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Fetal Alcohol Spectrum Disorder and Confabulation: A Clinical, Forensic, and Judicial Dilemma

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Abstract

Fetal Alcohol Spectrum Disorder is a permanent disorder resulting from prenatal alcohol exposure. This disorder consists of an array of cognitive and adaptive functioning impairments, many of which may increase the risk for confabulation. This possible link between Fetal Alcohol Spectrum Disorder and confabulation takes on increased importance for individuals who become involved in the criminal justice and legal systems. Specifically, an individual's ability to navigate criminal investigations and the trial process may be compromised. This article aims to introduce clinical, forensic, and judicial professionals to the constructs of Fetal Alcohol Spectrum Disorder and confabulation to raise awareness of the impact in the criminal justice and legal systems.

Keywords: Confabulation, fetal alcohol spectrum disorders, forensic mental health, legal system

Fetal Alcohol Spectrum Disorder

Fetal Alcohol Spectrum Disorder (FASD) is a life course persistent disorder that results from Prenatal Alcohol Exposure [PAE] (Boland, Chudley, & Grant, 2002; Shankar, 2015; Ware et al., 2015). Fetal Alcohol Spectrum Disorder can consist of an array of cognitive (e.g., attention span, memory encoding and retrieval, and executive control), social (e.g., communication skills and vulnerability to social pressure), and adaptive functioning (e.g., problem solving ability and capacity to make informed decisions) impairments (Baumbach, 2002; Brown, Gudjonsson, & Connor, 2011; Hofer & Burd, 2009; Greenspan & Driscoll, 2015; Macpherson, Chudley, and Grant, 2011; Manning & Hoyme, 2007; Mela, 2015; Petrenko, Tahir, Mahoney, & Chin, 2014; Rangmar, Hjern, Vinnerljung, Strömland, Aronson, & Fahlke, 2015; Wheeler, Stevens, Sheard, & Rovet, 2012). The combination of cognitive, social, and adaptive symptoms of FASD may confer an elevated risk of confabulation (Brown, Gudjonsson, & Connor, 2011; Burd, Fast, Conry, & Williams, 2010; Fast & Conry, 2009; Gibbard, Wass, & Clarke, 2003; Kully-Martens, Denys, Treit, Tamana, & Rasmussen, 2012; Rutman & Van Bibber, 2010). Although the etiological underpinnings of this phenomenon are unclear, intellectual and memory impairments coupled with a vulnerability to suggestion may be integral in the manifestation of confabulation (Baumbach, 2002; Fast & Conry, 2004; Gibbard, Wass, & Clarke, 2003). In light of this diverse range of symptoms, and the fact that physical facial feature abnormalities may be present in only a small portion of individuals, FASD often goes undetected (Brown, Wartnik, Connor, & Adler, 2010; Murawski, Moore, Thomas, & Riley, 2015; Olson, Oti, Gelo, & Beck, 2009; Wartnik & Carlson, 2011), especially when the impacted individual confabulates. Complicating matters, FASD is often comorbid with behavioral, mood, and other psychiatric disorders (O'Connor & Paley, 2009; Streissguth & O'Malley, 2000). As a result, assessment and diagnosis of individuals who may have FASD is a long and nuanced process that often results in missed diagnosis and misdiagnosis (Brown, Gudjonsson, & Connor, 2011; Brown, Haun, Novick Brown, & Zapf, 2016; Popova, Lange, Bekmuradov, Mihic, & Rehm, 2011). Such inaccuracies not only negatively impact individuals with FASD, but also result in issues for professionals employed within criminal justice and mental health arenas. The overarching purpose of this article is to introduce the reader to FASD and confabulation along with the implications for clinical, forensic, and legal settings.

Confabulation

Confabulation can be regarded as false memories unintentionally invented to fill in gaps in memory recall (Macleod, Gross, & Hayne, 2016; Shingaki, Park, Ueda, Murai, & Tsukiura, 2016; Rensen et al., 2015). By virtue of being false, memories can range from slight inflations or exaggerations of reality to entirely inaccurate or imagined creations of complicated events (Brown et al., 2014; Castelli & Ghetti, 2014; Turner, 2014). In many instances, confabulation may simply be the result of an individual attempting to compensate for memory deficits (Baddeley, 1990; Gudjonsson & Clare, 1995). These confabulated memories can be completely imagined, inspired by popular or social media, or drawn from personal experiences. For example, the individual may believe a memory occurred yesterday, when in fact the actual event took place several years prior. Not the result of a deliberate attempt to deceive or lie, the causal origins of confabulation remain unclear (Smith & Gudjonsson, 1995). Potential causes of

confabulation may include brain damage (e.g., frontal lobe lesions), cognitive control impairments (e.g., executive function deficits), memory impairments and distrust, and even social deficits (e.g., self-esteem and sense of identity), many of which are common among individuals with FASD. Nonetheless, confabulation has even occurred in individuals who appear logical and display no indications of cognitive impairment (Moscovitch, 1995). As such, confabulation is likely the result of several interacting biological and environmental factors, but causal pathways remain difficult to identify (Guerri, Bazinet, & Riley, 2009; Hirstein, 2005; Smith & Gudjonsson, 1995).

There are at least two types of confabulation: spontaneous or provoked (Berlyne, 1972; Kopelman, 1987; Kopelman, Thomson, Guerrini, & Marshall, 2009). *Spontaneous* confabulation occurs when an individual creates a false memory without precipitation by an external force or influence (Schnider, 2003; Schnider & Ptak, 1999). Depending on the individual, this can occur in rare instances or persistently across several situations. In contrast, *provoked* confabulation is a momentary distortion of memory that occurs in response to an external force or influence (Cooper, Shanks, & Venneri, 2006; Schnider, von Däniken, & Gutbrod, 1996). For example, the likelihood of confabulation being provoked is enhanced in situations where law enforcement specialists or forensic professionals ask leading questions, with implied answers or place undue pressure on the interviewee (Ackil & Zaragoza, 1998; Gudjonsson & Clare, 1995). With this in mind, both types of confabulation can have significant implications in the criminal justice system (Brown, Gudjonsson, & Connor, 2011; Clare & Gudjonsson, 2010).

FASD and Confabulation

Confabulation of new memories from both real and imagined experiences may be exacerbated in individuals with FASD (Fast & Conry, 2004; Fast & Conry, 2009). Specifically, Prenatal Alcohol Exposure (PAE) results in frontal lobe and hippocampus impairments that contribute to memory deficiencies and an elevated risk of manipulation (Gibbard, Wass, & Clarke, 2003). Further, the cognitive impairments (e.g., executive function deficits) and adaptive impairments (e.g., social deficits) that characterize FASD may actually contribute to the tendency to confabulate (Kapur & Coughlan, 1980; Moscovitch & Melo, 1997; Schnider & Ptak, 1999; Schnider, Von Daniken, & Gutbrod, 1996). For example, the memory deficits of FASD may reduce the accuracy or completeness of memories resulting in memory gaps (Brown, Gudjonsson, & Connor, 2011). In response to a memory gap, individuals with FASD may confabulate to render a complete story, either creating an entirely new memory or interjecting the details from a memory of another event (Brown, Gudjonsson, & Connor, 2011; Fast & Conry, 2004).

Forensic and Judicial Considerations

The link between FASD and confabulation takes on increased importance for individuals who become involved in the legal system. As discussed earlier, the impulse to confabulate is stronger when high levels of stress and pressure are applied or when questions with implied answers are asked. Over long and intense encounters, individuals with FASD are prone to acquiescing to pressure and may begin confabulating answers in an attempt to relieve the stress (Brown, Gudjonsson, & Connor, 2011; Brown, Wartnik, Connor, & Adler, 2010; Fast & Conry,

2009; Mela, & Luther, 2013). Complicating matters, individuals with FASD are also prone to suggestibility, where an individual incorporates the statements and cues of someone else as truth (Baumbach, 2002; Brown, Gudjonsson, & Connor, 2011; Douglas, 2010; Greenspan & Driscoll, 2015). The combination of confabulation and suggestibility results in an individual providing inaccurate guesses or statements. The motivation for this behavior is an attempt to please others, especially those in positions of power. These behaviors can profoundly limit an individual's capacity to navigate the criminal justice system.

Specifically, FASD and confabulation can interfere with an individual's ability to waive legal rights (e.g., *Miranda* rights and the right to an attorney), undergo police interrogation, render confessions, enter pleas, stand trial, and serve as a witness (Baumbach, 2002; Brown, Gudjonsson, & Connor, 2011; Brown, Oberoi, Long-McGie, Wartnik, Weinkauf, & Herrick, 2014; Fast & Conry, 2009; Mela, & Luther, 2013). During criminal investigations, the vulnerability to suggestibility and confabulation of FASD could lead to false confessions, particularly during interrogations (Brown et al., 2011). The likelihood of confabulation increases if criminal justice, legal, and forensic mental health professionals employ close-ended questions (e.g., "no" or "yes"), leading questions with implied answers or social pressure and intimidation (Ackil & Zaragoza, 1998; Gudjonsson & Clare, 1995). In court settings, the range of FASD symptoms can make it difficult for defendants to comprehend legal proceedings and assist defense counsel in the development of their defense (Brown et al., 2011; Douglas, 2010; Wartnik, Brown, & Herrick, 2015). Alternatively, witnesses with FASD may be prone to providing inaccurate testimony, which could result in wrongful convictions (Bracken, 2008; Fast & Conry, 2009; Gagnier, Moore, & Green, 2011; Thiel et al., 2010). Nonetheless, few empirical studies have investigated the impact of FASD or confabulation on participation in the legal system.

With this mind, ensure anyone suspected of having FASD be assessed by a trained mental health professional or forensic evaluator (Baumbach, 2002; Brown, Eckberg, Hesse, Freeman, & Martindale, 2016). Forensic professionals must keep in mind that many of the same techniques (e.g., close-ended and leading questions) that elicit confabulation during interrogations can have a similar impact during mental health evaluations (Brown, Haun, Novick Brown, & Zapf, 2016; LaDue & Dunne, 1995). For example, a defendant plagued by memory issues may confabulate as a result of pressure to satisfy an evaluator (Brown, Gudjonsson, & Connor, 2011). The likelihood of confabulation only increases with the length of the interview and the level of stress in the environment of the evaluation (Clare & Gudjonsson, 2010). As such, forensic professionals must be aware of the possibility of confabulation during mental health evaluations.

Forensic and judicial professionals are often the last line of defense in protecting these at-risk individuals against such miscarriages of justice (i.e., false confessions and wrongful prosecutions, convictions, and incarcerations; Baumbach, 2002; Brown et al., 2011; Moore & Green, 2004). In particular, knowledge of the symptoms and characteristics of FASD and confabulation can help professionals identify situations where confabulation may have occurred and the procurement of corroborating evidence is of the utmost importance. Unfortunately, there is a dearth of experts at the intersection of FASD and confabulation in the criminal justice and legal systems. However, few FASD-focused education and training programs currently exist. The importance of such work is emphasized by the consequences of under-identification and awareness of FASD and confabulation in criminal justice and legal settings.

Tips, Strategies, and Solutions for Clinical and Forensic Mental Health Professionals

Encountering individuals with FASD and potential confabulation issues can be very challenging for clinical and forensic mental health professionals. To protect against possible negative outcomes of FASD and confabulation, this section highlights tips, strategies, and solutions for criminal justice, legal, and forensic mental health professionals. Foremost, professionals must identify and pursue advanced education and training opportunities regarding the complexities of FASD and confabulation. Throughout this process, established partnerships with other professionals, providers, and programs that understand the complexities of FASD and confabulation is highly recommended. Such contacts may serve as valuable resources when dealing with difficult clients and situations. Once familiar with FASD and confabulation, professionals will be more equipped to recognize these constructs and effectively communicate with individuals afflicted by these conditions.

One area where the presence of confabulation can have a profound impact is assessment and diagnosis (Smith & Gudjonsson, 1995). To protect against this possibility, a recommended first-step for clinicians is reviewing records for behavioral patterns that may indicate a history of confabulation prior to initial contact with a client. If an individual is suspected of having FASD and/or confabulation, it should be appropriately documented in the case file. In clients where confabulation may be a possibility, professionals should verify the accuracy of the client's diagnoses (Brown et al., 2014; Fast & Conry, 2009). This may require referrals for expanded diagnostic and neurological testing. During the diagnostic assessment process, professionals cannot solely rely on the client's self-report of information. Throughout this process, professionals should implement fact-checking procedures to clarify and verify if statements made by the individual with FASD are accurate (Fast & Conry, 2009). When self-reporting is provided, close attention must be paid to discrepancies or inconsistencies in the client's narrative or responses. Further, clinicians should obtain corroborating information from collateral sources (e.g., family, friends, and official records) to confirm the accuracy of accounts provided by the individual (Huntley, Brown, & Wiley, 2016). The gathering of accurate and verifiable information throughout the assessment and treatment process is imperative, as clinical decision-making may be compromised by any inaccuracies from the assessment and diagnostic process (Huntley & Brown, 2016; Mertz & Brown, 2015). In some instances, inaccurate diagnosis and an ineffective treatment plan may result.

Once the diagnostic process is complete, professionals have the opportunity to begin to address these complicated issues. This can be a challenging process, particularly among those with court-mandated treatment. For example, a sex offender with FASD, receiving group treatment will likely be exposed to multiple accounts of secondary information (Baumbach, 2002). In some cases, the individual may incorporate the previous illegal actions of another person into their memory. In turn, the individual may come to believe that they committed this criminal act. As a result, the individual with FASD might then report this false memory of a sex crime to their sex offender therapist (Baumbach, 2002). This may result in additional sanctions, probation violations, and possible wrongful convictions.

To prevent such a scenario, a first-step for professionals is focusing on improving the cognitive deficits that contribute to the individual's confabulation (Fotopoulou, 2008). Aside from treating the symptoms of FASD and associated deficits and disorders, a useful approach may be teaching the individual self-monitoring training (Alderman, Fry, & Youngson, 1995;

Glowinski, Payman, & Frencham, 2008). This could include introducing the individual to a memory diary and working with them on skills related to memory monitoring. Throughout this process, professionals should regularly provide positive reinforcement and avoid overwhelming or confronting the individual. Together, these tips, strategies, and solutions have the potential to improve outcomes for individuals with FASD who confabulate.

Suggestions for Further Research

In addition to improving the recognition and treatment of FASD and confabulation by clinical, forensic, and judicial professionals, there is an urgent need for innovative and sophisticated research in this area. First, research that examines how and why confabulation occurs among some individuals with FASD is imperative. Second, the development of screening and assessment tools that help criminal justice, forensic, and mental health professionals identify potential cases of confabulation among individuals with FASD is suggested. This has the potential to resolve many existing issues in the field. Third, research that examines and refines tips, strategies, and solutions that work best for dealing with confabulation among individuals with FASD could be invaluable. Fourth, survey research is necessary to better understand the perceptions and knowledge of FASD and confabulation in criminal justice, forensic, and mental health professionals. Fifth, to better understand the impact of FASD and confabulation in the criminal justice system, systematic reviews of case law are a promising option. Sixth, research that specifically examines the impact FASD and confabulation have on competency to stand trial abilities is immediately needed. Together, such programs of research have the potential to advance the field and improve short- and long-term outcomes for individuals with FASD who are at an elevated risk to confabulate.

Summary

This article highlights the fact that the same deficits (e.g., cognitive impairments, adaptive functioning limitations, and social deficits) that characterize FASD may predispose some with this disorder to confabulate. Troublingly, the co-occurrence of FASD and confabulation can have particularly devastating consequences in the criminal justice and legal systems. These issues are exacerbated, at least in part, due to missed and misdiagnosis of FASD in criminal justice settings. To better protect against these miscarriages of justice (i.e., false confessions and wrongful convictions), clinical, forensic, and judicial professionals are in need of advanced education and training in the areas of FASD and confabulation (Baumbach, 2002; Brown et al., 2011; Moore & Green, 2004). Improved recognition of FASD and confabulation along with knowledge of appropriate strategies and techniques for interacting with individuals afflicted by these issues is imperative. That said, the unfortunate reality is that few FASD-focused education and training programs exist tailored to criminal justice, forensic, and legal professionals. Ideally, training programs on the inter-related nature of FASD and confabulation should be developed and widely available so more cases can be accurately detected. Along similar lines, research across a number of FASD and confabulation-related topics has the opportunity to strongly influence progress. Going forward, integrating concerted efforts across this range of areas is necessary to alleviate many of the devastating consequences of FASD and confabulation in the criminal justice system.

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