

2-29-2020

How Does Autism Affect the Processing of Child Sexual Abuse Trauma?

Jose Carbajal

Stephen F. Austin State University, carbajalji@sfasu.edu

Regina T. Praetorius

The University of Texas at Arlington, rtpraetorius@uta.edu

Follow this and additional works at: <https://scholarworks.sfasu.edu/jhstrp>



Part of the [Child Psychology Commons](#), [Clinical Psychology Commons](#), [Counseling Commons](#), [Counseling Psychology Commons](#), [School Psychology Commons](#), and the [Social Work Commons](#)

Tell us how this article helped you.

Recommended Citation

Carbajal, Jose and Praetorius, Regina T. (2020) "How Does Autism Affect the Processing of Child Sexual Abuse Trauma?," *Journal of Human Services: Training, Research, and Practice*: Vol. 5 : Iss. 1 , Article 4. Available at: <https://scholarworks.sfasu.edu/jhstrp/vol5/iss1/4>

This Article is brought to you for free and open access by the Human Services at SFA ScholarWorks. It has been accepted for inclusion in *Journal of Human Services: Training, Research, and Practice* by an authorized editor of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

How Does Autism Affect the Processing of Child Sexual Abuse Trauma?

There is extensive research on child sexual abuse (CSA) (Juye, Trickett, & Negriff, 2010; Katz & Hershkowitz, 2010; Negriff, Noll, Shenk, Putnam, & Trickett, 2010; Noll-Hussong et al., 2010). However, an area that has been neglected is the CSA of children with neurodevelopmental disorders (ND); this case study looked at autism (Bilgin & Kucuk, 2010; Hoover, 2015; Kerns, Newschaffer, & Berkowitz, 2015; Khetrupal, 2010; Sevlever, Roth, & Gillis, 2013). Children with autism are at higher risk because of their functional impairment in social interaction, social communication, and symbolic imagination (Aylott, 2010; Chown, 2010; Subramanyam, Mukherjee, Dave, & Chavda, 2019). Differential diagnosis might be a major concern, as the symptoms might appear to be those of autism, and the treatment plan might not be for the actual problem (Hoover, 2015). Thus, the warning signs of abuse might be interpreted or misinterpreted as autistic symptoms. Therefore, children with autism who have experienced CSA might rarely receive treatment because many clinicians are not trained to work with them (Khetrupal, 2010). The purpose of this case study, which uses secondary qualitative data, is to explore how a child with autism interprets and processes being sexually abused. We explore the similarities and differences of how a child with autism experiences CSA as compared to children without autism.

Though much is known about CSA as experienced by children without autism, the literature is limited on how the experience of CSA is further complicated for children with autism (Hoover, 2015; Kerns, Newschaffer, & Berkowitz, 2015). A brief overview of what is known about the experience of CSA for children without autism is presented, covering the prevalence and the effects of CSA. What little is known about CSA among children with autism is also presented, along with an overview of autism.

CSA

According to the American Academy of Child and Adolescent Psychiatry (AACAP) (2014), "Child sexual abuse has been reported up to 80,000 times a year, but the number of unreported instances is far greater because the children are afraid to tell anyone what has happened, and the legal procedure for validating an episode is difficult" (para. 1). Children are often afraid to make a report because CSA often occurs within the "family, by a parent, step-parent, sibling or another relative; or outside the home, for example, by a friend, neighbor, childcare person, teacher, or stranger" (Lippert, Cross, Jones, & Walsh, 2010, p. 1). Lippert et al. (2010) found 57% of the cases involved intrafamilial abuse. Intrafamily CSA is particularly significant because of the pervasive psychological effects it has on the victim in terms of relationships, anxiety and depressive disorders, and substance use (Dube et al., 2005; Schacht et al., 2010; Schraufnagel, Davis, George, & Norris, 2010; Stoner et al., 2008; Van Dorn, Mustillo, Elbogen, Dorsey, Swanson, & Swartz, 2005; National Child Traumatic Stress Network [NCTSN], 2009). Dimitrova et al. (2010) conducted a study regarding the relationship between CSA and attachment and found women who had experienced CSA being more anxious and fearful about their relationships.

Hovens et al. (2010) found childhood trauma, which included CSA, increased the risk for other psychological problems. Similarly, Noll-Hussong et al. (2010) found individuals with a history of sexual abuse were more likely to have increased "autonomous responses to emotionally negative stimuli" (p. 486). These increased responses might indicate individuals have more difficulty with processing and regulating emotions (Ford, Fraleigh, Albert, & Connor, 2010; Kim & Cicchetti, 2010; Yeater, Treat, Viken, & McFall, 2010). Therefore, the person's historical experience and adaptation determine how the individual will regulate the autonomous emotional responses (Schore & Schore, 2008). In a 45-year prospective epidemiological study, Clark,

Caldwell, Power, and Stansfeld (2010), found “childhood adversities were associated with adolescent and early adulthood psychopathology with some associations persisting to mid-life” (p. 391). As such studies found, untreated trauma persists until there is successful trauma processing. In other words, a trauma in these cases does not automatically or naturally dissolve. Moreover, initial symptom severity is an important factor in recovery from trauma, and specific reactions to trauma co-determine this recovery (Riggs, Rothbaum, & Foa, 1995; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992), along with other factors such as the quality of care available to support the person’s recovery from trauma.

However, past traumatic experiences, such as CSA, slow down the recovery process and increase the likelihood of developing Posttraumatic Stress Disorder (PTSD) (Briere, Godbout, & Dias, 2015; Koopman et al., 2005). The rates of PTSD among children who experience CSA are higher than among children who are not sexually abused (Cook, Blaustein, Spinazzola, & van der Kolk, 2003; Zero to Six Collaborative Group, 2010). The rate of lifetime exposure to traumatic stressors for young children between the ages of 2 and 5 is 52.5% (Zero to Six, 2010); 78% of children of all ages have experienced more than one trauma (Cloitre et al., 2009; Cook et al., 2003). In a multisite, randomized study of children who had experienced CSA, Cohen, Deblinger, Mannarino, and Steer (2004) found 89% of their sample met the full diagnostic criteria for PTSD. Subsequent trauma appears to exacerbate the symptoms, thus increasing the probability of developing PTSD (De Bellis, Hooper, Spratt, & Woolley, 2009; Samuelson, Krueger, Burnett, & Wilson, 2010).

Autism and Trauma

The Centers for Disease Control and Prevention (CDC) Community Report (2018) on autism found 1 in 59 children have an autism spectrum disorder (ASD). In addition, the CDC found that although developmental characteristics consistent with autism may be identified by age 2, children are not diagnosed until after age 4. The older age might indicate a lack of resources; this is a disadvantage to children with ASD, especially for those who have experienced trauma (Kerns, Newschaffer, & Berkowitz, 2015).

Autism impairs social communication capabilities, and repetitive sensory and motor behavior are impediments to processing information (APA, 2010). Impairment in any one of these domains, e.g., social, emotional reciprocity, social communication, and behavioral inflexibility, decrease the likelihood a child will be able to reprocess trauma naturally, as pathology blocks the information-processing system from reaching a resolution, and autistic symptoms are likely to impair processing. According to Shapiro (2001), trauma creates an imbalance in “the information-processing system” and the individual “is unable to function optimally and the information acquired at the time of the event, including images, sounds, affect, and physical sensations, is maintained neurologically in its disturbing state” (p. 31) (see also Heim & Buhler, 2006; Talwar, 2007). Children who have autism have an impairment in neurological and affect regulation, which increases their distress level and makes their ability to process trauma more difficult (Brenner, Pan, Mazefsky, Smith, & Gabriels, 2018), as the brain processes the information more slowly or blocks the information-processing system (Di Martino et al., 2014).

In considering how to best help children with autism process trauma, it is important to understand the prevalence of trauma in these children. Mandell, Walrath, Manteuffel, Sgro, and

Pinto-Martin (2005) found that among children with autism (62% males), 14.1% reported only physical abuse, 12.2% reported only sexual abuse, and 4.4% reported both physical and sexual abuse; therefore, a ratio of 1:5 experience physical abuse and 1:6 experience sexual abuse. Additionally, Mandell et al. (2005) found that the signs of CSA in children with autism were similar to the signs of CSA in children without autism: (1) sexually acting out and aggressive behavior; (2) running away from home; and (3) attempting suicide. Therein lies the major complication for children with autism who experience CSA: the typical signs indicating CSA are likely to present (Merrick, Litrownik, Everson, & Cox, 2008), thus decreasing the likelihood abuse will be discovered as a causative factor. Clinicians may assume the neurological disorder of autism is the etiology of the child's symptoms and overlook the possibility of sexual abuse as another etiological factor. The child's compromised ability to communicate also decreases the likelihood of the child reporting the CSA (Hoover, 2015).

Even if these difficulties in discovering the abuse are overcome, treatment interventions require modifications. Furthermore, while numerous studies have been conducted to understand autism, studies on how autism and sexual abuse might further complicate treatment are limited (Edelson, 2010; Hoover, 2015). With such a high prevalence of PTSD among children who have experienced CSA, treatment of PTSD is an appropriate starting point for exploring what might work for children with autism who have experienced CSA. Many studies have demonstrated the effectiveness of interventions to treat PTSD (Ahmad, Larsson, & Sundelin-Wahlsten, 2007; Friedman, Keane & Resick, 2007; Ribchester, Yule, & Duncan, 2010; Rothbaum, Ruef, Litz, Han, & Hodges, 2004; Shapiro, 2001), with trauma-focused cognitive behavioral therapy (TF-CBT) as the primary effective intervention among children with PTSD (Deblinger, Mannarino, Cohen, & Steer, 2006; National Crime Victims Research & Treatment Center, 2007). However, to date, no

studies demonstrate the efficacy of TF-CBT or any other treatment for children with autism and PTSD (Reichow & Volkmar, 2010; Stack & Lucyshyn, 2018). In addition, the focus of CBT is about changing the cognitive schema. For children and youth who have cognitive processing problems (often associated with autism), seeking to bring about change via cognitive processing may not be effective.

Suggestions have been made to modify current treatment interventions to best help children with autism (Reaven, 2009; Stack & Lucyshyn, 2018; White et al., 2010). A few emerging studies on anxiety (White et al., 2010; White, Ollendick, Scahill, Oswald, & Albano, 2009) may provide some useful directions in choosing interventions for children with autism and PTSD. White et al. (2009) suggest a multi-component integrated treatment (MCIT); a derivative of CBT, MCIT has had some promising results for anxiety reduction in children with autism. However, they also acknowledge more research is needed to further validate this intervention with children with autism. Nondirective play therapy and behavior therapy have also been suggested to assist children with autism and PTSD (Josefi & Ryan, 2004). However, it seems likely that incorporating directive play therapy with TF-CBT would be the most beneficial. This would help the child process the information without using talking therapy techniques. This intervention would be specific and concrete in processing the trauma, which a child with autism would need. Another intervention that might be helpful is eye movement desensitization and reprocessing (EMDR) therapy (Barol & Seubert, 2010; Lobregt-van Buuren, Sizoo, Mevissen, & de Jongh, 2019). However, expertise in EMDR therapy is required, as the protocol must be modified to accommodate the child's level of functioning. In conclusion, regardless of the intervention, four major components are critical to helping children with autism: (1) increasing the structure of the intervention for individual therapy; (2) using visual aids and having the child confirm the meaning of these visual aids; (3) adjusting

the intervention to the particular child's impairment; and (4) having parents involved in the therapy process (White et al., 2009).

Method

This study uses the qualitative approach of a case study because it is designed to capture the nuances of a single case, including both the experience and its context. Secondary data analysis for this topic is ethically most appropriate and feasible because it avoids adding the stress of research protocols to the already-detrimental experience of CSA. Approval of the Institutional Review Board (IRB) was acquired before this study was conducted.

Data Collection

This case study relies on the journaling of an autistic female who wrote about her experiences of being sexually abused from toddlerhood through young adulthood. She was diagnosed in young adulthood with autism by a leading autism psychologist, after two misdiagnoses in her childhood, the first of which was prior to her first sexual victimization. She published her journal in a public domain (the Internet) and had at least 280 entries reflecting on many aspects of her life dating back over five years, with four to eight entries per month. Entries were typically one single-spaced page, but occasionally shorter or longer. (It is not known whether she was journaling prior to this at a different Internet location or offline.)

Steps have been taken to ensure confidentiality is maintained, as required by the IRB approval for this study, including not using direct quotes from the journal entries. This measure is recommended when using sensitive data from public Internet sources (Brownlow & O'Dell, 2002; Kralik, Warren, Price, & Pignone, 2005). The data collected have been de-identified to ensure the person who reflected on her sexual abuse would not be identifiable, as recommended in the literature on use of Internet-based data for secondary qualitative analysis (Clarke & Ameron, 2008;

Hessler, Downing, Beltz, Pelliccio, Powell, & Vale, 2003; Kanuka & Anderson, 2007; Kralik et al., 2005).

Data Analysis

To ensure the credibility and robustness of qualitative analysis, the triangulation of analysts and theory was employed (Patton, 2002). Triangulation of analysts was performed for the two researchers who conducted the analysis. The first author conducted the first phase of analysis to ensure an informed expert analysis. He is a licensed clinical social worker with extensive clinical experience, over ten years, in working with survivors of childhood sexual abuse and has worked with several children with autism. The second phase of analysis involved discussions between researchers, in which the researchers provided neutral and objective suggestions to the research. The second author has experience in training law enforcement and healthcare professionals regarding sensitive communication with survivors of sexual abuse and violence but has not worked directly with survivors. Two masters level social workers with clinical experience with U.S. veterans and refugees provided additional data triangulation.

Data coding. A grounded theory approach was utilized for coding of the data, whereby the first author extracted open codes and then organized these into axial codes from which themes emerged. In keeping with conservative qualitative research norms, no literature review was conducted prior to the extraction of open codes. This serves as a protection against the researcher interjecting preconceived assumptions about the data informed by the existing literature on the subject.

Triangulation. For the second phase of analysis, triangulation, two masters-level social workers reviewed the codes, discussing and refining them through an iterative process until a satisfactory description of the results emerged and an agreement was reached among the

researchers. The second author reviewed the final product of this process, including the analysis procedure, coding, and results of the triangulation, providing an additional layer of triangulation for the study. A final layer of triangulation in the study was achieved by the authors reviewing the existing literature to enhance the understanding of what emerged from the data.

Case Description

Not much is known about Annie (pseudonym) prior to her toddler years. During toddlerhood, her autism was misdiagnosed as psychosis; shortly thereafter, she experienced her first sexual victimization by family friends, but she does not remember the event itself. During adulthood, she found documentation of this first instance of sexual abuse in her medical records. She has memories of being subsequently victimized throughout her childhood by two other family friends. By her adolescent years, Annie was working (somewhat unsuccessfully) and alternated living with her family and “couch-surfing” at friends’ houses. Around this time, she was gang-raped by a classmate and his friends but did not remember the experience until young adulthood. Shortly after the gang rape, she became a prostitute until young adulthood. During young adulthood, she was diagnosed with autism by a leading autism expert, and she returned to school. It seems, from her journal, she did not receive treatment for either her autism or her sexual abuse until young adulthood. Before then, she saw therapists for psychosis, not autism. By adulthood, she had married and embarked on a career she has to this day.

Results

The axial codes identified during this study emerged in two categories: Typical and Atypical. The Typical category included the following axial codes: Normalization, Interpretation, Substance Use, and Perpetrator. The Typical category is based on the characteristics of children who have experienced CSA but do not have autism. As mentioned earlier, no literature review was

conducted prior to the open coding. Therefore, the coding was specific to this case. However, similar characteristics to the Typical category codes were subsequently identified in the literature (NCTSN, 2009); these characteristics resonate with the first author's clinical experience. Unique to this case study is the Atypical category, which illustrates the differences between children with and without autism in processing CSA across some of the axial codes from the Typical category. The Atypical category has further clinical implications, especially for the interpretation code. Thus, the difference between the Typical and Atypical category is autism, that is, sexual abuse in itself is not different for children with autism, but trauma processing is different.

Typical

Normalization

In this study, *normalization* is defined as a person accepting something as normal when it is abnormal. The normalization process occurs over time. In sexual abuse cases, it is initiated when the perpetrator desensitizes the victim to alerts or triggers that something is wrong; this is the *grooming process*. In other words, it is a subtle process in which children might not be able to detect the perpetrator's intention. Detection might be even more difficult for children with autism, who already have impairments in social interaction.

This was the case for Annie, who experienced abuse as normal from toddlerhood, when the abuse began, continuing throughout the years during which she was abused. From early on, Annie reported how she began to normalize the abuse. She wrote that her parents and family members would tell her to just get over it. The family had normalized the situation as something that just happens in their family. They would say, "Yeah, yeah," as if it were something insignificant. This theme reoccurred many times in Annie's life. In addition, others blamed her for the sexual abuse, saying, "You probably asked for it." Thus, she was labeled as provoking the abuse. Another aspect

of this normalization was the grooming process: the perpetrator masked the abuse as normal and fun or blamed the victim.

Interpretation

The *interpretation process* is how a person tries to organize the traumatic event in his or her life. Interpretation is key to how a person understands the abuse. Annie wrote about her understanding of why the abuse occurred. In addition, she expressed how objectified she felt. Finally, she wrote about feeling trapped, confused, alone, and powerless.

The occurrence of and reasons for abuse

Annie's interpretation of the abuse was that kids or adolescents were bored, and sexual abuse was one way of ending their boredom. Her perception was the perpetrator would abuse her because he was bored. Annie continued to be abused until she was in her twenties. She reflected sexual abuse did not only happen to children or adolescents but to adults as well. As an adult, Annie wrote perpetrators, especially adult perpetrators, were "more subtle" at their manipulations and sexual advances. In addition, the ploys adult perpetrators used were different: she noted their language was sexualized but not explicitly sexual.

Objectification

Annie wrote that sexual abuse made her feel like an object to be used, a "tool." She experienced this as sexual abuse became more frequent, and she noticed the perpetrators' patterns. She also became more aware of sexual norms as she conversed with others who had not been sexually abused and discussed their sexual experiences. She wrote they gave consent, whereas she had never had "consensual sex." Thus, she began to feel like, and characterize herself as a "sexual tool" men used to satisfy themselves.

Feeling trapped

This theme occurred in various forms. Annie wrote she felt trapped and could not escape the perpetrators. She normalized the sexual assaults to the extent of believing nothing could change in her life. However, when she tried to escape her accepted normalcy, she discovered how difficult and pervasive it was. She felt trapped as she tried to escape from perpetrators and others who accepted these assaults as normal.

Substance use

For this study, *substance use* refers primarily to alcohol. Annie wrote alcohol was commonly used when she was assaulted. She also wrote about the normalcy of alcohol: “alcohol flowed” in her environment. She experienced alcohol-use normalcy as a child. She was given her first drinks by her parents before adolescence, and it continued throughout adolescence and young adulthood.

Perpetrators

The perpetrators, in this case, were no different from the typical perpetrators on children without autism. All of them were either friends of the family or acquaintances (classmates), and all were males. In addition, the perpetrators were not first-time offenders; some of them “had been jailed” for abuse of others. Therefore, it came as no surprise to family members or friends that further sexual abuse was occurring, and they accepted Annie’s sexual abuse as if it occurred in every family. In other words, this was the norm of the family system. As previously mentioned, Annie wrote about the manipulations these perpetrators used. Common threads were that they were friends of family members, acquaintances, or someone who had pretended to befriend her just to enable the assault.

Atypical

Atypical aspects of Annie’s experience emerged in the axial codes of *normalization* and

interpretation. As mentioned earlier, autism compounds the complexity of CSA. Though normalizing the abuse is a typical response for victims of CSA, Annie's autism further enhanced this response. Annie was told she provoked the abuse. In other words, her autism was characterized as the culprit, and thus she was blamed for what occurred. Her family called her "psychotic." Hence, she became even more silent as perpetrators threatened or physically and sexually assaulted her. Another atypical aspect of Annie's normalization was during the grooming process. Her perpetrators were familiar with the communication challenges autism produces. Furthermore, because of her autism, she had very few friends, and the perpetrators were keenly aware of her loneliness as well. For example, on several occasions, she was manipulated into believing certain males were her friends; then, as she began to trust them, they assaulted her.

The *interpretation* code was applied to Annie's writing about how her speech impediment prevented her from seeking help in the moment of abuse or disclosing it later, even when she wanted to— "I couldn't scream," she said. She also wrote her autism prevented her from processing the information, which "misleads people" into thinking children with autism "will never understand" the traumatic experience. Further, she reflected on how people in her life thought that because she had autism, the abuse would be less traumatic because she would not know how to process the "disturbing experiences." She wrote it was the opposite: the repetitive sensory input of the traumatic experiences made it even worse. She could not naturally reprocess the trauma; that is, she felt stuck in the same traumatic experience due to the repetitiveness of the autistic symptoms in addition to the symptoms from the trauma. Thus, her autism made reorganization of the traumatic experiences more difficult to accomplish.

Discussion

This case study reflects the added complexity of CSA for a person with autism. Though

typical characteristics of CSA were found with this case, the characteristics of the perpetrators and the use of alcohol during the abuse were major differences that emerged, as a child with autism normalizes and interprets CSA. For normalization, in addition to the typical aspect of being blamed for the abuse, Annie indicated that not only was she said "she probably asked for it," but also that her autism was the culprit.

In terms of interpretation, Annie noted that because of her autism, people in her life did not anticipate her being affected by the abuse. This misconception—that if a person has difficulty processing emotions, she or he will not be as strongly affected by trauma such as CSA—is common (Focht-New, Clements, Barol, Faulkner, & Service, 2008). However, because children with autism have a difficult time expressing their feelings and thoughts (McKenzie, Evans, & Handley, 2010; Monk et al., 2010), they experience more looped thinking patterns and have more repetitive symptoms than children without autism (Brenner, Pan, Mazefsky, Smith, & Gabriels, 2018; Koller, 2000; Lombardo, Chakrabarti, Bullmore, MRC AIMS Consortium, & Baron-Cohen, 2011; Kuusikko et al., 2009; Pelphrey et al., 2011; Shafritz et al., 2008), which actually exacerbate the effects of trauma. As Annie noted in relation to her victimization, she wanted to scream but could not.

Another aspect of interpretation that was different was Annie's compromised ability to assess others' intentions; male perpetrators whom she thought were friends deceived her. This might be related to an autistic characteristic called *social reciprocity*, or the ability to interpret others' feelings; this ability is compromised by challenges in processing facial expressions due to neural underconnectivity, e.g., between the amygdala and posterior and anterior portions of the temporal lobe (Bosl, Tierney, Tager-Flusberg, & Nelson, 2011; Monk et al., 2010; Pelphrey et al., 2011).

Limitations

The use of an Internet case has clear limitations. Because the victim's communications were Internet-based, it was not possible to follow up with Annie to validate our conclusions. The other limitation relates to the passage of time between the abuse and Annie's journaling. Annie's abuse spanned a period from toddlerhood through young adulthood; however, her journaling began in middle adulthood. Because Annie is reflecting as an adult on her childhood sexual abuse, her extrapolations might be from an adult's perspective rather than from a child's perspective. This might give a biased picture of how a child with autism experiences CSA. The bias is especially likely given memory decay. Memory is formed according to neural activity. Therefore, the reconstruction of memory is not a completely accurate retrieval of what occurred, and individuals with trauma hyper-focus on their traumatic experience (Roediger & McDermott, 2000). However, reflections can be insightful despite the adult perspective and memory reconstruction problems.

Conclusion

This study has important implications for the investigation and treatment process of CSA in children with autism. First, it points to the necessity of training of law enforcement and mental health professionals in the complications that autism adds to the already complex experience of CSA. Second, it highlights the need for more research on how the experience of CSA is further complicated by the presence of autism and on how best to treat the aftermath of CSA when autism is present.

Social justice in the investigation process is certainly at the core of this study's implications. One predictor of whether CSA charges will be filed is victim disclosure, as 87% of the cases produce no physical evidence, and 91% have no medical evidence of the abuse (Lippert et al., 2010; Walsh, Jones, Cross, & Lippert, 2010). A child with autism has social communication

impairment that might hinder disclosure. Nevertheless, behavioral cues might assist the investigator, mental health professional, or parent/guardian in identifying the perpetrator (Balogh et al., 2001). For the child with autism, this may not be an obvious clue, as children with autism are often particular about with whom they spend time, regardless of whether CSA has occurred. Still, when a child with autism is not willing to spend time with someone whom he or she previously accepted, others should consider whether this refusal is an indication of possible sexual abuse rather than a manifestation of the child's autistic characteristics. This change in behavior should be investigated in context.

Based on this study and the literature, comprehensive training related to autism is recommended for mental health professionals and law enforcement professionals. In addition, more research is needed for autism and CSA. Clinicians, especially those assisting law enforcement in the investigation process and providing treatment, must be able to differentiate between autism symptoms and symptoms related to the abuse. Differential diagnosis is critical to accurately diagnose and treat a child with autism who has experienced CSA (Bryson, Bradley, Thompson, & Wainwright, 2008; Dominick, Davis, Lainhart, Tager-Flushberg, & Folstein, 2007), as some symptoms might be related to autism, e.g., a child's gaze, lack of peer relationships, lack of interest in social activities, and intense focus or inflexibility. The National Child Traumatic Stress Network (2009) reports the following symptoms in children who have been sexually abused: (1) an increase in nightmares or sleeping difficulties; (2) withdrawn behavior; (3) anger outbursts; (4) anxiety; (5) depression; (6) not wanting to be left alone with a particular person, and (7) advanced sexual knowledge or inappropriate sexual behavior for the child's age. Several of these CSA symptoms are similar to characteristics of autism, e.g., withdrawn behavior, anger outbursts, and sleeping difficulties. Thus, this case study points to the need for better investigation and

therapeutic techniques and more research on children with autism who have experienced trauma.

References

- Ahmad, A. B., Larsson, B., and Sundelin-Wahlsten, V. (2007). EMDR treatment for children with PTSD: Results of a randomized controlled trial. *Nordic Journal of Psychiatry, 61*, 354–349.
- American Academy of Child and Adolescent Psychiatry [AACAP]. (2014). Facts for families: Child sexual abuse. Retrieved from https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Child-Sexual-Abuse-009.aspx
- American Psychiatric Association. (2010). *Diagnostic and statistical manual of mental disorders* (5th ed). Retrieved June 1, 2011, from <http://www.dsm5.org/ProposedRevisions/Pages/InfancyChildhoodAdolescence.aspx>
- Aylott, J. (2010). Improving access to health and social care for people with autism. *Nursing Standard, 24*, 47–56.
- Barol, B. I., and Seubert, A. (2010). Stepping stones: EMDR treatment of individuals with intellectual and developmental disabilities and challenging behavior. *Journal of EMDR Practice & Research, 4*, 156–169.
- Brenner, J., Pan, Z., Mazefsky, C., Smith, K. A., & Gabriels, R. (2018). Behavioral symptoms of reported abuse in children and adolescents with an autism spectrum disorder in inpatient settings. *Journal of autism and developmental disorders, 48*(11), 3727-3735.
- Bilgin, H., and Kucuk, L. (2010). Raising an autistic child: Perspectives from Turkish mothers. *Journal of Child & Adolescent Psychiatric Nursing, 23*, 92–99.
- Bosl, W., Tierney, A., Tager-Flusberg, H., and Nelson, C. (2011). EEG complexity as a biomarker for autism spectrum disorder risk. *BMC Medicine, 9*, 1–16.

- Briere, J., Godbout, N., & Dias, C. (2015). Cumulative trauma, hyperarousal, and suicidality in the general population: A path analysis. *Journal of Trauma & Dissociation, 16*(2), 153-169.
- Brownlow, C., and O'Dell, L. (2002). Ethical issues for qualitative research in on-line communities. *Disability & Society, 17*, 685–694.
- Bryson, S. E., Bradley, E. A., Thompson, A., and Wainwright, A. (2008). Prevalence of autism among adolescents with intellectual disabilities. *Canadian Journal of Psychiatry, 53*, 449–459.
- Centers for Disease and Control Prevention. (2018). *Community report from the autism and developmental disabilities monitoring (ADDM) network*. Retrieved from <https://www.cdc.gov/ncbddd/autism/addm-community-report/documents/addm-community-report-2018-h.pdf>
- Chown, N. (2010). “Do you have any difficulties that I may not be aware of?” A study of autism awareness and understanding in the UK police service. *International Journal of Police Science & Management, 12*, 256–273.
- Clark, C., Caldwell, T., Power, C., and Stansfeld, S. A. (2010). Does the influence of childhood adversity on psychopathology persist across the lifecourse? A 45-year prospective epidemiologic study. *Annals of Epidemiology, 20*, 385–394.
- Clarke, J., and Ameron, G. (2008). A comparison of blogs by depressed men and women. *Issues in Mental Health Nursing, 29*, 243–264.
- Cloitre, M., Stolbach, B.C., Herman, J. L., Van der Kolk, B., Pynoos, R., Wang, J., and Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22*, 399–408.

- Cohen, J. A., Deblinger, E., Mannarino, A. P., and Steer, R. A. (2004). A multisite, randomized controlled trial for children with abuse-related PTSD symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry, 43*, 393–402.
- Cook, A., Blaustein, M., Spinazzola, J., and van der Kolk, B. (Eds.) (2003). *Complex trauma in children and adolescents*. National Child Traumatic Stress Network. Retrieved from <http://www.NCTSNet.org>
- De Bellis, M. D., Hooper, S. R., Spratt, E. G., and Woolley, D. P. (2009). Neuropsychological findings in childhood neglect and their relationship to pediatric PTSD. *Journal of the International Neuropsychological Society, 15*, 868–878.
- Deblinger, E., Mannarino, A. P., Cohen, J. A., and Steer, R. A. (2006). A follow-up study of a multisite, randomized controlled trial for children with sexual abuse—related PTSD symptoms. *Journal of American Academy of Child & Adolescent Psychiatry, 45*, 1474–1484.
- Di Martino, A., Yan, C. G., Li, Q., Denio, E., Castellanos, F. X., Alaerts, K., ... & Deen, B. (2014). The autism brain imaging data exchange: towards a large-scale evaluation of the intrinsic brain architecture in autism. *Molecular psychiatry, 19*(6), 659-667.
- Dimitrova, N., Pierrehumbert, B., Glatz, N., Torrisi, R., Heinrichs, M., Halfon, O.,...Chouchena, O. (2010). Closeness in relationships as a mediator between sexual abuse in childhood or adolescence and psychopathological outcome in adulthood. *Clinical Psychology and Psychotherapy, 17*, 183-195.
- Dominick, K. C., Davis, N. O., Lainhart, J., Tager-Flushberg, H., and Folstein, S. (2007). Atypical behaviors in children with autism and children with a history of language impairment. *Research in Developmental Disabilities, 28*, 145–162.

- Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., ... Giles, W. H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine, 28*, 430–438.
- Edelson, M. G. (2010). Sexual abuse of children with autism: Factors that increase risk and interfere with recognition of abuse. *Disability Studies Quarterly, 30*(1). Retrieved from <http://dsq-sds.org/article/view/1058>
- Focht-New, G., Clements, P. T., Barol, B., Faulkner, M. J., and Service, K. P. (2008). Persons with developmental disabilities exposed to interpersonal violence and crime: Strategies and guidance for assessment. *Perspective in Psychiatric Care, 44*, 3–13.
- Ford, J. D., Fraleigh, L. A., Albert, D. B., and Connor, D. F. (2010). Child abuse and autonomic nervous hyporesponsivity among psychiatrically impaired children. *Child Abuse & Neglect, 34*, 507–515.
- Friedman, M. J., Keane, T. M, and Resick, P. A. (Eds.). (2007). *Handbook of PTSD: Science and practice*. New York, NY: Guilford Press.
- Heim, G., and Buhler, K-E. (2006). Psychological trauma and fixed ideas in Pierre Janet's conception of dissociative disorders. *American Journal of Psychotherapy, 60*, 111–129.
- Hessler, R. M., Downing, J., Beltz, C., Pelliccio, A., Powell, M., and Vale, W. (2003). Qualitative research on adolescent risk using email: A methodological assessment. *Qualitative Sociology, 26*, 111–124.
- Hovens, J. G., Wiersma, J. E., Giltay, E. J., Oppen, P., Spinhoven, P., Penninx, B. W., and Zitman, F. G. (2010). Childhood life events and childhood trauma in adult patients with depressive, anxiety and comorbid disorders vs. controls. *Acta Psychiatrica Scandinavica, 122*, 66–74.

- Hoover, D. W. (2015). The effects of psychological trauma on children with autism spectrum disorders: a research review. *Review Journal of Autism and Developmental Disorders*, 2(3), 287-299.
- Josefi, O., and Ryan, V. (2004). Non-directive play therapy for young children with autism: A case study. *Clinical Child Psychology & Psychiatry*, 9, 533–551.
- Juye, J., Trickett, P. K., and Negriff, S. (2010). Multidimensional self-perception of sexually abused girls: Factor models and differences between sexual abuse and comparison groups. *Journal of Psychopathology & Behavioral Assessment*, 32, 203–214.
- Kanuka, H., and Anderson, T. (2007). Ethical issues in qualitative e-learning research. *International Journal of Qualitative Methods*, 6, 1–14.
- Katz, C., and Hershkowitz, I. (2010). The effects of drawing on children's accounts of sexual abuse. *Child Maltreatment*, 15, 171–179.
- Kerns, C. M., Newschaffer, C. J., & Berkowitz, S. J. (2015). Traumatic childhood events and autism spectrum disorder. *Journal of autism and developmental disorders*, 45(11), 3475-3486.
- Khetrapal, N. (2010). Overlap of autism and seizures: Understanding cognitive comorbidity. *Psychotherapy Today: Some Issues*, 8, 122–128.
- Kim, J., and Cicchetti, D. (2010). Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of Child Psychology & Psychiatry*, 51, 706–716.
- Koller, R. (2000). Sexuality and adolescents with autism. *Sexuality and Disability*, 18, 125–135.
- Koopman, C., Paesh, O., Marten, B., Thompson, B., Ismailji, T., Holmes, D., et al. (2005). Child abuse and adult interpersonal trauma as predictors of posttraumatic stress disorder

- symptoms among women seeking treatment for intimate partner violence. In T. A. Corales (Ed.), *Focus on posttraumatic stress disorder research* (pp. 1–16). New York, NY: Nova Science Publishers.
- Kralik, D., Warren, J., Price, K., and Pignone, G. (2005). The ethics of research using electronic mail discussion groups. *Journal of Advanced Nursing*, *52*, 537–545.
- Kuusikko, S., Haapsamo, H., Jansson-Verkasalo, E., Hurtig, T., Mattila, M-L., Ebeling, H., ... Moilanen, I. (2009). Emotion recognition in children and adolescents with autism spectrum disorders. *Journal of Autism Developmental Disorders*, *39*, 938–945.
- Lippert, T., Cross, T. P., Jones, L., and Walsh, W. (2010). Suspect confession of child sexual abuse to investigators. *Child Maltreatment*, *15*, 161–170.
- Lobregt-van Buuren, E., Sizoo, B., Mevissen, L., & de Jongh, A. (2019). Eye movement desensitization and reprocessing (EMDR) therapy as a feasible and potential effective treatment for adults with autism spectrum disorder (ASD) and a history of adverse events. *Journal of autism and developmental disorders*, *49*(1), 151-164.
- Lombardo, M. V., Chakrabarti, B., Bullmore, E. T., MRC AIMS Consortium, and Baron-Cohen, S. (2011). Specialization of right tempo-parietal junction for mentalizing and its relation to social impairment in autism. *Neuroimage*, *56*, 1832–1838.
- Mandell, D. S., Walrath, C. M., Manteuffel, B., Sgro, G., and 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*, 1359–1372.
- McKenzie, R., Evans, J., and Handley, S. J. (2010). Conditional reasoning in autism: Activation and integration of knowledge and belief. *Developmental Psychology*, *46*, 391–403.
- Merrick, M. T., Litrownik, A. J., Everson, M. D., and Cox, C. E. (2008). Beyond sexual abuse:

- The impact of other maltreatment experiences on sexualized behaviors. *Child Maltreatment*, *13*, 122–132.
- Monk, C. S., Weng, S., Wiggins, J. L., Kurapati, N., Louro, H. M., Carrasco, M., ... Lord, C. (2010). Neural circuitry of emotional face processing in autism spectrum disorders. *Journal of Psychiatry Neuroscience*, *35*, 105–114.
- National Child Traumatic Stress Network, Child Sexual Abuse Committee. (2009). *Caring for kids: What parents need to know about sexual abuse*. Los Angeles, CA: Author. Retrieved from https://www.nctsn.org/sites/default/files/resources/fact-sheet/caring_for_kids_what_parents_need_know_about_sexual_abuse.pdf
- National Crime Victims Research & Treatment Center. (2007). TF-CBTWeb: First year report. Charleston, SC: Author. Available at <http://tfcbt.musc.edu/resources/pdfs/TF-CBTWeb%20First%20Year%20Report.pdf>
- Negriff, S., Noll, J. G., Shenk, C. E., Putnam, F. W., and Trickett, P. K. (2010). Associations between nonverbal behaviors and subsequent sexual attitudes and behaviors of sexually abused and comparison girls. *Child Maltreatment*, *15*, 180–189.
- Noll-Hussong, M., Otti, A., Laer, L., Wohlschlaeger, A., Zimmer, C., Lahman, C., ... Guendel, H. (2010). Aftermath of sexual abuse history on adult patients suffering from chronic functional pain syndromes: An fMRI pilot study. *Journal of Psychosomatic Research*, *68*, 483–487.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed). Thousand Oaks, CA: Sage.
- Pelphrey, K. A., Shultz, S., Hudac, C. M., and Vander Wyk, B. C. (2011). Research review: Constraining heterogeneity: The social brain and its development in autism spectrum

- disorder. *Journal of Child Psychology & Psychiatry*, *56*, 631–644.
- Reaven, J. A. (2009). Children with high-functioning autism spectrum disorders and co-occurring anxiety symptoms: Implications for assessment and treatment. *Journal for Specialists in Pediatric Nursing*, *14*, 192–199.
- Reichow, B., and Volkmar, F. R. (2010). Social skills interventions for individuals with autism: Evaluation for evidence-based practices within a best evidence synthesis framework. *Journal of Autism Developmental Disorders*, *40*, 149–166.
- Ribchester, T., Yule, W., and Duncan, A. (2010). EMDR for childhood PTSD after road traffic accidents: Attentional, memory, and attributional processes. *Journal of EMDR Practice & Research*, *4*, 138–147.
- Riggs, D. S., Rothbaum, B. O., and Foa, E. B. (1995). A projective examination of symptoms of posttraumatic stress disorder in victims of nonsexual assault. *Journal of Interpersonal Violence*, *10*, 201–214.
- Roediger, H. L., & McDermott, K. B. (2000). Distortions of memory. In E. Tulving & F. I.M. Craik (Eds.), *The Oxford Handbook of Memory* (pp. 149-162). New York, NY: Oxford University Press.
- Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., and Walsh, W. (1992). A projective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress*, *5*, 455–475.
- Rothbaum, B. O., Ruef, A. M., Litz, B. T., Han, H., and Hodges, L. (2004). Virtual reality exposure therapy of combat-related PTSD: A case study using psychophysiological indicators of outcome. In S. Taylor (Ed.), *Advances in the treatment of posttraumatic stress disorder: Cognitive-behavioral perspective* (pp. 93-112). New York: Springer

Publishing Company, Inc.

Samuelson, K. W., Krueger, C. E., Burnett, C., and Wilson, C. K. (2010). Neuropsychological functioning in children with posttraumatic stress disorder. *Child Neuropsychology*, *16*, 110–133.

Schacht, R. L., George, W. H., Davis, K. C., Heiman, J. R., Norris, J., Stoner, S. A., ...

Kajumulo, K. F. (2010). Sexual abuse history, alcohol intoxication, and women's sexual risk behavior. *Archives of Sexual Behavior*, *39*, 898–906.

Schore, J. R., and Schore, A. N. (2008). Modern attachment theory: The central role of affect regulation in development and treatment. *Clinical Social Work Journal*, *36*, 9–20.

Schraufnagel, T. J., Davis, K. C., George, W. H., and Norris, J. (2010). Childhood sexual abuse in males and subsequent risky sexual behavior: A potential alcohol-use pathway. *Child Abuse & Neglect*, *34*, 369–378.

Sevlever, M., Roth, M. E., & Gillis, J. M. (2013). Sexual abuse and offending in autism spectrum disorders. *Sexuality and Disability*, *31*(2), 189-200.

Shafritz, K. M., Dichter, G. S., Baranek, G. T., and Belger, A. (2008). The neural circuitry mediating shifts in behavioral response and cognitive set in autism. *Biological Psychiatry*, *63*, 974–980.

Shapiro, F. (2001). *Eye movement desensitization and reprocessing (EMDR): Basic principles, protocols, and procedures* (2nd ed). New York, NY: Guilford Press.

Stack, A., & Lucyshyn, J. (2018). Autism spectrum disorder and the experience of traumatic events: Review of the current literature to inform modifications to a treatment model for children with autism. *Journal of autism and developmental disorders*, 1-13.

Stoner, S. A., Norris, J., George, W. H., Morrison, D. M., Zawacki, T., Davis, K. C., ... Hessler,

- D. M. (2008). Women's condom use assertiveness and sexual risk-taking: Effects of alcohol intoxication and adult victimization. *Addictive Behaviors, 33*, 1167–1176.
- Subramanyam, A. A., Mukherjee, A., Dave, M., & Chavda, K. (2019). Clinical practice guidelines for autism spectrum disorders. *Indian Journal of Psychiatry, 61*(8), 254.
- Talwar, S. (2007). Accessing traumatic memory through art making: An art therapy trauma protocol (ATTP). *The Arts in Psychotherapy, 34*, 22–35.
- Van Dorn, R. A., Mustillo, S., Elbogen, E. B., Dorsey, S., Swanson, J. W., and Swartz, M. S. (2005). The effects of early sexual abuse on adult risky sexual behaviors among persons with severe mental illness. *Child Abuse & Neglect, 29*, 1265–1279.
- Walsh, W. A., Jones, L. M., Cross, T. P., and Lippert, T. (2010). Prosecuting child sexual abuse: The importance of evidence type. *Crime & Delinquency, 56*, 436–454.
- White, S. W., Albano, A. M., Johnson, C. R., Kasari, C., Ollendick, T., Klin, A., ... Scahill, L. (2010). Development of a cognitive-behavioral intervention program to treat anxiety and social deficits in teens with high-functioning autism. *Clinical Child & Family Psychology Review, 13*, 77–90.
- White, S. W., Ollendick, T., Scahill, L., Oswald, D., and Albano, A. M. (2009). Preliminary efficacy of a cognitive-behavioral treatment program for anxious youth with autism spectrum disorders. *Journal of Autism Developmental Disorders, 39*, 1652–1662.
- Yeater, E. A., Treat, T. A., Viken, R. J., and McFall, R. M. (2010). Cognitive processes underlying women's risk judgments: Association with sexual victimization history and rape myth acceptance. *Journal of Consulting & Clinical Psychology, 78*, 375–386.
- Zero to Six Collaborative Group, National Child Traumatic Stress Network. (2010). *Early childhood trauma*. Los Angeles, CA: National Center for Child Traumatic Stress.