Fetal Alcohol Spectrum Disorder (FASD) and Sexually Inappropriate Behaviors: A Guide for Criminal Justice and Forensic Mental Health Professionals

Jerrod Brown1,2,3, Rae Mitten4, Megan N. Carter5,6, Jeffrey Haun7,8, Amanda Fenrich4, Diane Neal10, Brenda Frye1, Judge Anthony Wartnik2, Stefanie Varga1, Trisha M. Kivilamu12, Charlotte Gerth Haanen13, Hal Pickett14, Diane Harr15, Elizabeth (Anne) Russell15, & Ryan Van Gundy16

1 Pathways Counseling Center, Inc., St. Paul, MN, USA; 2 Concordia University, St. Paul, MN, USA; 3 American Institute for the Advancement of Forensic Studies, St. Paul, MN, USA; 4 Mitten Law, Redvers, SK, Canada; 5 University of Washington, Seattle, WA, USA; 6 Department of Social and Health Services, Special Commitment Center, Steilacoom, WA; 7 University of Minnesota, Minneapolis, MN, USA; 8 Direct Care & Treatment - Forensic Services, St. Peter, MN, USA; 9 Washington State Department of Corrections, Monroe, WA, USA; 10 Project Pathfinders, St. Paul, MN, USA; 11 Treehouse Psychology, PLLC, Hugo, MN, USA; 12 UT Health, San Antonio, TX, USA; 13 Minnesota Department of Corrections, MN, USA; 14 Headway Emotional Health Services, MN, USA; 15 Russell Family Fetal Alcohol Disorders Association (rffada), Australia; 16 Dakota County Sheriff’s Office, Hastings, MN, USA

This article and included views and findings are the author’s own and are in no way affiliated with the Department of Social and Health Services, Special Commitment Center.

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Corresponding Author: Jerrod Brown, Ph.D., 1919 University Avenue West Suite 6 St. Paul, Minnesota, 55104. Email: jerrod01234brown@live.com
ABSTRACT

Affecting millions of individuals in North America, Fetal Alcohol Spectrum Disorder (FASD) is characterized by impairments in cognitive, social, and adaptive functioning. The presence and severity of these symptoms vary widely by individual, as such typical mental health screening, assessment, and diagnostic processes often fail to accurately identify FASD. A consequence of these diagnostic difficulties is that individuals with FASD often go untreated or receive ineffective treatment services. It is common for some individuals with FASD to struggle to comprehend interpersonal cues and non-verbal behaviors of others, understand normative social boundaries, control one’s impulses, and find socially appropriate ways to express sexual desires. When adequate treatment services are not provided, individuals with FASD may become inadvertently involved in the legal system for crimes including sexual misconduct. Individuals with FASD who become involved in the criminal justice system often have more difficulty obtaining benefit from services provided compared to those without FASD and maybe at greater risk for recidivism. This is especially the case when interventions, services, and supports fail to take into account the short and long-term deficits caused by prenatal alcohol exposure. To serve as a guide for criminal justice and forensic mental health professionals, this article provides background information on FASD, explores the role of FASD symptoms in sexually inappropriate behaviors, discusses screening and assessment considerations, identifies potential treatment and intervention options, and makes recommendations for future research. Finally, example cases are provided to assist the reader in understanding how FASD influences the individual who engages in inappropriate sexual behaviors. These examples provide detailed descriptions of the various areas of functioning affected by FASD and how this can result in different kinds of inappropriate sexual behaviors resulting in involvement in both the mental health and criminal justice systems.

Keywords: fetal alcohol spectrum disorder, forensic mental health, screening, sexual behaviors, sex offender treatment

OVERVIEW

Fetal Alcohol Spectrum Disorder (FASD) is a neurodevelopmental disorder caused by prenatal exposure to alcohol and besets millions of individuals in North America. More recently, May and colleagues (2018) estimate that 3% to 5% of the population is afflicted with FASD. This is an increase from earlier reported birth rates that estimate FASD in 3 of every 1000 births (Dehaene et al., 1991; Sampson et al., 1997). FASD is an umbrella term that is used to describe the various conditions that can result from more than minimal prenatal alcohol exposure. The most severe of these conditions, Fetal Alcohol Syndrome (FAS), is consistent with individuals who have experienced growth deficiencies, facial abnormalities, and brain damage resulting in central nervous system (CNS) problems (e.g., memory difficulties, impulsivity, impaired executive functioning, etc.). Those with FAS may also experience some physical problems, such as abnormal development in hearing, vision or skeletal structure. Those with FAS may also experience intellectual disabilities. Those with Alcohol-Related Birth Defects (ARBD) may experience problems with internal organs such as the heart, kidney, or skeletal structure due to prenatal alcohol exposure. Alcohol-Related Neurodevelopmental Disorder (ARND) is a condition in which those with prenatal alcohol exposure may not have the physical symptoms associated with alcohol exposure (e.g., growth deficiencies, facial abnormalities) but they experience the brain damage resulting in CNS problems and may experience intellectual disabilities (Doyle & Mattson, 2015; Manning...
& Hoyme, 2007; Murawski, Moore, Thomas, & Riley, 2015). Beginning in 2013 with the release of the fifth edition of the Diagnostic and Statistical Manual (DSM-5), Neurobehavioral Disorder – Prenatal Alcohol Exposure (ND-PAE) was included as a recognized diagnosis by the American Psychiatric Association (American Psychiatric Association, 2013). ND-PAE provides the ability for clinicians to provide a diagnosis for those exposed prenatally to alcohol and experiencing significant problems associated with various areas of functioning but do not necessarily qualify for a diagnosis of FAS.

Typically, FASD is characterized by impairments in cognitive (e.g., information processing, attention, and memory), social (e.g., verbal and non-verbal communication), and adaptive (e.g., decision making and problem solving) capacities (Brown, Connor, & Adler, 2012; McGee, Bjorkquist, Price, Mattson, & Riley, 2009). In a minority of cases, physical symptoms such as facial dysmorphism and other skeletal and muscular conditions may be present (Spohr et al., 1993, 1994; Steinhausen, Willms, & Spohr, 1993). The presence and severity of these symptoms varies widely by individual and is impacted by the variations in dose and frequency of prenatal alcohol exposure. Additionally, other environmental influences (e.g., early interventions, childhood environment, head injuries, exposure to violence, etc.) may also affect the manifestations of FASD symptoms, which can cause wide variability in symptoms between individuals (Fast & Conry, 2009). As such, one individual with FASD can present with completely different symptoms than another individual with FASD. For example, while one person with FASD may present with a well below average intellectual ability, others may have average or higher IQ's. Such varied presentations make it difficult to screen, assess, and diagnose FASD. A direct consequence of the difficulty in identifying this disorder is that many individuals with FASD are either misidentified or undiagnosed, particularly if they have not received mental health services or intervention early in life. In addition, while not required for a diagnosis, a more accurate diagnosis would include admission of alcohol use during pregnancy by the mother or collateral information indicating alcohol use by the mother during pregnancy. This can often be very difficult given the stigma associated with alcohol use during pregnancy and possibly the lack of involvement of the biological mother at the time of assessment (Legge, Roberts, & Butler, 2000; Westrup, 2013).

The accurate identification of FASD is further hindered by the fact that FASD typically co-occurs with other conditions and forms of psychopathology (i.e., mental disorders or maladaptive behaviors; Burd et al., 2003; Popova et al., 2016). In some instances, the presence of FASD may even predispose an individual to other types of psychopathology. Disorders that are commonly co-morbid with features of FASD include anxiety, mood (i.e., depression and mania), behavioral (e.g., autism and conduct disorder), substance use, and other neurological disorders (e.g., attention deficit/ hyperactivity disorder; Burd et al., 2003; Popova et al., 2016). Additionally, those with FASD often experience significant sleep disturbance problems resulting in further deficits in many areas of functioning (e.g., attention and concentration; Burd et al., 2003; Ipsiroglu, McKellin, Carey, & Loock, 2013). Although it may necessitate consultation with or a referral to an FASD specialist, differential diagnosis with nuanced psychological and neurological screening is imperative in the effort to accurately diagnose a client suspected of having FASD. Without a strong understanding of the client's individual needs, the development of plans for treatment and services are likely to have less than optimal effectiveness.

When untreated, individuals with FASD may be prone to various adverse life experiences, including involvement in the legal system. Streissguth, Barr, Kogan, and Bookstein (1996) estimate that as many as 60% of those with FASD...
become involved in the criminal justice system during their life. The reason for this high likelihood of involvement is that many of the deficits of FASD are risk factors for antisocial behavior in the absence of FASD (Byrne, 2002). For example, cognitive deficits like impaired information processing and disinhibition may make it difficult for an individual to control one's impulses. Social impairments like immaturity and ineptness could lead to awkward social interactions and engagement in illegal activities to gain favor with antisocial peers. Furthermore, these impairments may lead one to lack understanding of the social nuances of situations and they may act out of context without recognizing they are doing so. Finally, adaptive functioning deficits like difficulty contextualizing consequences and comprehending cause and effect could contribute to the individual taking actions without realizing the severity of their behavior. Together, this combination of impairments has the potential to contribute to antisocial behavior (Byrne 2002; Malbin 2004; Page, 2001; Schonfeld et al., 2005).

One type of crime that individuals with FASD may be prone to is sexual misconduct (Graham, 2014; Novick, 1997; Streissguth et al., 2004). These behaviors may include inappropriate sexual touching, exposure, voyeuristic behavior, or sexual aggression. Research indicates that about half of adolescents and adults with FASD engage in inappropriate sexual behavior, and about 18% of those with FASD and criminal involvement engage in sexual aggression (Streissguth et al., 2004). This same research also has found that inappropriate sexual behaviors was the second most common adverse life outcome for those with FASD following co-morbid mental health problems. This risk of engaging in inappropriate sexual behaviors is conferred by the same cognitive, social, and adaptive impairments often characteristic of those living with FASD, which can increase the likelihood of committing a crime (Brown, Connor, & Adler, 2012). In particular, these impairments likely make it difficult for an individual living with FASD to learn the difference between appropriate and inappropriate sexual behavior, comprehend appropriate versus inappropriate interpersonal cues through non-verbal behavior, control their impulses, and find socially appropriate ways to express sexual desires (Boland, Chudley, & Grant, 2002; Clark, Lutke, Minnes, & Ouellette-Kuntz, 2017; Kodituwakku, Kalberg, & May, 2001). After becoming entangled in the criminal justice system, individuals with FASD are unlikely to benefit from much of the programming typically provided to sexual offenders (Baumbach, 2002). Standard treatment programming for sex offenders is ineffective for those with FASD and their associated variability in social, cognitive and interpersonal functioning given the emphasis on cognitive and social skills goals as well as the pace with which these programs often run. More tailored interventions are necessary to treat and reduce recidivism among those with FASD. Unfortunately, individuals with FASD and a history of sexual offending may be more likely to have difficulty complying with the conditions of their supervision in custodial or community settings, resulting in an elevated risk to reoffend and increased adverse outcomes for the person with FASD (e.g., additional incarceration, inability to be released from sex offender registry, etc.).

Although the legal consequences of inappropriate sexual behavior among individuals with FASD are clear, the topic is understudied in the empirical literature. To this point, most information has been drawn from case law, popular media news stories, and accounts provided by caregivers and professionals. In fact, accounts of caregivers and professionals are integral in helping establish the links between FASD and inappropriate sexual behaviors (Brown, Wartnik, Connor, & Adler, 2010; McMurmrie, 2011; Streissguth et al., 1996). Behaviors highlighted by these accounts include asking questions about sex, non-consensual sexual touching or groping, public autoeroticism, stalking, and rape. Going forward,
sophisticated and nuanced empirical research on this topic is of paramount importance. Any information garnered will be fruitful in the development of FASD-targeted treatment programs and improved legal process techniques.

In addition to this need for research, there is a strong demand for FASD awareness among forensic mental health professionals. Currently, there is a significant lack of knowledge and a wealth of misunderstanding about FASD among professionals working in criminal justice settings (McLachlan, Roesch, Viljoen, & Douglas, 2014). The lack of training on FASD and the difficulties in assessing FASD are likely large contributors to this misunderstanding (Brown & Singh, 2016). This is due not only to the complicated symptomatology of these clients, but also the fact that it is exceedingly difficult, in a number of cases, to obtain confirmation of prenatal alcohol exposure. Providing advanced education and training opportunities on FASD to criminal justice professionals is of the utmost importance. As prior pilot study research by Brown and Singh (2016) noted, there is a lack of knowledge of FASD in sexually violent predator civil commitment professionals. Moreover, the outcomes of the pilot study found many civil commitment professionals either had no or limited training in FASD and varied in their ability to precisely identify the characteristics of FASD (Brown & Singh, 2016). Once FASD is better recognized in criminal justice settings, the appropriate treatment and services can be provided to the client. To this end, the present article serves as a guide for forensic mental health professionals by providing background information on FASD, exploring the role of FASD in sexually inappropriate behaviors, discussing screening and assessment concerns, as well as identifying potential treatment and intervention options.

The Role of FASD in Inappropriate Sexual Behaviors

The relationship between FASD and inappropriate sexual behaviors is complicated due to the diverse and varied symptomatology characteristic of FASD. As discussed above, there are a host of cognitive, social, and adaptive functioning deficits that can be present in individuals with FASD making it difficult to accurately identify the etiology of the inappropriate sexual behaviors. This section explores, in further detail, how different aspects of FASD may contribute to inappropriate sexual behaviors.

EXECUTIVE FUNCTION DEFICITS

Executive functioning deficits are perhaps the most deleterious of FASD impairments (Kodituwakku, 2009). Executive functioning can be defined as the capacity to consciously execute goal-directed behavior including planning and adapting to arising issues while maintaining focus and attention (Kodituwakku, Kalberg, & May, 2001). In other words, executive functioning is an individual’s aptitude to collect and process relevant information in an effort to reach a goal (Rasmussen et al., 2008). Deficits in executive functioning are often caused by the frontal lobe damage that results from prenatal alcohol exposure (PAE) (Rasmussen et al., 2008), and can be debilitating even in the presence of average to good scores on intelligence tests (Green et al., 2009; Rasmussen & Bisanz, 2009; Rasmussen, 2005). As noted previously, executive function deficits can vary widely between individuals with FASD although those with FASD typically have some level of difficulties with executive functioning.

Several different FASD-related deficits can interfere with an individual’s capacity for executive function. First, inattention, affective dysregulation, impulsivity, and the inability to delay gratification can result in an individual not succeeding,
discontinuing, or falling short, on an attempt to accomplish a goal (Fast & Conry, 2009). Second, memory and learning difficulties can impair, or challenge, individuals’ ability to learn from experience and associate actions with consequences (Fast & Conry, 2009). Third, individual’s with FASD may also exhibit poor planning and organization skills, which complicate an individual’s ability to reflect and make sound decisions (Mattson et al., 2011; Petrenko, Tahir, Mahoney, & Chin, 2014; Rasmussen, 2005). Because many of these deficits are often present in an individual with FASD, suboptimal outcomes, such as low educational attainment and antisocial behavior, often result from poor executive functioning (Brown et al., 2012; Olson, Feldman, Streissguth, Sampson, & Bookstein, 1998; Streissguth et al., 1996).

One type of antisocial behavior that could result from the executive functioning impairments of individuals living with FASD is inappropriate sexual behaviors. In fact, research has found that sexual offenders more generally are characterized by low levels of executive functioning abilities (Rasmussen & Wyper, 2007). Deficits in executive functioning could impact the manner by which individuals living with FASD manage urges of a sexual nature, particularly in situations characterized as stressful or unusual (Brown, Warthin, Connor, & Adler, 2010). If this is the case, such inappropriate sexual behavior may be the result of the effects of FASD on the brain rather than the maliciousness of the individual with FASD (Brown et al. 2010). Nonetheless, there has been an absence of research on the prevalence of FASD related to executive function deficits among those who have sexually offended and in particular among individuals classified as “sexually violent predators.”

ADAPTIVE/SOCIAL FUNCTIONING DEFICITS

Adaptive functioning is an individual’s ability to successfully resolve the tasks and problems of everyday living (Mariasine, Pei, Poth, Henneveld, & Rasmussen, 2014). In other words, these are the skills necessary to successfully function across different settings such as adjusting to and from home to work. There are several problems that can interfere with an individual’s capacity for adaptive functioning that include: poor coping skills, deficits in abstract thinking, generalized learning impairments, trouble identifying risky situations, difficulty recognizing and comprehending social cues, emotion regulation, boundary problems, and immaturity. It is important to note that deficits in adaptive functioning can persist independently of intelligence (Streissguth et al., 1991; Streissguth et al., 1996). As such, adaptive functioning deficits could be pervasive and persistent even in individuals who score well on intelligence tests.

Often present among individuals with FASD (Ladue, Streissguth, & Randles, 1992; Thomas, Kelly, Mattson, & Riley, 1998), are problems with adaptive functioning, which become more apparent, and worse, as the individual with FASD ages into adulthood (Crocker, Vaurio, Riley, & Mattson, 2009; Mattson & Riley, 2000; O’Connor et al., 2006; Quattlebaum & O’Connor, 2013). This challenge in maturity of adaptive functioning has been linked to the limited development of the frontal lobe and other regions of the brain beginning during the childhoods of those with FASD (Fagerlund et al., 2012; O’Connor, Kogan, & Findlay, 2002; Treit et al., 2013). The consequences of adaptive functioning deficits can be devastating for individuals with FASD. For example, they may contribute to problems with learning and developing skills, solving novel problems across different situations (e.g., school, work, and home), in addition to difficulty establishing and maintaining interpersonal relationships (Coriale et al., 2013; Jirikowic, Kartin, & Olson, 2008; Mitten, 2011).
In light of the pervasive consequences, adaptive functioning deficits may very well contribute to inappropriate sexual behaviors among individuals with FASD. Specifically, issues with establishing relationships and trouble understanding social cues and boundaries may, at least in part, precipitate sexual offending. Consequently, an individual with FASD may experience sexual urges, fail to detect social cues discouraging acting on these urges, and then act on these urges without realizing it is not consensual. Further, the individual may not recognize that their behavior is illegal or has severe consequences due to the issues with learning and understanding consequences that are characteristic of moderate and severe forms of the effects of FASD in individuals. In addition, because of adaptive functioning deficits, those with FASD may be more prone to engage in social relationships with others who are much younger resulting in the development of emotional identification with children (Edwards & Greenspan, 2010; LaDue & Dunne, 1996). Feelings of connection and acceptance with children may lead some adolescents and adults to engage in sexual behaviors with children rather than learning to develop the skills to engage in social and sexual relationships with similar age peers.

To begin to address inappropriate sexual behavior in individuals with FASD, social nuances and legal behaviors must be the focal points. This should include clear and concrete examples of both appropriate and inappropriate behaviors (Novick, 1997). In treatment if the goals are directed toward only inappropriate behaviors and what they are not allowed to do, this will result in confusion because the individual will not have options and a plan for what they can do (Baumbach, 2002). Difficulties with generalizing information may lead an individual with FASD to lack the ability to act appropriately in even somewhat different circumstances. Explaining and teaching appropriate behaviors is of paramount concern as individuals with FASD have, like all other individuals, normative sexual urges that need healthy and appropriate outlets (Mitten, 2011). Providing information about appropriate behaviors allows for the replacement of maladaptive functioning and an increased sense of well-being. It would be most beneficial for examples to incorporate when, where, and with whom sexual behaviors are appropriate. Teaching clients this information and these skills will likely require modeling appropriate social behaviors across several situations with consistent and substantial repetition (Mitten, 2011). Employing variation and repetition are essential because individuals with FASD have difficulty learning new information and then generalizing this knowledge to different situations (Boland, Chudley, & Grant, 2002).

**THEORY OF MIND DEFICITS**

One specific type of social skills deficit that needs to be considered when someone with FASD engages in inappropriate sexual behaviors is a deficit in Theory of Mind (ToM). Theory of Mind (ToM) is generally referred to as the ability to recognize and understand others’ mental states and predict their behaviors as well as the recognition that others can have different thoughts, beliefs, or desires than one’s own (Rasmussen et al., 2009). This is typically assessed using a story, for example, of an object being placed in one location by the main character and then the object is later moved to a new location by another character without the main character’s knowledge. The examinee is then asked to predict where the main character will say the object is. This requires the person being tested to understand the perspective of the main character rather than simply identifying where the object is based on their own knowledge. At times, this also requires the person to make inferences in various areas of social communication including the other person’s emotions and knowledge. For example, identifying another person’s emotions about that person’s
experience. ToM is strongly related to executive functioning, particularly working memory and inhibition (Rasmussen et al., 2009), areas of functioning often impaired by prenatal alcohol exposure.

Only a few research studies have been completed on those with FASD and their skills in ToM, and consistently those with FASD have been found to have significant deficits in this area of functioning compared to peers who were not alcohol exposed (Greenbaum et al., 2009; Lindinger et al., 2016; Rasmussen et al., 2009). Even when compared to other children with executive functioning difficulties (e.g., those with ADHD), the children with FASD performed more poorly (Greenbaum et al., 2009). For those with FASD and associated deficits in ToM, there may be instances when the impacted individual engages in inappropriate sexual behavior because of their difficulty taking the other person's perspective, understanding the other person's emotional reactions and appropriately interpreting the other person's behaviors or social communication. For example, if an older adolescent or adult with FASD approaches and engages a young child in sexual contact, the young child may become quiet and shrink away from the older person out of fear but without explicitly saying no or verbally indicating their fear. The older person may misinterpret this reaction as compliance as the child did not protest although others would likely be able to accurately interpret the non-verbal communication of fear. A similar scenario could occur with an adult victim of a sexual assault as well, with a person with FASD initiating the sexual contact not recognizing the expressions of fear and non-consent on the person's face and in their body language and not being able to understand that person's experience.

As previously noted, those with Theory of Mind deficits have particular difficulty with specific executive functioning skills such as inhibition. Those with ToM deficits may be less likely to be able to redirect their urges and behaviors based on the behaviors of others and therefore discontinue inappropriate behavior, including sexual behavior. Unfortunately, intellectual abilities have little influence on the person's ability to engage in ToM skills (Lindinger et al., 2017) so even those with higher IQ's who have been exposed to alcohol prenatally may be more likely to engage in sexually inappropriate behavior. However, research specific to this phenomenon (ToM deficits in those with FASD and engagement in sexually inappropriate behavior) has not been completed so further investigation is warranted. Specifically, those who have offended sexually are generally likely to have Theory of Mind deficits (Massau et al., 2017), but no research has been completed to specifically determine if those with FASD significantly differ from typically functioning sexual offenders to determine if specialized interventions to improve ToM skills would be beneficial for those who have FASD and have engaged in inappropriate sexual behaviors.

**DIMINISHED ABILITY TO APPROPRIATELY EXPRESS AND EXHIBIT EMPATHY**

The impairments due to the effects of FASD may also manifest in individuals as difficulties with exhibiting empathy (Page, 2002). Although, this could also be related to an inability to identify the consequences of their behavior (Rogers, McLachlan, & Roesch, 2013) as individuals with FASD often have atypical affect characterized by trouble displaying emotions in an appropriate manner. For example, affective dysregulation can result in individuals with FASD showing no affective response, flat affect, a lack of remorse, laughing, crying, or acting erratically (e.g., child behaviors like temper tantrums) at inappropriate times across different settings (Brown et al., 2010; Page, 2002; Rogers, McLachlan, & Roesch, 2013; Thiel et al., 2011). Furthermore, it is also important to note that inappropriate reactions could be magnified in stressful situations.
Appropriate emotional expression and exhibiting empathy are of paramount concern in criminal justice settings. FASD related deficits may limit an individual’s capacity to demonstrate that they understand the seriousness of an offense along with the offense’s impact on the victim(s). If the impression of remorselessness or a lack of empathy is left on the jury or judge, the type and severity of legal consequences may be exacerbated (Nash et al., 2006; Page, 2002; Rogers et al., 2013; Stevens et al., 2015). Mental health professionals in criminal justice settings must caution other stakeholders to not make such assumptions. In many instances, it is plausible that both the offense and the failure to demonstrate remorse and empathy are the result of prenatal alcohol exposure rather than the inherent maliciousness or deviousness of the individual with FASD (Aragon et al., 2008; Boland, Burrill, Duwyn, & Karp, 1998; Nash et al., 2006; Streissguth, Moon-Jordan & Clarren, 1995).

JUDGMENT ISSUES

Individuals with FASD often struggle with abstract thinking and rational judgments (Kodituwakku, 2007; Streissguth, 2007). Limitations in these areas are contributed to by brain damage-related deficits in the ability to delay gratification, control impulses, resist manipulation, create and execute plans as well as anticipated consequences of behaviors (Brown, Gudjonsson, & Connor, 2011; Greenspan & Woods, 2014). Further, the thought patterns of individuals with FASD, in many cases, can tend to be concrete and inflexible in nature. As a result, individuals with FASD are prone to making poor or rash decisions and they may not adequately consider the moral consequences of their decisions. For example, someone with FASD and over the age of majority may meet a group of adolescents at a park and be invited to join them. The person with FASD may be dared to kiss/ fondle a young female adolescent and then engage in this behavior to seek acceptance from the group without understanding the behavior is illegal and may result in significant consequences. The person was simply seeking approval and acceptance from a group of potentially socially and developmentally more advanced individuals but used poor judgment and concrete problem-solving (i.e., following the directions of the group of adolescents to gain acceptance).

Deficits in making effective judgments can serve to complicate the performance of an individual’s daily life tasks. For example, individuals with FASD and challenges in judgment will likely struggle in the area of social relationships, including how to express and reciprocate appropriately their sexuality with others. Symptoms like impulsivity and poor decision-making likely contribute to risky sexual behaviors in addition to issues recognizing the verbal and social cues of consent. More generally, individuals with FASD may struggle with understanding social cues (Martyniuk & Melrose, 2018; Wilhoit, Scott, & Smecka, 2017). Research shows that sexual offenders, specifically those with intellectual disabilities, and individuals with Autism Spectrum Disorder (ASD) can have deficits in social functioning which may contribute to these individuals misinterpreting social and sexual cues (Grant, Furlano, Hall, & Kelley, 2018; Marotta, 2017). In many instances, individuals with FASD may tend to focus on their immediate gratification and not the short- or long-term consequences of their behavior. These issues are often magnified during adolescence as puberty and sexual development to maturation occur. It is not uncommon for this to continue into adulthood for those affected by FASD. As such, individuals with FASD could find themselves entangled in the legal system due to inappropriate sexual behavior in the absence of adequate ongoing support and services.
IMMATUREY

Emotional, intellectual, and behavioral immaturity are often present among individuals with FASD. This can be operationalized as a person functioning at a level that is lower than average for their biological age. Linked to frontal lobe damage, symptoms can often include poor cognitive control, affective regulation, and behavioral control (Greenspan & Driscoll, 2015; Verbrugge, 2003). This constellation of symptoms can result in naiveté, poor judgment, a disregard for personal safety, and thoughtless and impulsive actions. For example, individuals with FASD may quickly act without considering how their actions impact others or the repercussions of their behaviors (Fast & Conry, 2009; Rasmussen, 2005). Moreover, these issues may become more apparent as a child ages into adolescence and adulthood with the physiological, neurochemical and hormonal changes occurring in the body. In the presence of learning difficulties that limit the capacity to comprehend cause and effect, such actions may become dangerous and repeated across situations, particularly when reinforced by peers or media content (Henry, Sloane, & Black-Pond, 2007; Weinberg, Sliwowska, Lan, & Hellemans, 2008).

Immaturity has been linked to inappropriate sexual behaviors, especially among adolescents with cognitive deficits. It stands to reason that individuals with FASD who struggle with maturity issues would also be susceptible to inappropriate sexual behaviors (Malbin, 2004). For example, an 18-year-old with the cognitive and social functioning of a 13-year-old may believe it is appropriate to engage in sexual activity with a 13-year-old. Although the 18-year-old has the same cognitive and social functioning levels as the 13-year-old, this would legally constitute a crime. Complicating matters, the impulsivity that could characterize such inappropriate sexual behaviors may be misperceived as intentional and malicious, resulting in more severe punishments (Brown et al., 2010). The first line of defense in efforts to effectively address such inappropriate sexual behaviors among individuals with FASD is sexual education that emphasizes both appropriate and inappropriate sexual behaviors. Social skills training can assist with FASD in better social relationships with those similar to their own age making age-appropriate social and sexual relationships more likely. It is imperative that social skills training around the area of sexually appropriate behaviors and the nuances of dating be taught kinesthetically and with a lot of repetition.

INTERPERSONAL BOUNDARIES

Individuals with FASD may exhibit difficulty complying with the norms of interpersonal boundaries. This includes struggling to recognize inappropriate incursions into the personal space of other individuals. The origins of these issues with interpersonal boundaries may be related to the social deficits of FASD such as verbal and non-verbal communication issues, which become more apparent with age. As a result, individuals with FASD often have unintentional conflicts with other people due to violations of interpersonal boundaries (Malbin, 2004; Thiel et al., 2011). Unfortunately, this can result in awkwardness in some situations, and in other contexts, be viewed as dangerous or antisocial.

Inappropriate sexual behaviors are one area where the violation of interpersonal boundaries have particularly severe consequences for individuals with FASD (Chudley et al., 2005; Conry, Fast, & Loock, 1997; Graham, 2014). For example, individuals with FASD could have difficulty comprehending the inappropriateness of sexual encounters with minors (Streissguth et al., 2004). Alternatively, individuals with FASD may not recognize, either verbally or non-verbally, that
the other person is not willingly consenting to their sexual advances (Streissguth et al., 2004). Regardless, individuals with FASD may cross interpersonal boundaries with inappropriate sexual behaviors that harm someone else. If the role of FASD in these behaviors is not recognized, the individual with FASD will likely face serious and long-term consequences rather than receive specialized interventions (Brown et al., 2010).

Sexual education is essential in preventing such legal outcomes for individuals with FASD. Foremost, clients need to learn about both appropriate and inappropriate relationships along with how to address their sexual desires in a socially acceptable manner (Novick, 1997). Such education should include information about both in-person interactions as well as online sexual behaviors including the use of pornography and the generation/distribution of sexual material they create. Any intervention must include information about how to recognize and respect interpersonal boundaries in daily conversations as well as in intimate or social contexts. Addressing the role of culture in this process is integral. Along these lines, building and maintaining a strong social support system for the client can help create safe environments for the client to comfortably learn about this nuanced topic inside and outside of therapy sessions. In most instances, guidance on social norms and how to comply with them in an acceptable manner will be necessary for the rest of the client’s life (Graham, 2014).

PERSEVERATION

A common symptom of FASD, perseveration is the inability to alter one's attention or behavior once engaged on a path. This behavior then persists even in the presence of negative consequences (Brown et al., 2010). Perseveration has been linked to cognitive impairments including the capacity to monitor one’s self, receive and respond to feedback, consider and anticipate outcomes of the behavior as well as other aspects of executive control (Edwards & Greenspan, 2011; Streissguth et al., 2004; Thiel et al., 2011). In cases of individuals with FASD, where perseveration is present, inappropriate sexual behaviors could result in situations without clear and apparent social boundaries (Brown et al., 2010). For example, an individual with FASD may perseverate on fulfilling a sexual desire and fail to recognize verbal and non-verbal cues that indicate another individual does not wish to participate in such sexual activities. In the aftermath of criminal justice involvement, the client could seem resistant to treatment or other instructions. However, professionals must keep in mind that this could be due to symptoms of the disorder rather than the purposeful actions, or intent, of the client. As previously described, a strong and proactive support group as well as positive sexual education to attain healthy sexual behaviors are key to managing sexually inappropriate behavior, including perseverative sexual behavior in those with FASD.

VULNERABILITY AND RISK OF VICTIMIZATION

Individuals with FASD are prone to victimization by a range of devastating acts (Conry, Fast, & Loock, 1997; Conry & Lane, 2009). This is directly related to the cognitive, social, and adaptive impairments of the disorder. In fact, the symptoms characteristic of FASD may make those who live with the disorder compelling targets for sexual abuse by others. Conry and colleagues (1997, 2009) have reported that well over half of those with FASD have reported experiencing significant abuse including sexual abuse. Their difficulties with understanding social interactions, particularly subtle or manipulative behavior of others, may make them more vulnerable to being taken advantage of sexually. Because individuals with FASD may be very impressionable, they may, in turn, engage in similar
inappropriate sexual behaviors later in life. This likelihood is only exacerbated by pre-existing symptoms such as impulsivity and affective dysregulation, which make it difficult for individuals with FASD to control themselves. In such instances, individuals with FASD may not recognize that the inappropriate sexual behavior was problematic or realize there are consequences for these acts. Forensic and mental health professionals must turn to interventions that address impulsivity and affective dysregulation along with efforts to distinguish between appropriate and inappropriate sexual behaviors. Interventions for those who have experienced trauma, including sexual trauma earlier in life, may benefit from trauma-focused interventions or trauma-informed care.

**DIMINISHED ABILITY TO UNDERSTAND CONSEQUENCES OF THEIR ACTIONS**

Individuals with FASD often struggle to understand how their actions are related to consequences. This can manifest itself in different ways. On one hand, individuals with FASD may not be able to foresee the consequences and punishments that could result from a given behavior. One the other hand, individuals with FASD may have trouble associating the punishment that they received with the action that precipitated the punishment. Consequently, individuals with FASD may be likely to have trouble learning from previous experiences and adjusting their behavior accordingly (Brown et al., 2010). These issues are often compounded by other FASD-related deficits including impulsivity, inattentiveness, and compromised communication skills (Kelly et al., 2000; Kully-Martens et al., 2012; Timler et al., 2005). Failure to adequately treat individuals with FASD often results in prolonged behavioral issues and involvement in the criminal justice system.

Criminal justice-involvement can take several forms. In some cases, involvement in the criminal justice system may be due to the actions of other individuals. Specifically, individuals with FASD could be vulnerable to serving as pawns for the perpetrator of a crime. This vulnerability is related to the social deficits characteristic of FASD, which often includes an eagerness to please others. In turn, an individual with FASD may be willing to say that they committed a crime to protect someone that they consider as a friend. In other cases, individuals with FASD could commit inappropriate sexual behaviors due to other social deficits as described above (McMurtrie, 2011). Whether the act was unintentional or not, individuals with FASD may fail to comprehend why the act was problematic in many instances. In both types of cases, the individual with FASD may have a limited understanding of the severity of any consequences for taking the blame or engaging in the behavior (Malbin, 2004; Thiel et al., 2011).

**SUGGESTIBILITY**

Individuals with FASD may be predisposed to suggestibility (Brown, Gudjonsson, & Connor, 2011). This can be defined as the propensity to adopt another individual’s point of view or beliefs, even if this is not accurate (Clare & Gudjonsson, 1993). The potential of suggestibility and manipulation by others in turn places individuals with FASD in peril of a few different suboptimal criminal justice outcomes. First, individuals with FASD may be convinced by peers, or others, to participate in a crime that they would never have committed on their own. In some cases, individuals with FASD may not even recognize that the act is a crime or that it has consequences. For example, peers could encourage the individual with FASD to act out sexually as a joke such as streaking or masturbating in a public space. Alternatively, individuals with FASD may go along with the crime in an effort to gain friends or impress peers. For example, other adolescents (or adults) may convince a young adolescent with FASD to send naked pictures of him/
her self in order to gain friendship or in hopes of developing a romantic relationship without realizing this behavior is a crime. Second, individuals with FASD may take the blame for actions committed by someone else. Such blame taking could be done purposefully in an effort to please peers or unconsciously via confabulation as a result of police interview and interrogation techniques (Brown et al., 2011; Douglas, 2010; Greenspan & Driscoll, 2015; Roach & Bailey, 2009). The consequences of this in the criminal justice system could include false confessions and wrongful convictions.

CONFabULATION

As mentioned above, the presence of confabulation can be troublesome among individuals with FASD (Rasmussen, Talwar, Loomes, & Andrew, 2008). Confabulation is the non-purposeful alteration of existing memories or creation of new memories to fill memory gaps. These confabulated memories may range from a slight adjustment to a memory of a real event or extend to the full creation of a memory of an event that never took place. Inspiration for confabulation can come from personal experiences, popular media, or imagination. Furthermore, an individual struggling with confabulation may believe that their memory of an event happened last week, but the event may have actually taken place decades ago. A key aspect of confabulation is that the individual does not realize that these memories are inaccurate or untrue (Smith & Gudjonsson, 1995). The causes of confabulation may include frontal lobe damage, cognitive impairments (e.g., executive functioning and memory), social deficits, and an effort to compensate for gaps in memory (Baddeley, 1990; Gudjonsson & Clare, 1995). It may also occur as a way to please law enforcement officials when they are being interviewed about an alleged crime. Confabulation can have devastating consequences in the criminal justice system, including false confessions and wrongful convictions of inappropriate sexual behavior that never took place (Baumbach, 2002; Fast & Conry, 2009; Fast & Conry, 2004).

PRIVATE VS. PUBLIC BEHAVIORS

Similar to those with autism, the tendency to engage in private behaviors in public spaces is common among individuals with FASD (Kalyva, 2010; Ruble & Dalrymple, 1993; Van Bourgondien et al., 1997). This tendency could be attributed to several different FASD symptoms. For example, the social deficits often characteristic of FASD, include difficulty understanding social cues and conventions. Alternatively, FASD may also manifest itself in obsessional behaviors where the individual has difficulty controlling their compulsive actions. In turn, deficits related to frontal lobe dysfunction, including impulsivity and failure to consider the consequences of their actions may contribute to private behaviors being manifested in public situations. In all of these instances, individuals with FASD may inadvertently commit inappropriate sexual behaviors without comprehending the severity of their actions or their consequences. Compounding problems, individuals with FASD may, unfortunately, have limited exposure to how to express their sexual desires in a socially acceptable manner, which could result in engaging in inappropriate sexual behaviors out of frustration (Brown & Singh, 2016; Streissguth et al., 1996).
Intended Benefits of Routine Screening for Fetal Alcohol Spectrum Disorder (FASD) Within Sex Offender Treatment Programs

FASD often goes undiagnosed into adulthood. In fact, the symptoms of FASD are typically misdiagnosed as another disorder, or are not diagnosed at all, when they are not initially recognized in childhood. This is due, in part, to the presence of comorbid disorders such as anxiety, depression, and behavioral issues among individuals with FASD. This makes the differential diagnosis process difficult at best. In the absence of accurate diagnosis, individuals with FASD often do not receive adequate support, treatment, and services. This exacerbates the risk of negative outcomes such as low educational attainment, under-employment or unemployment, and involvement in the criminal justice system. Improved recognition and knowledge of FASD by professionals is essential to prevent these adverse outcomes.

This need of advanced education and training is salient among criminal justice and forensic mental health professionals that work with sex offenders (Brown & Singh, 2016). As highlighted by Baumbach (2002), the amalgam of the poor identification of FASD and the perceived risk of inappropriate sexual behaviors among individuals with FASD suggests that individuals with a history of inappropriate sexual behaviors could possibly be living with the effects of FASD. If this is the case, the presence of FASD should be routinely screened for in an effort to inform any allocation of treatment or support services for sex offenders. Such diagnostic information could also be utilized by judges and correctional staff when setting placement decisions and requirements. Further, improved identification of FASD in sex offending treatment programs could help facilitate research on the most effective treatment and interventions for this group. Ultimately, the effectiveness of interventions and successful re-entry to the community for individuals with FASD and exhibiting inappropriate sexual behaviors could be improved by routine screening.

Intervention and Treatment Recommendations

As shown in previous sections, FASD is characterized by a diverse and varying set of symptoms that must be methodically considered during treatment planning. Unfortunately, the deficits of FASD are not typically considered and accounted for in traditional sexual offender treatment programs, particularly with the heavy emphasis on cognitive abilities in treatment programs. This is problematic because brain damage often limits an individual’s capacity to benefit from a range of treatment options. As such, individuals with FASD often struggle in such sexual offender treatment programs (Rutman, 2011). The primary consequences of this have been not only ineffective programming, but also a waste of resources, a disservice to the individual with FASD, increased risk to the community and, in some cases, even iatrogenic effects. This includes an exacerbation of symptoms, persistent inappropriate sexual behaviors, and continued involvement in the criminal justice system (Novick, 1997).

Although there are limited research-based recommendations for sexual offenders with FASD at this point, a developmentally-informed individualized approach holds the most promise. Specifically, treatment providers should carefully assess the individual’s risks and needs. To do this successfully, professionals require substantial training and expertise to be able to recognize and assess these needs in clients with FASD. Needs that should be considered include the consideration of the individual’s cognitive, social, and adaptive functioning. Once identified, consideration
of needs should be a central component of developing a treatment plan. Maintaining flexibility to address these needs when appropriate during the treatment process through specialized case management is paramount. This is consistent with the Risk, Needs, and Responsivity (RNR) model that is commonly used in corrections settings, and has a demonstrated impact on the desistance of sexual and other criminal behavior (Hanson, Bourgon, Helmus, & Hodgson, 2009). However, when the client’s personal needs are not considered, treatment tends to be less effective and the potential for harm to the client and others persists.

There are several broad tips that professionals treating sexual offenders with FASD should consider and adopt. First, the professional should confer with the client in the identification of treatment goals. In this process, the professional must ensure that these goals remain practical, obtainable, and mutually beneficial (Roberts & Nanson, 2000). This will help the client better understand how they can benefit from the therapeutic process. Throughout this process, professionals must engage the client. This could take the form of praising the successes of the client as they progress through treatment.

Second, treatment and any treatment-related discussions should be held at the cognitive and developmental level of the client. Due to the deficits associated with prenatal alcohol exposure, individuals living with FASD often process information at a rate that is much slower than expected for their chronological age. To account for this, professionals should use a deliberate pace with frequent breaks. Information should be disbursed in manageable chunks, as well as periodic checks to ensure the individual understands the information, is warranted. More importantly, those with FASD are often able to verbally present as more sophisticated than they actually function so it is important that professionals working with those who have FASD check to make sure the person is actually understanding information and not simply parroting back phrases. The pace and organization of sessions should be consistently organized and predictable. Professionals need to make an effort to keep the therapeutic environment calm and free from distractions such as noise or bright lights (Graham, 2014). Temporal supports like visual timers or procedural supports like a step-by-step outline plan could be helpful. These steps should maximize the client’s chance to absorb, process and retain the information and to be consistent with the approaches often used in clients with special needs (Baumbach, 2002; Graham, 2014; Novick, 1997).

Third, professionals should keep in mind the best ways to verbally, and non-verbally, communicate with the client. This includes the use of clear, concise, and specific language that is concrete rather than abstract in nature. For example, jargon that could be potentially confusing should be avoided. In other words, professionals would benefit from using plain language and simple terms. When useful, professionals should also explore the use of non-verbal communication modalities like drawing, photography, or journaling. Throughout these interactions, it is wise for the professional to check in and verify if the client has comprehended a statement or concept. The best approach for verification is asking the client to explain recent content in their own words. If the client is unable to do this, it is wise to cover this information again. It will also be important to repeat and review content multiple times over longer periods of time to ensure retention.

In addition to these broad tips, there are several techniques that hold promise for these clients. The use of a multi-disciplinary treatment team is the foremost among these approaches. This should include a combination of
psychological, medical, and social workers that coordinate regularly in service of the client. Topics that this team should address include medical and behavioral care, case management, living situation, finances, life skills, and criminal justice issues. Addressing this broad range of care and needs assists in providing the structure and support those with FASD need to develop adaptive skills for successful life functioning. The use of role-plays and rehearsals are particularly effective in addressing many of the difficulties and deficits in individuals with FASD (Roberts & Nanson, 2000). Modeling should be used in a supportive environment throughout the treatment interaction. For example, this can help ensure that clients master tangible life skills and problem-solving abilities (e.g., stress and anger management and communication skills) that they can apply in other settings (Fast & Conry, 2004; Novick, 1997). Additionally, it may be beneficial to utilize a trauma-informed approach in addressing these wide-ranging issues, as many individuals with FASD have been victimized from an early age (Conry, Fast, & Loock, 1997; Streissguth et al., 2004).

Another essential topic to cover with individuals who have FASD and who have engaged in inappropriate sexual behaviors is the topic of appropriate sexual behavior. This should begin with basic sexual socialization and information about sexuality (Novick-Brown, 2007). There should be clear discussions of what constitutes sexual consent and the identification of appropriate and inappropriate sexual behaviors. This includes distinguishing the differences between inappropriate and illegal sexual behaviors based on societal norms and laws. The client must understand that all sexual encounters must be consensual and be equipped to navigate the consent process. An important part of this process is ensuring that the client understands how such inappropriate sexual behaviors impact others while providing them with the knowledge and skill to replace inappropriate sexual behaviors with appropriate behaviors. One promising technique for assisting those with developmental delays/deficits, including those with FASD, is the use of social narratives or stories to assist in learning and understanding social behaviors such as sexual interactions. The use of short stories to teach social skills was originally developed by Carol Gray (1995) to teach children on the autism spectrum improved communication skills. The use of social narratives has been found to be effective in modifying social behavior and understanding as it provides information to teach appropriate responses as opposed to admonishing inappropriate responses. Therapists, teachers, or caregivers can develop individualized stories for unique individuals and situations depending on the need. These stories typically involve very brief descriptions along with pictures to assist in understanding, followed by discussion with the trainer (e.g., teacher, therapist, caregiver). The stories are simple and do not require high levels of literacy such that individuals with difficulty reading can understand them and they can be implemented with caregivers who may not have high levels of education but understand social interactions well. Over time, the use of this technique has expanded to other special needs populations beyond the autism spectrum disorders (e.g., children with hearing impairments, those with other developmental disabilities). This technique uses specially developed stories/narratives with particular characteristics to teach social skills and behaviors, focusing on the positive perspective (e.g., teaching what to do rather than focusing on what not to do). This can be particularly useful with sexual behaviors as the interactions can be subtle and the consequences for inappropriate interactions can be severe. Those with FASD tend to do best with overt, concrete instruction so using social narratives to teach sexual socialization can provide this type of communication in a non-threatening manner and provide for the incorporation of other means of learning, such as role-playing, following the story to practice and develop skills before they are needed in real life experiences. Additionally,
because the stories use various forms of communication including pictures, written story, and verbal discussion, the format for learning is easily accessible for those who require more than one type of educational system.

While specific research has not been completed with the use of this technique for those with FASD, the similarities between the social and communication deficits of those with FASD and other developmental disorders like autism indicate this may be a useful technique for assisting in education and intervention for inappropriate sexual behaviors for those with FASD. In particular, research more generally on social skills deficits in those with FASD indicate that the deficits appear more pronounced as the person gets older. Research specifically with adolescents and adults using social narratives to teach sexual socialization may be particularly useful in developing an effective program to assist those who have FASD and engage in inappropriate sexual behavior. Throughout all the intervention processes, professionals must consistently verify that the client understands and retains the information covered during sessions. This can be done through repetition and inquiry as to the individual’s understanding and retention of the information.

All of these services including an accurate assessment of the client’s potential and abilities need to be available to the client on an ongoing basis (Novick, 1997). Because FASD cannot simply be cured, the symptoms will need to be managed for the rest of the client’s life (Douglas, 2010). Continued external support, organization and structure (often referred to as the ‘external brain’) for those with FASD provides the most likely outcome for success in the community. Failure to address these symptoms will contribute to the client’s deterioration and the potential emergence of new exacerbating symptoms. As a result, a lack of treatment and services increases the risk of recidivism and other negative life outcomes in the client (e.g., the development of secondary disabilities such as additional mental health problems, drug and alcohol addition, etc.). Early and effective interventions offer the best path forward for the client and the community (McLachlan, 2012).

**Future Directions**

Inappropriate sexual behaviors among individuals with FASD are an under-researched area that offers several opportunities for growth (Brown & Singh, 2016). First, epidemiological works such as surveys are imperative to better understand the prevalence of FASD and inappropriate sexual behaviors among this group. Second, research that explores the causal relationship between FASD symptoms and inappropriate sexual behaviors could be promising. This should account for the moderating influences of comorbid psychopathology along with developmental, gender, and cultural differences. Third, the development and validation of assessment tools for use in this population is necessary. Such instruments should focus on the identification of FASD-related deficits through official diagnostic criteria for Neurodevelopmental Disorder-Prenatal Alcohol Exposure (ND-PAE); the diagnosis provided in the DSM-5 as well as the risks and needs of this population in criminal justice settings. Improvements in these areas of assessment have the potential to guide treatment and supervision going forward resulting in a more successful outcome for the individual and society more broadly. Fourth, research has a strong role to play in the development, evaluation, and refinement of sex offender treatment programs for individuals with FASD. These studies may explore the suitability of attachment-based or trauma-informed approaches with this population. Fifth, there is a strong need for developmentally sensitive research on how to best educate and support individuals with FASD about sexuality and
sexual expression. For example, promising techniques, such as social narratives, found helpful in other populations with similar deficits have not been systematically explored with those with FASDs. Further research to determine effective interventions that target the various types of inappropriate sexual behaviors should be further explored. Sixth, research that elucidates how characteristics of FASD may contribute to challenges in individual's participation and functioning in the criminal justice system is needed. This could include the process of making legal decisions, competency to stand trial, and the ability to meet the conditions of supervision in confined settings and community supervision like probation. Last but not least, research must work to develop education and training programs on FASD and inappropriate sexual behaviors for criminal justice and forensic mental health professionals. In combination, research in these areas has the potential to improve outcomes for clients and improve public safety.

Case Example

The following case example is a combination of FASD features that may be observed in someone who engaged in inappropriate sexual behaviors. This is a case example composed of features of various individuals and is not a description of any one person. The features highlighted in this case example illustrate how an individual with an average level of intellectual functioning within FASD may result in involvement in both mental health services and the criminal justice system given that those who have significant intellectual and other deficits may be found to not be competent to stand trial (and therefore not managed in the criminal justice system) or will be provided services through other agencies (e.g., developmental disabilities services, state hospitals, etc).

Mr. Jones is a 61-year-old Caucasian male who is currently civilly committed under the mental health system. He was born to an intact family to a father who worked in a professional position while his mother worked part-time in an office setting. His mother is known to have consumed significant amounts of alcohol while pregnant with him but otherwise experienced a normal pregnancy. Records indicate that Mr. Jones was a hyper child who demonstrated difficult behaviors including intrusiveness, inattention, poor school performance, and difficulty with social relationships. He was physically abused at times when his parents' attempts at discipline were ineffective. Generally, he remained somewhat isolated from peers throughout his childhood but when he did interact with others, he tended to play with much younger children. This resulted in inappropriate sexual behavior at a young age as he sexually acted out with the younger children. Interventions to prevent continued sexual behaviors with younger children were ineffective, and Mr. Jones continued to engage in sexually inappropriate behavior with young children off and on throughout his life. He also engaged in other behaviors indicative of sexual preoccupation including seeking out pictures of partially clothed or unclothed children in medical books or store flyers and eventually on the Internet.

While intellectual testing has indicated he intellectually functions in the lower range of average, his adaptive functioning and communication skills are generally much lower. He was never able to live independently as he could not manage money, reliably track and pay bills, and often could not tell time. He was unable to track appointments or follow a schedule without external support. As Mr. Jones got older, he continued to demonstrate difficulties with impulsivity and poor social skills as well as emotional dysregulation.
As a young adult, Mr. Jones was convicted of molesting several male children (ages 8-10 years old) after meeting them near his job where he worked in a somewhat supported environment in custodial services. He explained that he felt accepted by the children and that they did not judge him as he felt adult peers would do. Following his conviction, he was provided a brief period of counseling and moved to a new area. Shortly after moving, new allegations of sexual contact with young boys were made; however, no charges were filed. He was often found to engage in other problematic behavior including telephone harassment (i.e., threats made when he had difficulty with emotion regulation) and ‘pranks’ on neighbors (i.e., impulsive behaviors like moving their belongings or writing obscene messages in the dirt on their car windows). Mr. Jones was also the target of harassment with neighborhood kids/adolescents vandalizing his home on numerous occasions or calling and harassing him over the phone.

Another feature of Mr. Jones’ inappropriate behavior included attempts to engage others in sexual behavior in a socially inappropriate manner such as asking a taxi driver if he could masturbate while the taxi driver transported him to appointments. At one point, while attending an appointment, he asked a young woman in the lobby for a hug and when she acquiesced, Mr. Jones fondled her breast. Mr. Jones has reported that he engaged in such behaviors in an attempt to initiate sexual contact. While in institutional settings, he would approach others with offers of sexual contact or he would attempt to watch them shower. There were frequent complaints of his unwanted sexual advances, often resulting in further social isolation.

Despite various interventions and consequences, Mr. Jones continued to engage in these sexually inappropriate behaviors and eventually agreed to civil commitment to seek help and due to his risk to others and inability to reside independently in the community. His interpersonal interactions are abrasive at times, although he tries to connect with others in an inept manner, and he is unable to function within a group for treatment. He tends to be very rigid in his problem solving and will often refuse to participate in particular types of treatment (medical and mental health) until he feels a sufficient reason has been provided. He does not tell others when he does not understand, rather he pretends to understand until he gets in trouble for not following rules. Unfortunately, this rigidity and lack of understanding what is expected of him often results in the conclusion by direct caregivers that he is ‘lazy’ or unmotivated to comply with rules or treatment plans. Previously, this has resulted in the erroneous diagnosis of a personality disorder and the misattribution of his difficulties. With the appropriate diagnosis established by a multi-disciplinary evaluation team through extensive research of his records, interviews with family members, and psychological/neuropsychological testing, Mr. Jones was properly identified as experiencing FASD and treatment planning was modified to appropriately address his complex needs through individualized interventions and supports.
Case Example 2

This case example incorporates descriptions of several male sex offenders who have FASD and engage in sexually inappropriate behaviors. All identifying information has been changed to protect the anonymity of the person(s) included. Mr. Davis is a 28-year-old Caucasian male who is currently incarcerated for a sexual offense. He reported that his mother consumed alcohol while pregnant with him, but otherwise reports a fairly normal pregnancy, with few complications. Mr. Davis reports that his mother died when he was 5 years old and that child protective services removed him from his father’s care. He would spend the remainder of his childhood living with a family member. Prior to his mother’s death, there was a history of domestic violence and excessive alcohol use in the home. Upon reviewing his records, Mr. Davis lacked prosocial relationships, has been unable to maintain healthy romantic relationships, isolates, and struggled in school.

Intellectual testing has been conducted confirming that he has deficits in intellectual functioning such as problem solving, abstract thinking, judgment, and adaptive functioning. He has an additional diagnosis of depression and post-traumatic stress disorder. He has refused mental health services in the community and during incarceration.

As an adult, Mr. Davis was convicted of child molestation after he was found by a family member engaging in sexual role-plays with a six-year-old child for the purpose of sexual gratification. During the investigation, thousands of images of child pornography were found on his computer. Detectives also found that Mr. Davis had been corresponding with several minor females through social media sites. During the conversations, Mr. Davis would ask these victims to send nude photos to him and then attempt to engage them in sexually explicit conversations. In addition, other victims came forward and reported that Mr. Davis had engaged in similar inappropriate sexual behaviors with other minors, including voyeurism. His offending towards minors spans over 10 years and includes victims ages 3-11 years-of-age.

While in incarcerated, Mr. Davis continues to engage in sexually inappropriate behaviors as he was found watching television shows containing minor children, therefore, reinforcing his deviant arousal towards children. During a cell search, officers found drawings of minor children engaging in sexual acts. Mr. Davis struggles to admit to his offending behaviors and continually fails to take responsibility for his actions. He does not want to talk about his emotions and only wants to admit to behaviors found in official documentation (e.g., police reports, pre-sentence investigation). Despite a continued pattern of deviant arousal to minor children and numerous attempts to gain access to minor victims, he denies having a problem.

After a thorough assessment and many case staffing sessions, Mr. Davis was diagnosed with FASD. Treatment approaches have been modified to help Mr. Davis learn and apply appropriate and healthy interventions.
CONCLUSION

The cognitive, social, and adaptive functioning symptoms of FASD may contribute to some individuals with this disorder to engage in inappropriate sexual behaviors. In the absence of accurate diagnosis and appropriate treatment services, inappropriate sexual behaviors and criminal justice-involvement may persist across an extended period of time. This is troublesome because individuals with FASD are not well equipped to function in the criminal justice system and make legal decisions. Furthermore, well trained professionals on the aspects and treatment needs related to FASD within the criminal justice system are lacking.

The effects of FASD pose a challenge to forensic contexts which require cognitive competency of charges and court proceedings. Prior research indicates ensuring adequate knowledge about FASD as well as having resources to refer individuals for assessment are a first step towards effective intervention to ensure due process for each person in the criminal justice system (Brown & Singh, 2016). Diagnosed or not, FASD can place individuals at a disadvantage in their legal cases. Having a thorough understanding and diagnosis can promote effective counsel and guidance in criminal justice settings and forensic contexts; thereby ensuring fairness for those living with the effects of FASD. To effect changes, criminal justice and forensic mental health professionals must not only become aware of the link between FASD and inappropriate sexual behaviors, but also need to take proactive measures.

Actions can include the expanded use of FASD screening and assessment measures among individuals with a history of inappropriate sexual behaviors resulting in more individualized and specialized interventions. When both FASD and inappropriate sexual behaviors are present, professionals should form a multi-disciplinary team including legal professionals, treatment providers, social workers, and family members to address the diverse treatment needs of the client. These efforts would be greatly enhanced by systematic research on the etiology, assessment, and treatment of individuals living with FASD and sexually inappropriate behaviors. In combination, advances in these areas have the potential to improve outcomes for clients and enhance the safety of the community.

REFERENCES


