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Professional Practices in FASD Among International Forensic Mental Health Clinicians

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Table of Contents

List of Tables

List of Figures

Executive Summary

Individuals with fetal alcohol spectrum disorder (FASD), a common neurodevelopmental disability (NDD)[1] caused by prenatal alcohol exposure, face high rates of criminal justice system contact and are overrepresented in correctional and forensic settings. As a result, forensic mental health clinicians, who frequently provide assessment and treatment services in criminal justice system contexts, are likely to see youth and adults with FASD in their practice. Existing evidence suggests that awareness of FASD among clinical and criminal justice system professionals is variable. Evidence also suggests that many lack the appropriate training, knowledge, and skill to work effectively with this population, potentially leading to missed diagnosis and other adverse legal and social outcomes As forensic mental health professionals play an increasingly important role in providing assessment and intervention services for individuals with FASD, it is critical to understand their FASD-related knowledge, professional practices, and training needs. The current study sought to evaluate the professional practices of forensic mental health clinicians regarding FASD, with the overall goal of informing best practices and identifying needs for the development of potential training, tools, and resources.

In total, 81 forensic mental health clinicians completed an online survey about their forensic practices and training experiences related to FASD. The sample was international in scope, with 27% of clinicians responding from Canada. Most forensic clinicians (93%) indicated that they had some level of practice experience with clients who had neurodevelopmental disorders (NDDs). Of these, many had at least some experience with clients who had FASD (85%), though these clients formed only a small part of their usual caseloads. A sizeable proportion (15%) had no practice experience with this client population. Clinicians who had completed forensic assessments with clients who had FASD indicated that assessments occurred in a variety of forensic contexts. The most commonly reported contexts were: fitness to stand trial; diagnosis; future violence/recidivism risk; and disposition planning. Fewer clinicians had provided forensic intervention for clients with FASD. Those who had experience in this area described using a range of therapeutic approaches, including cognitive behaviour therapy, psychoeducational strategies, social skills training, anger management programming, and substance abuse treatment.

Most clinicians had experienced barriers in their forensic assessment and intervention practices in working with clients with FASD, including: difficulty obtaining records; making culturally-informed assessments; having a lack of treatment options and/or methods for managing risk; and, a lack of research linking best forensic practices for clients with FASD. Many clinicians had not received formal education or training about FASD, and generally reported feeling inadequately prepared for forensic practice with this population. The majority endorsed the need for additional training, resources, and supports to enhance their forensic practice for clients with FASD, such as evidence-based screening approaches and tools, clinical guidelines for best practice in diagnosis, in-depth workshops and/or accredited training opportunities.

The study's findings offer important insights into the practices and experiences of forensic mental health clinicians who provide services to clients with FASD. Critically, clinicians identified important gaps in their training, knowledge, and competence to practice in forensic contexts with individuals who have FASD.

[1] NDDs comprise a group of conditions with onset in the developmental period, that are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning. (American Psychiatric Association, 2013).

Background

FASD in the Criminal Justice System

Fetal alcohol spectrum disorder (FASD) is a common neurodevelopmental disability (NDD)[2] caused by prenatal alcohol exposure, thought to affect approximately 4% of the Canadian population, or roughly 1.4 million people, with an annual economic impact ranging between $1.3 and $2.3 billion (May et al., 2014, 2018; Popova et al., 2018; Popova, Lange, Probst, Parunashvili, & Rehm, 2017). People with FASD experience a range of difficulties in their cognitive, affective, behavioural, and adaptive functioning, in addition to physical features in a smaller number of cases (e.g., facial dysmorphology) (Cook et al., 2016; Mattson, Bernes, & Doyle, 2019). They also experience high rates of co-occuring mental and physical health concerns, and high rates of additional adversities, including caregiver disruption, experiences of abuse, and contact with the child welfare system (Corrado & McCuish, 2015; Mattson et al., 2019; McLachlan et al., 2016; Pei, Denys, Hughes, & Rasmussen, 2011; Streissguth et al., 2004). As many as 30% to 60% of youth and adults with FASD may have some level of contact with the criminal justice system, with prevalence estimates in forensic and correctional settings ranging from 10% to 36% and far exceeding those of the general population (Bower et al., 2018; Fast, Conry, & Loock, 1999; Forrester et al., 2015; MacPherson, Chudley, & Grant, 2011; McLachlan, Flannigan, Temple, Unsworth, & Cook, under review; McLachlan et al., 2019; Popova, Lange, Bekmuradov, Mihic, & Rehm, 2011; Popova, Lange, Shield, Burd, & Rehm, 2019).

Forensic and Correctional Mental Health Practices

Forensic mental health clinicians are frequently called upon to complete assessments and provide treatment for individuals at various stages of the criminal justice process (Neal & Grisso, 2014; Viljoen, McLachlan, & Vincent, 2010). Given the overrepresentation of people with FASD in both forensic and correctional settings, forensic mental health clinicians are likely to have frequent contact with this population. Further, individuals with FASD may present with a host of complex clinical needs and difficulties that are likely to impact forensic evaluation and treatment outcomes, including complex neurocognitive deficits, comorbid mental and physical health concerns, substance misuse, problems with dependent living, and difficulty maintaining employment (Mattson et al., 2019; McLachlan et al., 2016; Streissguth et al., 2004). FASD has relevance at multiple adjudicative stages, including during arrest and police interview; fitness to stand trial; risk assessment in the context of sentencing and disposition planning; determinations of criminal responsibility; dangerous and long-term offender applications; and, post adjudicative management, intervention, and planning for return to community (Chandler, 2016; Gagnier, Moore, Green, & Hall, 2011; McLachlan, Gray, Roesch, Douglas, & Viljoen, 2018; McLachlan, Roesch, Viljoen, & Douglas, 2014; Mela & Luther, 2013; Roach & Bailey, 2009). However, FASD can be difficult to clinically identify and frequently goes undetected in criminal justice contexts, owing in part to a frequent lack of physical features that distinguish individuals with FASD, variability in the pattern of difficulties and needs experienced from one person with FASD to another, associated stigma, and lack of awareness about the disability among professionals (Astley, 2010; Brown, Helmstetter, Harr, & Singh, 2016; Cox, Clairmont, & Cox, 2008; Mattson et al., 2019).

Existing evidence suggests that knowledge and awareness of FASD in clinicians, criminal justice and legal professionals is variable, and that many lack the appropriate training to work effectively with this population (Bibr, 2018; Brown, Cich, & Singh, 2017; Brown et al., 2016; Caley et al., 2008; Coons, Clement, & Watson, 2017; Cox et al., 2008). Currently, there is limited research examining FASD-related

[2] NDDs comprise a group of conditions with onset in the developmental period, that are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning.

clinical practices, or training experiences or needs, among forensic mental health professionals. This gap in knowledge makes it difficult to know whether forensic clinicians are aware that some of their clients might have FASD, how they identify and work with these individuals in forensic assessment and intervention contexts, and whether they identify a need for additional training or supports to improve practice. As part of a broader study evaluating the professional practices, training experiences, and needs of forensic mental health clinicians in working with clients presenting with a range of NDDs,[3] the aim of the current report is to summarize findings from this research that are specific to FASD.

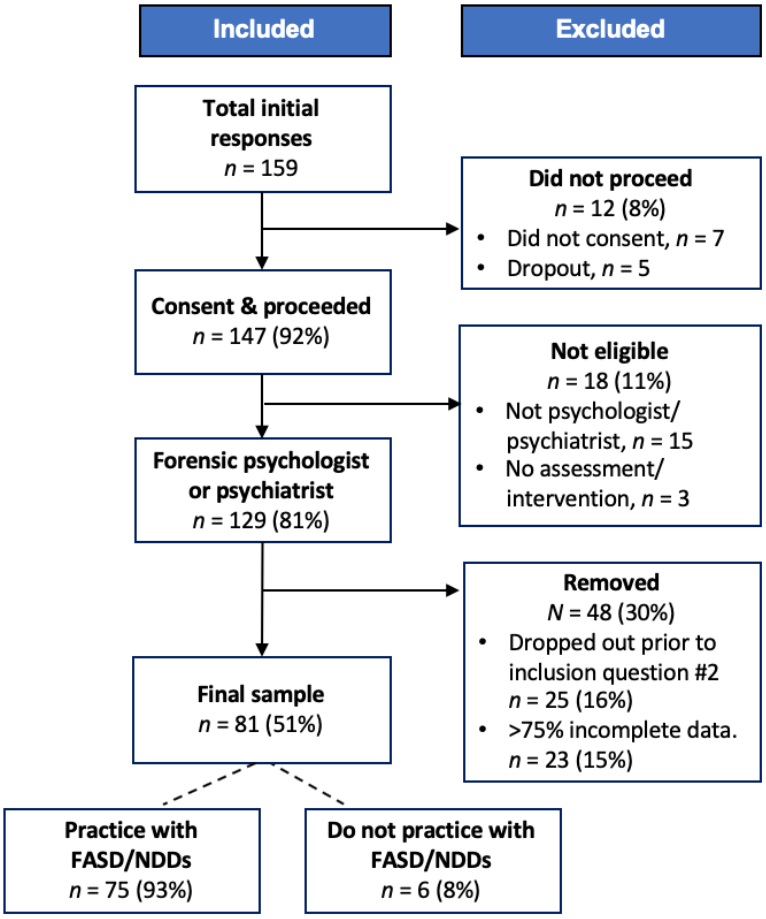
Method

In total, 81 experienced forensic mental health clinicians (primarily psychologists, with some psychiatrists) completed an online survey about their forensic practices and training experiences related to FASD and other NDDs. The sample was primarily drawn from the United States, (56%), Canada (27%), Europe (11%), and Australia and New Zealand (5%). In order to recruit a broad sample, the survey was distributed through professional association list serves, posted on websites advertising research opportunities, and circulated on various social media platforms. Clinicians with identified forensic mental health expertise were also contacted via email using publicly available information. The survey invitation described a study examining professional practices in forensic mental health clinicians, including those who worked with clients with NDDs. The invitation was designed to encourage the participation of a range of forensic clinicians with at least some practice experience working with this population to participate. All study procedures were approved by the University of Guelph's Research Ethics Board.

A total of 156 individuals clicked on the initial survey link (Figure 1). Of these, 92% consented to participate, 81% met forensic practice inclusion criteria (e.g., a psychologist or psychiatrist who engages in forensic assessment or intervention), and 51% practised with clients who may have FASD or other NDDs. An additional 30% were removed due to drop-out or incomplete data (more than 25% of the survey was incomplete).

[3] These may include: attention-deficit/hyperactivity disorder, autism spectrum disorder, intellectual disability, specific learning disorder, or other neurodevelopmental disorders.

Figure 1. Sample details and inclusion criteria



The final sample included 81 forensic clinicians[4] (Table 1). The majority (93%) had practice experience with clients who had NDDs broadly. Respondents were primarily psychologists with areas of practice including clinical and forensic psychology, and had substantial experience working as mental health practitioners.[5] Several forensic psychiatrists are also included in the final sample. Clinicians worked in various settings, including private practice, forensic/court clinics, and forensic mental health facilities.

[4] Mean Age (M_{Age}) = 47, Standard Deviation (*SD*) = 13, 56% female.
[5] *M* = 17 years, *SD* = 13.

Table 1. Participant demographic information

	%		%
Age (years, *M,* SD)	47 (13)	Geographic region	
Male gender	42	USA	56
Highest degree		Canada	27
PhD	61	Europe	11
PsyD	23	Australia & New Zealand	5
MD	8	Other	2
MA/MSc	6	Professional membership[a]	
Other	2	AP-LS	66
Field of practice[a]		CPA	25
Correctional/forensic psychology	63	IAFMHS	23
Clinical psychology	55	American Board of Forensic Psychology	14
Forensic psychiatry	9	American Academy of Forensic Psychology	11
Counselling Psychology	2	Other	14
Other	9	Source of forensic referrals[a]	
Practice setting[a]		Judges/court-ordered	89
Private practice	47	Public/private defense attorneys/lawyers	45
Forensic/court clinic	34	Prosecution/crown	39
Inpatient forensic mental health facility	33	Probation/parole officers	28
Academic setting	25	Other	13
Outpatient forensic mental health facility	19	Formal training for court	
Jail, prison, or detention center	13	Graduate school	64
Non-forensic mental health facility	5	Developed expertise later	41
Other	5	N/A; no formal training	3
Years of practice in current field (*M,* SD)	15 (11)	Forensic diplomat (% yes)	16

Notes. *N* = 64 with 17 missing cases due to the questions being placed at the end of the survey and attrition.

[a] Percentages do not sum to 100 as clinicians were allowed to select multiple options. AP-LS = American Psychology-Law Society (APA Division 41); CPA = Canadian Psychological Association; IAFMHS = International Association for Forensic Mental Health Professionals.

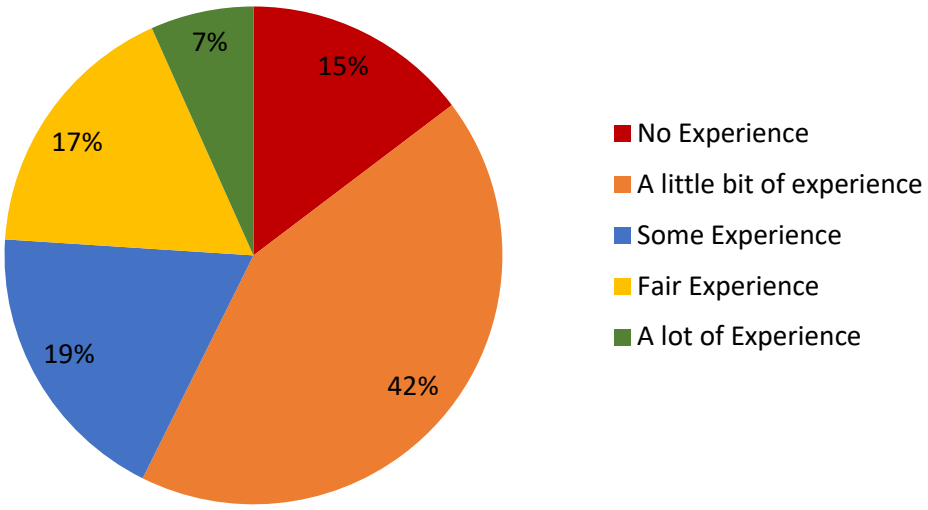
Survey. The online survey was developed based on a review of other relevant practice surveys and consisted of five major sections (see Bibr, 2018; Brown et al., 2017, 2016; Caley et al., 2008; Coons et al., 2017; Cox et al., 2008). Participants first responded to forensic inclusion and practice questions, followed by a section characterizing their assessment and intervention practices with clients who have FASD and other NDDs. Participants then detailed their forensic training experiences focusing on FASD

and other NDDs, and indicated whether additional training would be helpful. They also answered questions about their FASD-relevant knowledge, and lastly, provided demographic information.

Results

Most clinicians (85%) who had forensic NDD practice experience also had specific experience working with clients who had FASD. Many (56%) had provided only forensic assessment services for this client group; a smaller proportion (25%) provided both assessment and intervention services; and, a very small number (7%) provided only intervention services. Many clinicians indicated that their typical forensic practice did not include clients with FASD for assessment (43%), individual treatment (76%) or group treatment (86%). Among clinicians who had seen clients with FASD in their practice, this population most commonly translated to a very small percentage of their practice or usual caseload (e.g., less than 20%). Clinicians reported variable levels of perceived practice experience for clients with FASD, with 15% describing no experience with this population. Most had experience ranging from "a little bit" to a "fair" amount of experience (79%), and only a small share (7%) felt they had "a lot" of experience working with clients who have FASD (Figure 2). Clinicians who had previously provided assessment services to clients with FASD reported seeing roughly three clients with FASD for assessment in a "typical" or average month of practice, though this frequency ranged widely across practitioners.[6] Clinicians who had previously provided intervention services to clients with FASD also reported seeing roughly three clients with FASD in a "typical" or average month of practice.[7]

Figure 2. Forensic practice experience with clients who have fetal alcohol spectrum disorder



Forensic Assessment. Clinicians reported completing a variety of specific types of forensic assessments for clients with FASD in criminal justice contexts. The most common included evaluations for

[6] *M* = 2, SD = 9, range = 0 to 50.
[7] *M* = 3, SD = 3, range = 0 to 10.

competence/fitness to stand trial, diagnosis of FASD, assessments of future violence or recidivism risk, and assessments for the purposes of disposition planning in the context of sexual offences (Table 2).

Table 2. Context of forensic assessments for clients with fetal alcohol spectrum disorder

	(%)
Competence to stand trial/fitness to stand trial	69
Assessment for diagnosis	58
Violence risk assessment/assessment of future recidivism risk	56
Disposition planning/sentencing for defendants charged with sexual offences	44
Custody/probation community	42
Criminal responsibility (e.g., NCRMD)	37
Appropriateness for possible diversion from the justice system	29
Competence to plead	27
Transfer (i.e., to criminal court or transfer back to juvenile court from adult court)	19
Annual review board	17
Capacity to waive arrest rights/validity of statements provided to police	15
Long-term offender/dangerous offender designation	13
Sex offender registration/notification	10
Response to justice intervention	10
Parole	10
Need for pretrial detention	6

Notes. Values in columns = percent positively endorsed. FASD = fetal alcohol spectrum disorder; NCRMD = Not criminally responsible by reason of mental disorder.

Referrals for forensic assessment referrals came most frequently from judges or were court ordered (89%), followed by public/private defence attorneys and/or lawyers (45%), and prosecution or crown (39%). Just over two-thirds of clinicians agreed (67%) that it was their role and/or responsibility to identify FASD in the context of their forensic practice.

Clinicians characterized a wide range of forensic assessment practices when working with clients who have FASD (Table 3). Common practices that were “always” or “almost always” used included interviews with caregivers, mental health providers, and social workers, and obtaining records from mental health providers, police, and custody/detention centres. Clinicians reported using a range of general psychological tests and tools to assess intellectual and cognitive functioning, mental health and personality, and academic skills. They also described using many forensic assessment instruments (FAIs) including FAIs to assess risk for violence/future offending, and psychopathy.

Table 3. Forensic assessment methods in clients with fetal alcohol spectrum disorder

	% Almost Always/ Always
Sources of Information	
Interviews	
Probation officer	55
Caregivers	35
Mental health provider	32
Social workers	23
Other family	18
School teachers	11
Records	
Mental health	83
Police	78
Custodial/detention facility	63
School	46
Social work	29
Medical/birth	31
Test Use	
Intellectual/cognitive function	46
Mental health and personality	40
Academic skills	29
Effort/symptom validity, malingering	33
FAI instruments to assess risk for violence or offending	37
FAI to assess psychopathy or psychopathy-related characteristics	18
FAI to assess competency	8
Referrals	
Neuropsychologist	5
Medical/Allied health	5
Occupational therapy	2
Speech-Language therapy	2
Geneticist	0

*Notes. n*s vary due to missing data by item. Percentages are calculated based on items positively endorsed as Almost Always/Always.

Clinicians were asked if they had any recommendations about whether courts should receive additional information for cases involving an accused person with FASD. Of those who provided feedback (22%), common recommendations included providing more comprehensive information about FASD (23%), prognosis regarding the likelihood of successful treatment outcomes (14%), and providing additional FASD training for courts/lawyers (9%). Clinicians were also asked what courts could do to better identify people who may have FASD. Of those who provided feedback (19%), common suggestions included listing FASD specifically in the referral question for assessments (29%), providing access/court orders to facilitate obtaining records or access to informants (24%), further FASD-related education for the courts (14%), and requesting court-ordered psychological/neuropsychological assessments (14%).

Forensic Intervention. As previously noted, a smaller proportion of the sample provided forensic treatment services to clients with FASD (31%). Those who did provide treatment services described a range of practice approaches commonly used in forensic and correctional treatment settings, including cognitive behaviour therapy (70%), providing psychoeducational strategies (65%), social skills training (55%), anger management treatment (55%), and treatment for substance abuse (50%). Clinicians also described providing treatment services more often in an individual or one-on-one format for this population, compared to intervention delivered in a group setting.

Practice Barriers. The majority of clinicians reported experiencing barriers in their forensic assessment and intervention practices when working with clients who have FASD. Common barriers included difficulty obtaining records, difficulty in making culturally informed assessments, perceived lack of cooperation from clients, lack of treatment options and/or methods for managing risk, lack of research on best forensic practices for clients with FASD, and lack of funding for sufficient evaluation.

Training Experiences and Needs

Many clinicians had not received formal training about FASD with respect to their forensic practice for: planning/delivering forensic treatment/management plans; offering consultation to legal and other health professionals regarding forensic issues; assessing and/or diagnosing FASD in either youth or adults; assessing adjudicative competence; selecting reliable/valid assessment instruments to screen/diagnose FASD; or, assessing risk for future violence (Table 4). For those who had received FASD training, learning had most commonly focused on recognizing FASD-related clinical signs and symptoms, and less commonly in more specialized areas of practice, such as assessing and/or diagnosing FASD, or providing forensic specific services such as assessing future risk for violence.

Table 4. Forensic training experiences relevant to fetal alcohol spectrum disorder

	None	Graduate/ Medical School	Postgrad/ Residency	CME	Other
	%	%	%	%	%
Recognize clinical signs/symptoms	18	57	22	37	26
Select valid/reliable assessment instruments to screen/diagnose	47	33	18	20	24
Assess/diagnose FASD in youth	53	22	16	20	18
Assess/diagnose FASD in adults	45	26	16	28	22
Assess risk for future violence	53	14	16	20	26
Plan/deliver clinically relevant forensic treatment/management plans	53	16	8	14	29
Assess adjudicative competency	53	10	16	24	26
Offer consultation to legal/health professionals on forensic issues	63	8	12	14	26

Note. CME = Continuing education for credit.

In general, clinicians reported feeling that they were not adequately prepared for forensic practice with clients who have FASD, with 22% feeling “not at all” prepared, most (55%) feeling “slightly” to “somewhat” prepared, and only 23% feeling “moderately” to “very prepared.” Many clinicians felt only

"slightly" to "somewhat" prepared to complete a range of clinical activities in their forensic practice, including identifying individuals at risk of having FASD in forensic contexts (64%), assessing and/or diagnosing FASD (50%), conducting forensic assessments with clients who have FASD (45%), or managing forensic intervention in this population (58%). Notably, substantially more clinicians felt better prepared (e.g., "moderately" to "very" prepared) to identify clients at risk of having FASD (46%), compared to formally diagnosing FASD in forensic contexts (29%). Similarly, a greater number of clinicians reported feeling better prepared to conduct forensic assessments (45%), compared to managing forensic intervention (22%) for clients with FASD.

All clinicians reported that additional training, resources, and supports were needed to enhance their skills and knowledge in working with individuals who may have FASD in forensic contexts, with two-thirds (67%) of the sample identifying these as "moderately" to "very much" needed. Several specific types of training and practice resources and supports were rated as being "moderately" to "very helpful" in supporting forensic FASD practice, including: evidence-based screening tools and approaches for identifying clients with FASD in forensic settings (75%); clinical guidelines for best practice in diagnosis (73%); having access to a registry of specialists available for consultation (68%); in-depth workshops and/or accredited training opportunities (62%); concise provider and staff information/training on FASD prevention, diagnosis, and intervention (58%); listing of community-based resources (58%); self-study materials (56%); and online training opportunities (55%).

Discussion and Conclusions

Findings from the current study provide an important snapshot of the practices, training experiences, and training and support needs of forensic mental health clinicians providing services to individuals with FASD in various criminal justice contexts. While the majority of forensic mental health clinicians reported at least some experience working with clients who may have FASD, many did not regularly practice with this population. Further, clients with FASD tended to reflect a very small proportion of typical clinician caseloads, and relatively few clinicians provided forensic intervention services to this population despite their pronounced clinical needs (Brown et al., 2015; Mattson et al., 2019; Pei et al., 2011). These low rates may be driven by several factors, including not having adequate training or access to effective tools to support the identification of individuals with FASD in practice (e.g., they may see more clients with FASD than they realize); not routinely practicing with this population given limited training, perceived competency, or other barriers (e.g., insufficient time or funding allotted); or individuals with FASD not being detected and flagged for referral to forensic mental health services (Bibr, 2018; Brems, Boschma-Wynn, Dewane, Edwards, & Robinson, 2010; Eyal & O'Connor, 2011; Gahagan et al., 2006; Popova et al., 2019). Indeed, many clinicians characterized themselves as inadequately prepared for forensic practice with clients who have FASD, and most felt that their formal training either during professional school or in the context of postgraduate training had been limited. These findings are similar to other FASD practice surveys of various clinicians and both legal and health professionals (Bibr, 2018; Brown et al., 2017, 2016; Caley et al., 2008; Coons et al., 2017; Cox et al., 2008; Sarrett, 2017).

The current results strongly support the need to develop additional FASD training opportunities, resources, and supports geared toward forensic mental health clinicians. Clinicians strongly endorsed a range of possible FASD-focused resources and training opportunities they felt would be helpful in strengthening their forensic practices. Helpful training modalities may include developing modularized curriculum components to increase training in key areas (e.g., graduate programs and internships) and online and/or face-to-face continuing education courses and workshops tailored to forensic practice. In

addition, clinicians highlighted the value of having access to evidence-based screening tools and approaches, as well as practice guidelines to support their forensic work with clients who have FASD.

Findings from this study suggest that forensic mental health clinicians may not be providing services to clients with FASD at rates consistent with their estimated proportions in forensic and correctional settings. Although several clinicians with substantial FASD-related expertise were identified, most felt ill-equipped to practice effectively with this population. Findings highlight the need to ensure that appropriate training opportunities are provided for clinicians, in addition to sufficient time and resources allocated to both assessment and intervention processes, to support best practice. This will be particularly critical as FASD awareness continues to grow among criminal justice and legal professionals, that coupled with potential policy shifts, may result in increased FASD-related referrals for forensic assessment and treatment.

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