future studies or reports if used (Pollock & Fernandes,2017, p.2).

Data Collection

With the inclusion criteria in mind during this process, the research team will obtain related articles by searching the online Stephen F. Austin State University library site and Google Scholar (similarly an article search engine) using the following databases: Scholarworks (SFA), ScienceDirect, SOCINDEX with full text, the Centers for Disease Control and Prevention (CDC), and PubMed. While using these mentioned databases, the search will be filtered for the inclusion of these terms: children, adolescents, autism, child sexual abuse, vulnerability, effects of child sexual abuse, prevalence, and trauma.

Inclusion criteria initially included articles from the last ten years to ensure the most relevant data, but permission has been given to use articles past this time if deemed necessary. Additional filters for collecting data would be the selection of only English language

Figure 1: Selection of Studies



peer-reviewed articles that are fully accessible, so that the content can be properly tested for relevance and quality, using the tools PRISMA and AMSTAR, respectively.

Data Analysis

After selecting a variety of sources, the team will do a full review of the collected articles to decide if they fit the criteria of the SLR. After this selection is made, it will potentially be narrowed down more with the use of PRISMA and AMSTAR, initially using the PRISMA checklist to assess the relevance of each article to the study, and then with the AMSTAR questionnaire to assess the quality of each article. This process is to ensure that the systematic review only has articles that will strengthen it and lead to well-researched answers.

Results

The total number of articles identified in the initial database search was 5,847. After considering the inclusion of the age limitations, that being children 18 and under, the overall number became 37. Of the 37 articles, 16 were excluded after being assessed for the availability of full-text of said articles being provided. The remaining 21 were then assessed for the relevance to the inclusion material, which led to the exclusion of 16 articles and a final inclusion amount of 5 that met all requirements.

Study Characteristics

The five included studies all included subjects that have ASD (Autism Spectrum Disorder), have a focus on subjects with ASD that have experienced child sexual abuse, are reported to be at risk to experience and are under 18 years of age, which labels it as child sexual abuse (CSA). Of the five articles, four are considered to use primary data and one uses secondary data. The article study locations are not exclusive to the United States, as this was determined to not affect the quality of results.

Table: Description of Studies

Author	Reviews types	AMSTAR score	Study Design	Sample	Research aim	Measures	Outcome
Aker & Johnson (2020)	Quantitative	3.5	Interviews and case study	N=96, Mild n=48 (5-70 years); IDmoderate n=18 (14-43 years); Autism n=16 (5-50 years); race NR	The present a clear description of how investigative interviews of individuals with ID and autism are conducted.	Victims of sexual and physical abuse, mild and moderate autism symptoms	The majority of victims were female, and the questions used by police when interviewing victims were not highly recommendable.
Brenner et al., (2017)	Quantitative	3.5	Observation study, interactive assessment	N=350, 4-21 years adolescents	To examine how youths with autism expressed abuse-related trauma	Severity of ASD, childhood occurrence of abuse, PTSD symptoms.	Youths with ASD portrayed intrusive thoughts and loss of interest.

Gotby et al., (2018)	Quantitative	2.5	Informative prospective design	N=4,500 Males=1,902 Females =2,598	Determine whether childhood ADHD and ASD symptoms predicted sexual abuse behavior at 18 years.	Neurodevelopmental issues, coercive sexual victimization , zygosity	ASD was related to a threefolded risk for coercive sexual abuse, while ADHD was associated with a double risk for the related behavior.
Author	**Reviews Types**	**AMSTAR Score**	**Study Design**	**Sample**	**Research aim**	**Measures**	**Outcome**
Kenny et al., (2013)	Qualitative	3.5	Case study	N=1; age=5; gender= M; race=Latino	Teach the boy body safety and general safety rules to combat possible sexual victimization and injury.	Diagnosed with ASD, Enrolled in KLAS program for being accident prone.	He started learning how to walk away from fire, learned to say 'no' to inappropriate touches, and got more insight into the issue of sexual abuse.
Walters et al., (2013)	Quantitative	2.5	Interview And retrospective self-report	(n=46, 15 to 19 years, M=17.90; 43 males from juvenile court.	To evaluate possible depression symptoms and presence of severe abuse among adolescences with ASD who are judged for sexual offences.	Diagnosed with ASD, childhood abuse-related trauma, presence of depression	There were occurrences of childhood maltreatment for the adolescence with ASD who had been judged by the juvenile court for sexual offenses

Prevalence of Abuse

Gotby et al. ‘s (2018) perspective articulates that although ASD, ADHD, and NDDs have been linked to increased risks of sexual victimization in previous studies, there is limited research specifying whether the associations are connected to the specific neurodevelopmental disorder. The researchers studied cases of ADHD and ASD from childhood up to 18 years among 4,500 participants and used a genetically informative and prospective design to examine the connection with sexual victimization. The researchers realized that ASD diagnosis in female patients escalated the risk of coercive sexual victimization three times, and ADHD was linked with doubled risks. In contrast, ASD and ADHD among male patients have the same magnitude of associated risks to sexual harassment. However, the researchers discovered that due to shared genetics, coercive sexual victimization was associated with NDD as a general factor. Conclusively, the article asserts that NDD is a general factor deemed as the vulnerability condition that fueled coercive sexual victimization instances among patients.

Aker & Johnson’s (2020) review shows that patients with autism or intellectual disabilities are prone to distressing cases of sexual and physical abuse. They used transcribed investigative interviews to analyze 96 suspected victims diagnosed with mild and Moderate ID and those with autism. The gap in this research shows that there is a lack of enough studies analyzing the features of the issue in the criminal justice system; the process of real-life investigative interviews is understudied as well. The researchers discovered that females in their early twenties were the victims, and they reported cases of sexual abuse. Based on their findings, the researchers argued that investigative police used less practical interview strategies when interviewing PWID and PWA as they relied mostly on yes/no questions. The research concluded

with recommendations views that called for more information regarding how people with disabilities should be engaged in investigative interviews.

Effects of Abuse

The research of Brenner et al. (2017) found that children and adolescents with Autism Spectrum Disorder encounter numerous maltreatment and traumatic experiences. Thus, the study aimed to uncover youth with ASD express trauma-based behavioral manifestations as a result of abuse. Using the caregivers' report on the patients' history of abuse, the researchers utilized the Analysis of Covariance tool (ANCOVA) to compare the study's outcomes. The study identified that youths with ASD who had a history of different abuse cases, including emotional, sexual, and physical, were most likely to have distressing memories, loss of interest, lethargy, and intrusive thought compared to ASD patients who had no history of maltreatment. In contrast, the article points out that Patients diagnosed with posttraumatic stress disorder experienced externalized and more severe signs than ASD patients with a history of abuse but have no clinical diagnosis of PTSD. In conclusion, the researchers recommended the need for evidence-based treatment measures for ASD children and Adolescents by promoting trauma screening strategies.

Walters et al. (2013) in their article had the research rationale which illustrates that although ASDs children and adolescents are at greater risk of encountering maltreatment and anxiety disorders, the literature reviews and research works investigating the aftermaths of neglect and abuse among ASD patients. Therefore the aim of the research was to determine cases of neglect and abuse as linked to the depressive system among ASD patients. The researchers also aimed to examine adjudicated ASD sexual offenders by focusing on cases of childhood maltreatment and depression. Of the 43 participants, 27 had autism, while the remaining 16 had

not undergone ASD diagnosis. The findings show that both groups had a high level of abuse and neglect. The researchers also identified that ASD sexual offenders had extreme depressive symptoms compared to those without ASD conditions. The article recommends that rehabilitative programs should be restructured to accommodate the needs of adolescent sexual offenders with ADHD. The researchers also articulated that social skills programs and biological sexual education should be introduced for children and adolescents with ASD.

Education and Training Safety

Kenny et al. (2013), the researchers explored a case study that illustrates the implementation of a safety training program for a Latino boy with ASD. The program was designed to enlighten the boy about safety measures to limit his vulnerability to sexual injuries and victimizations. Through the training program, the article identifies that the little boy learned a few safety ideas that supported personal safety. Without follow-up programs, the researchers pointed out; it would lead to reduced knowledge about safety strategies. However, the researchers identified that treatment fidelity procedures limited efficiency in the research. The researchers concluded that more safety training programs should be created and should involve the parents; they also argued that frequent “booster” education and training programs are inevitable in training and educating autistic children.

Summary of Results

During this research process, the results found indicated that there is a prevalence of CSA victimization when it comes to children with ASD, as they are targeted due to the parts of their disorder that makes them vulnerable, such as their impaired communication skills (Gotby, p.962, 2018). Aker & Johnson (2020) found in their research that while there seems to be a link between prevalence of CSA in those with ASD, there is limited research and strategies at hand to

deal with such situations in a practical manner and seek out signs that CSA accorded for a child with ASD. The effects of said abuse on ASD children specifically are found by Brenner et al. (2017) and Walters et al. (2013), who point to potential psychology, behavioral, developmental and other effects from csa experiences that can effect a the child, but not be as visible as a child without ASD. It is part for these same reasons that Kenny et al. (2013), emphasizes the need for programs that teach children with ASD and their parents/families for the child's safety, and, as the previous articles stated as well, the need to further research the subject matter.

References

Åker, T. H., & Johnson, M. S. (2020). Interviewing alleged victims with mild and moderate intellectual disabilities and autism: A field study of police‐investigated cases of physical and sexual abuse in a Norwegian national sample. *Journal of Intellectual Disability Research, 64*(10), 782-792.

American Academy of Child & Adolescent Psychiatry (AACAP). (2020). *Sexual Abuse*. American Academy of Child & Adolescent Psychiatry. Retrieved September 9, 2022, from https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Child-Sexual-Abuse-009.aspx

American Association for Marriage and Therapy (AAMFT). (n.d.). *Childhood Sexual Abuse*. AAMFT. Retrieved September 9, 2022, from https://www.aamft.org/Consumer_Updates/Childhood_Sexual_Abuse.aspx

Anjum, S., & Asir Ajmal, M. (2012). Evaluation of a multi-pronged intervention with an autistic child: A grounded action research. *Pakistan Journal of Social & Clinical Psychology*, *9*(3), 9–19.

Arora, P. (2021). *Play therapy: CBPT or CCPT?* ParikramA. https://www.parikram-appliedpsychology.com/post/play-therapy-cbpt-or-ccpt#:~:text=Both%20CBPT%20and%20CCPT%20approaches,to%20change%20their%20thought%20process

Bhat, A. N. (2021). A SPARK study report shows that motor impairment increases in children with autism spectrum disorder as a function of social communication, cognitive and

functional impairment, repetitive behavior severity, and comorbid diagnoses. *Autism Research, 14*(1), 202-219.

Blakemore, T., Herbert, J. L., Arney, F., & Parkinson, S. (2017). The impacts of institutional child sexual abuse: A rapid review of the evidence. *Child abuse & neglect, 74*, 35-48. Retrieved October 23, 2022, from https://www.sciencedirect.com/science/article/abs/pii/S0145213417302843

Brenner, J., Pan, Z., Mazefsky, C., Smith, K. A., & Gabriels, R. (2018). Behavioral symptoms of reported abuse in children and adolescents with autism spectrum disorder in inpatient settings. *Journal of autism and developmental disorders, 48*, 3727-3735.

Brown-Lavoie, S. M., Viecili, M. A., & Weiss, J. (2014). Sexual knowledge and victimization in adults with autism spectrum disorders. *Journal of autism and developmental disorders, 44*, 2185-2196.

Brown, K. R., Peña, E. V., & Rankin, S. (2017). Unwanted sexual contact: Students with autism and other disabilities at greater risk. *Journal of College Student Development, 58*(5), 771-776.

Buck, R., Powers, S. R., & Hull, K. S. (2017). Measuring emotional and cognitive empathy using dynamic, naturalistic, and spontaneous emotion displays. *Emotion, 17*(7), 1120.

Canadian Agency for Drugs and Technologies in Health (CADTH). (2014). Stepwise approach for the prescription of opiates for non-cancer pain: a review of clinical evidence and guidelines. *Rapid Response Report: Summary with Critical Appraisal.* 1-17.

Carbajal, J., & Praetorius, R. T. (2020). How does autism affect the processing of child sexual abuse trauma? *Journal of Human Services: Training, Research, and Practice, 5(*1), 4.

Centers for Disease Control and Prevention. (2022). *Fast facts: Preventing child sexual abuse |violence prevention|injury Center|CDC*. Centers for Disease Control and Prevention. Retrieved November 25, 2022, from https://www.cdc.gov/violenceprevention/childsexualabuse/fastfact.html

Centers for Disease Control and Prevention (CDC). (2022a, March 2). *Data & statistics on autism spectrum disorder.* Centers for Disease Control and Prevention. Retrieved September 24, 2022, from https://www.cdc.gov/ncbddd/autism/data.html

Centers for Disease Control and Prevention (CDC). (2022b, March 28). *Signs and symptoms of autism spectrum disorder.* Centers for Disease Control and Prevention. Retrieved September 24, 2022, from https://www.cdc.gov/ncbddd/autism/signs.html

Chan, J. & John, R. M. (2012). Sexuality and sexual health in children and adolescents with autism. *The Journal for Nurse Practitioners, 8*(4), 306 - 315. Retrieved September 8, 2022, from https://doi.org/10.1016/j.nurpra.2012.01.020

Child abuse statistics. Indiana Center for the Prevention of Youth Abuse & Suicide. (2022). Retrieved October 23, 2022, from https://www.indianaprevention.org/child-abuse-statistics

Children's Defense Fund. (2021). *The State of America's children 2021 - overview.* Children's Defense Fund. Retrieved September 8, 2022, from https://staging.childrensdefense.org/state-of-americas-children/soac-2021-overview/

Christoffersen, M. N. (2019). Violent crime against children with disabilities: a nationwide prospective birth cohort-study. *Child Abuse & Neglect, 98*, 104150. https://doi.org/10.1016/j.chiabu.2019.104150

Cockbain, E., Ashby, M., & Brayley, H. (2017). Immaterial boys? Large-scale exploration of gender-based differences in child sexual exploitation service users. *Sexual Abuse, 29*(7), 658-684. https://doi.org/10.1177/1079063215616817

Consequences of child sexual abuse. INSPQ. (n.d.). Retrieved January 15, 2023, from https://www.inspq.qc.ca/en/sexual-assault/understanding-sexual-assault/consequences

Dahlgren, S., & Sandberg, A. D. (2008). Referential communication in children with autism spectrum disorder. *Autism, 12*(4), 335-348. https://doi.org/10.1177/1362361308091648

Fuld, S. (2018). Autism Spectrum Disorder: The Impact of Stressful and Traumatic Life Events and Implications for Clinical Practice. *Clinical Social Work Journal*, *46*(3), 210–219. https://doi.org/10.1007/s10615-018-0649-6

Gervais, S. J., & Eagan, S. (2017). Sexual objectification: The common thread connecting myriad forms of sexual violence against women. *American Journal of Orthopsychiatry, 87*(3), 226.

Gotby, O., V., Lichtenstein, P., Långström, N., & Pettersson, E. (2018). Childhood neurodevelopmental disorders and risk of coercive sexual victimization in childhood and adolescence–a population‐based prospective twin study. *Journal of Child Psychology and Psychiatry, 59*(9), 957-965.

Harracksingh, R., & Johnson, E. J. (2021). An Exploratory Study on Child Sexual Abuse and Exploitation. *Social Development Issues (Social Development Issues)*, *43*(2), 40–53.

Hindley, N., & Lord, L. (2021). The development of guidance for responding to disclosure of non‐recent child sexual abuse within a large provider of health services for adults and children. *Child Abuse Review*, *30*(1), 71–83. https://doi.org/10.1002/car.2663

Ion, S. (2021). Social Assistance for Children and Young People with Autism Spectrum Disorders (ASD). *Social Work Review / Revista de Asistenta Sociala*, 2, 187–199.

Jones, K. D. (2002). Group Play Therapy With Sexually Abused Preschool Children: Group Behaviors and Interventions. *Journal for Specialists in Group Work*, *27*(4), 377–389. https://doi.org/10.1080/714860200

Kenny, M. C., Bennett, K. D., Dougery, J., & Steele, F. (2013). Teaching general safety and body safety training skills to a Latino preschool male with autism. *Journal of Child and Family Studies, 22,* 1092-1102.

Kenny, M. C., Crocco, C., & Long, H. (2021). Parents plan to communicate about sexuality and child sexual abuse with their children with an autism spectrum disorder. *Sexuality and Disability, 39*(2), 357-375.

La Valle, C., Plesa-Skwerer, D., & Tager-Flusberg, H. (2020). Comparing the pragmatic speech profiles of minimally verbal and verbally fluent individuals with an autism spectrum disorder. *Journal of autism and developmental disorders, 50*(10), 3699-3713.

Lev-Wiesel, R., Goldner, L., & Daphna-Tekoah, S. (2022). Introduction to the special issue: The use of creative art therapies in the prevention, screening, and treatment of child sexual abuse. *Journal of Child Sexual Abuse*, *31*(1), 3–8. https://doi.org/10.1080/10538712.2022.2032895

Lord, C., Elsabbagh, M., Baird, G., & Veenstra-Vanderweele, J. (2018). Autism spectrum disorder. *The Lancet, 392*(10146), 508-520.

Mallett, R., Hagen-Zanker, J., Slater, R., & Duvendack, M. (2012). The benefits and challenges of using systematic reviews in international development research. *Journal of*

development effectiveness, 4(3), 445-455. Retrieved from https://www.tandfonline.com/doi/full/10.1080/19439342.2012.711342.

Mandell, D. S., Walrath, C. M., Manteuffel, B., Sgro, G., & Pinto-Martin, J. A. (2005). The prevalence and correlates of abuse among children with autism served in comprehensive community-based mental health settings. *Child Abuse & Neglect, 29*(12), 1359–1372. https://doi.org/10.1016/j.chiabu.2005.06.006

Martinello, E. (2014). Reviewing strategies for risk reduction of sexual abuse of children with intellectual disabilities: A focus on early intervention. *Sexuality & Disability, 32*(2), 167–174. Retrieved September 8, 2022, from https://doi.org/10.1007/s11195-014-9345-9

Mii, A. E., McCoy, K., Coffey, H. M., Meidlinger, K., Sonnen, E., Huit, T. Z., Flood, M. F., & Hansen, D. J. (2020). Attention Problems and Comorbid Symptoms following Child Sexual Abuse. *Journal of Child Sexual Abuse*, *29*(8), 924–943. https://doi.org/10.1080/10538712.2020.1841353

Nario‐Redmond, M. R. (2010). Cultural stereotypes of disabled and non‐disabled men and women: Consensus for global category representations and diagnostic domains. *British journal of social psychology, 49*(3), 471-488.

Ohlsson Gotby, V., Lichtenstein, P., Långström, N., & Pettersson, E. (2018). Childhood neurodevelopmental disorders and risk of coercive sexual victimization in childhood and adolescence–a population‐based prospective twin study. J*ournal of Child Psychology and Psychiatry, 59*(9), 957-965.

Olteanu, M. C., & Faraj, F. (2018). Development of the autistic child by play: Spontaneous play and therapeutic play. *Social Research Reports*, *10*(3), 28–37.

Pachner, O., & Aranyi, G. (2021). Challenges for children and adolescents with autism and their families during the Covid-19 pandemic. *Journal of Global Awareness, 2*(1), 4. Retrieved September 8, 2022, from https://scholar.stjohns.edu/jga/vol2/iss1/4

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Systematic reviews, 10(*1), 1-11. Retrieved from https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-021-01626-4#citeas

Pati, D., & Lorusso, L. N. (2018). How to write a systematic review of the literature. *HERD: Health Environments Research & Design Journal, 11*(1), 15-30. https://doi.org/10.1177/1937586717747384

Pollock, M., Fernandes, R. M., & Hartling, L. (2017). Evaluation of AMSTAR to assess the methodological quality of systematic reviews in overviews of reviews of healthcare interventions. *BMC Medical Research Methodology, 17*(1), 1-13. Retrieved from https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/s12874-017-0325-5#citeas.

Public health expertise and reference centre. (2017). *Consequences*. INSPQ. Retrieved November 25, 2022, from https://www.inspq.qc.ca/en/sexual-assault/understanding-sexual-assault/consequences

Roberts, T. P., Matsuzaki, J., Blaskey, L., Bloy, L., Edgar, J. C., Kim, M., ... & Embick, D. (2019). Delayed M50/M100 evoked response component latency in minimally verbal/nonverbal children who have autism spectrum disorder. *Molecular autism, 10*(1), 1-10.

Romney, J. S., & Garcia, M. (2021). TF-CBT Informed Teletherapy for Children with Autism and their Families. Journal of Child & Adolescent Trauma, 14(3), 415–424. https://doi.org/10.1007/s40653-021-00354-0

SAMHSA. (2022). *Recognizing and treating child traumatic stress*. SAMHSA. Retrieved November 12, 2022, from https://www.samhsa.gov/child-trauma/recognizing-and-treating-child-traumatic-stress

Sarahan, N., & Copas, R. (2014). Autism Assets. *Reclaiming Children & Youth*, 22(4), 34–37.

Schottelkorb, A. A., Swan, K. L., & Ogawa, Y. (2020). Intensive child‐centered play therapy for children on the autism spectrum: A pilot study. *Journal of Counseling & Development*, *98*(1), 63–73. https://doi.org/10.1002/jcad.12300

Simpson, K., Adams, D., Bruck, S., & Keen, D. (2019). Investigating the participation of children on the autism spectrum across home, school, and community: A longitudinal study. *Child: Care, Health & Development*, *45*(5), 681–687. https://doi.org/10.1111/cch.12679

Simpson, K., Adams, D., Wheeley, E., & Keen, D. (2020). Parent Perspectives on the Presentation, Triggers, Impact, and Support of Anxiety in Young Children on the Autism Spectrum. *Journal of Child & Family Studies*, *29*(2), 572–582. https://doi.org/10.1007/s10826-019-01576-5

Sohn, E. (2020). *How abuse mars the lives of autistic people.* Spectrum. Retrieved September 8, 2022, from https://www.spectrumnews.org/features/deep-dive/how-abuse-mars-the-lives-of-autistic-people/

U.S. Department of Health and Human Services (HHS). (2022). *Autism spectrum disorder (ASD).* National Institute of Mental Health. Retrieved September 24, 2022, from https://www.nimh.nih.gov/health/statistics/autism-spectrum-disorder-asd#:~:text=Across%20the%20CDC%20surveillance%20sites,all%20racial%20and%20ethnic%20groups.

Walters,B., J., Hughes, T. L., Sutton, L. R., Marshall, S. N., Crothers, L. M., Lehman, C., ... & Huang, A. (2013). Maltreatment and depression in adolescent sexual offenders with an autism spectrum disorder. Journal of child sexual abuse, 22(1), 72-89.

Wamser, N. R., & Wamser-Nanney, R. (2020). Sexual Behavior Problems and Premature Termination From Pediatric Trauma-Focused Treatment Among Sexually Abused Children. *Journal of Traumatic Stress*, *33*(5), 835–842. Retrieved from: https://onlinelibrary.wiley.com/doi/abs/10.1002/jts.22518

Weiss, J. A., Thomson, K., Burnham Riosa, P., Albaum, C., Chan, V., Maughan, A., ... & Black, K. (2018). A randomized waitlist‐controlled trial of cognitive behavior therapy to improve emotion regulation in children with autism. *Journal of Child Psychology and Psychiatry, 59*(11), 1180-1191.

Wills, C. (2014). DSM-5 and neurodevelopmental and other disorders of childhood and adolescence. *Journal of the American Academy of Psychiatry and the Law Online*, *42*(2), 165-172. Retrieved September 8, 2022, from https://pubmed.ncbi.nlm.nih.gov/24986343/

Appendix

AMSTAR 2 Checklist

1. Did the research questions and inclusion criteria for the review include the components of PICO?

For Yes:
- □ Population
- □ Intervention
- □ Comparator group
- □ Outcome

Optional (recommended)
- □ Timeframe for follow-up

- Yes
- No

2. Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?

For Partial Yes:
The authors state that they had a written protocol or guide that included ALL the following:
- □ review question(s)
- □ a search strategy
- □ inclusion/exclusion criteria
- □ a risk of bias assessment

For Yes:
As for partial yes, plus the protocol should be registered and should also have specified:
- □ a meta-analysis/synthesis plan, if appropriate, *and*
- □ a plan for investigating causes of heterogeneity
- □ justification for any deviations from the protocol

- Yes Partial
- Yes No
-

3. Did the review authors explain their selection of the study designs for inclusion in the review?

For Yes, the review should satisfy ONE of the following:
- □ *Explanation for* including only RCTs
- □ OR *Explanation for* including only NRSI
- □ OR *Explanation for* including both RCTs and NRSI

- Yes
- No

4. Did the review authors use a comprehensive literature search strategy?

For Partial Yes (all the following):
- □ searched at least 2 databases (relevant to research question)
- □ provided key word and/or search strategy
- □ justified publication restrictions (e.g. language)

For Yes, should also have (all the following):
- □ searched the reference lists / bibliographies of included studies
- □ searched trial/study registries
- □ included/consulted content experts in the field
- □ where relevant, searched for grey literature
- □ conducted search within 24 months of completion of the review

- Yes Partial
- Yes No
-

5. Did the review authors perform study selection in duplicate?

For Yes, either ONE of the following:

- □ at least two reviewers independently agreed on selection of eligible studies and achieved consensus on which studies to include
- □ OR two reviewers selected a sample of eligible studies and achieved good agreement (at least 80 percent), with the remainder selected by one reviewer.

□ Yes
□ No

6. Did the review authors perform data extraction in duplicate?

For Yes, either ONE of the following:

- □ at least two reviewers achieved consensus on which data to extract from included studies
- □ OR two reviewers extracted data from a sample of eligible studies and achieved good agreement (at least 80 percent), with the remainder extracted by one reviewer.

□ Yes
□ No

7. Did the review authors provide a list of excluded studies and justify the exclusions?

For Partial Yes:	For Yes, must also have:	
□ provided a list of all potentially relevant studies that were read in full-text form but excluded from the review	□ Justified the exclusion from the review of each potentially relevant study	□ Yes □ Partial Yes □ No

8. Did the review authors describe the included studies in adequate detail?

For Partial Yes (ALL the following):	For Yes, should also have ALL the following:	
□ described populations □ described interventions □ described comparators □ described outcomes □ described research designs	□ described population in detail □ described intervention in detail (including doses where relevant) □ described comparator in detail (including doses where relevant) □ described study's setting □ timeframe for follow-up	□ Yes □ Partial Yes □ No

9. Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review?

RCTs

For Partial Yes, must have assessed RoB from	For Yes, must also have assessed RoB from:	
□ unconcealed allocation, *and* □ lack of blinding of patients and assessors when assessing outcomes (unnecessary for objective outcomes such as all-cause mortality)	□ allocation sequence that was not truly random, *and* □ selection of the reported result from among multiple measurements or analyses of a specified outcome	□ Yes □ Partial Yes □ No □ Includes only NRSI

NRSI

For Partial Yes, must have assessed RoB:
- ☐ from confounding, *and*
- ☐ from selection bias

For Yes, must also have assessed RoB:
- ☐ methods used to ascertain exposures and outcomes, *and*
- ☐ selection of the reported result from among multiple measurements or analyses of a specified outcome

- ☐ Yes
- ☐ Partial Yes
- ☐ No
- ☐ Includes only RCTs

10. Did the review authors report o n the sources of funding for the studies included in the review?

For Yes
- ☐ Must have reported on the sources of funding for individual studies included in the review. Note: Reporting that the reviewers looked for this information but it was not reported by study authors also qualifies

- ☐ Yes
- ☐ No

11. If meta-analysis was performed did the review authors use appropriate methods for statistical combination of results?

RCTs

For Yes:
- ☐ The authors justified combining the data in a meta-analysis
  - ☐ AND they used an appropriate weighted technique to combine study results and adjusted for heterogeneity if present.
  - ☐ AND investigated the causes of any heterogeneity

- ☐ Yes
- ☐ No
- ☐ No meta-analysis conducted

For NRSI

For Yes:
- ☐ The authors justified combining the data in a meta-analysis
  - ☐ AND they used an appropriate weighted technique to combine study results, adjusting for heterogeneity if present
  - ☐ AND they statistically combined effect estimates from NRSI that were adjusted for confounding, rather than combining raw data, or justified combining raw data when adjusted effect estimates were not available
  - ☐ AND they reported separate summary estimates for RCTs and NRSI separately when both were included in the review

- ☐ Yes
- ☐ No
- ☐ No meta-analysis conducted

12. If meta-analysis was performed, did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?

For Yes:
- ☐ included only low risk of bias RCTs
- ☐ OR, if the pooled estimate was based on RCTs and/or NRSI at variable RoB, the authors performed analyses to investigate possible impact of RoB on summary estimates of effect.

- ☐ Yes
- ☐ No
- ☐ No meta-analysis conducted

13. Did the review authors account for RoB in individual studies when interpreting/ discussing the results of the review?

For Yes:
- ☐ included only low risk of bias RCTs
- ☐ OR, if RCTs with moderate or high RoB, or NRSI were included the review provided a discussion of the likely impact of RoB on the results

- ☐ Yes
- ☐ No

14. Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?

For Yes:	
□ There was no significant heterogeneity in the results □ OR if heterogeneity was present the authors performed an investigation of sources of any heterogeneity in the results and discussed the impact of this on the results of the review	□ Yes □ No

15. If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?

For Yes:	
□ performed graphical or statistical tests for publication bias and discussed the likelihood and magnitude of impact of publication bias	□ Yes □ No □ No meta-analysis conducted

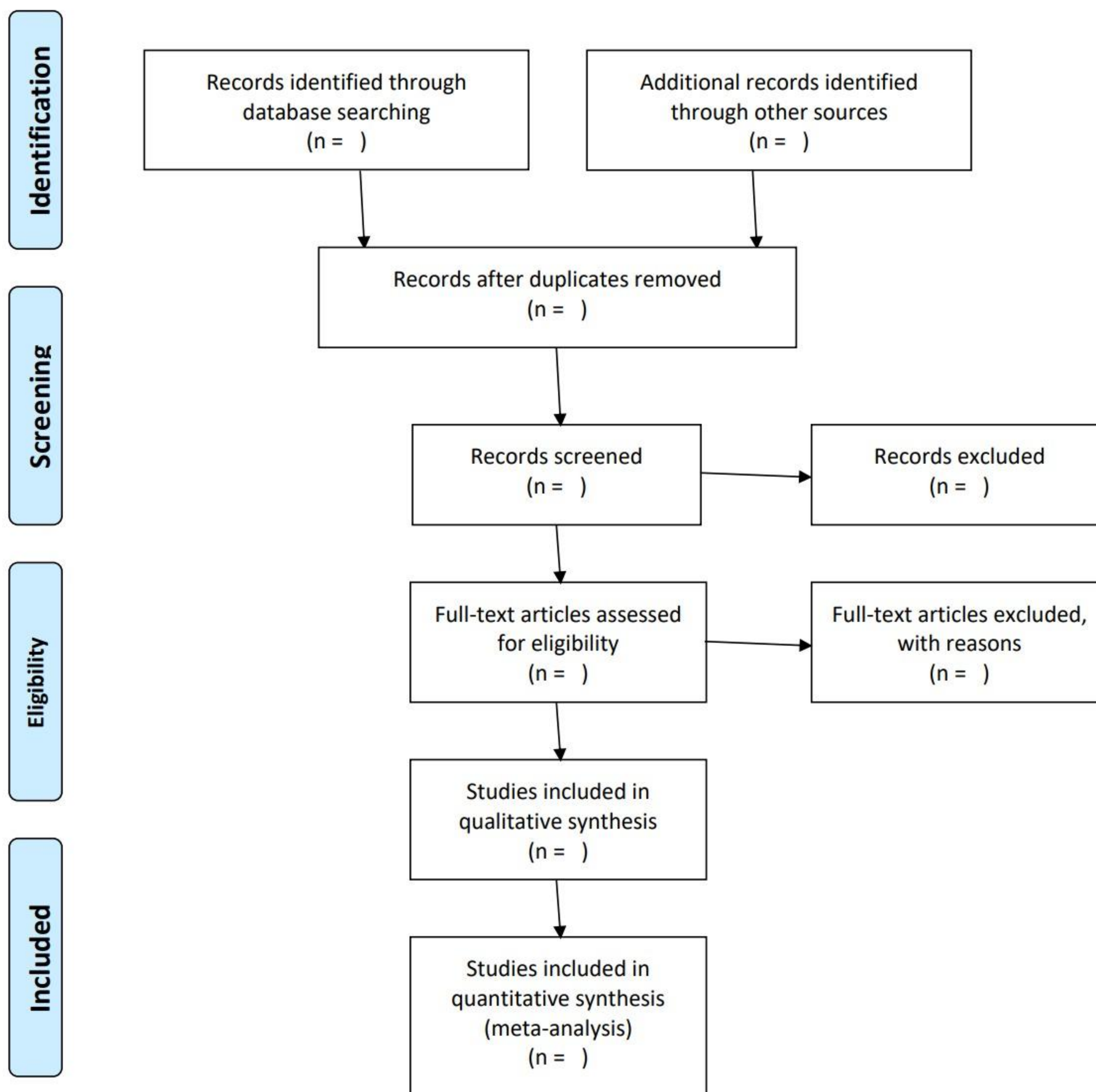
16. Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?

For Yes:	
□ The authors reported no competing interests OR □ The authors described their funding sources and how they managed potential conflicts of interest	□ Yes □ No

References

Ohlsson, Gotby, V., Lichtenstein, P., Långström, N., & Pettersson, E. (2018). Childhood neurodevelopmental disorders and risk of coercive sexual victimization in childhood and adolescence–a population‐based prospective twin study. *Journal of Child Psychology and Psychiatry*, *59*(9), 957-965.

PRISMA Flow Diagram



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *P*referred *R*eporting *I*tems for *S*ystematic Reviews and *M*eta-*A*nalyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

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PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	

Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	

Section and Topic	Item #	Checklist item	Location where item is reported
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	

	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

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