Assessing for FASD in Canada

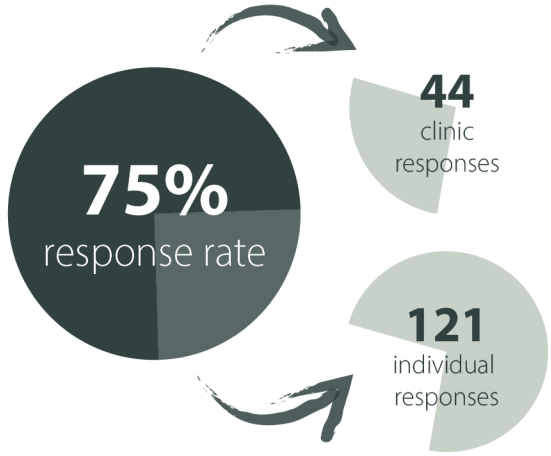
A National Survey of Assessment Measures Used at Fetal Alcohol Spectrum Disorder (FASD) Clinics in Canada

Introduction

The process of FASD assessment and diagnosis is constantly evolving and improving. The goal of this research was to understand the assessment measures clinicians use to assess for and diagnose FASD in order to explore the current diagnostic process and its consistency across Canada.

Research

Researchers conducted a nation-wide survey to determine what assessment measures are being used by Canadian clinicians to evaluate brain function in FASD assessment and diagnosis. The distribution of responses was in line with the current Canadian landscape of FASD clinical practice.



from clinics in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Newfoundland and Labrador, New Brunswick, Northwest Territories, Yukon, and Nunavut.

from psychologists, speech language pathologists, occupational therapists, clinic coordinators, physicians, nurses, and a few others.

Overview of the Findings

Thank you to all the clinicians across Canada who helped contribute to the current body of FASD research. Overall our findings suggest a number of strengths in Canadian FASD clinical practice.

1. There is consistency in the assessment measures that are used across Canada

Clinicians reported using 182 unique tools to measure brain function for the purpose of FASD assessment and diagnosis. The most commonly reported measures used in each brain domain are listed below:

1. **Motor Skills**
   - Sensory Profile (various versions)
2. **Neuroanatomy/ Neurophysiology**
   - Facial Measurements
3. **Cognition**
   - WISC-5
4. **Language**
   - CELF (various editions)
5. **Academic Achievement**
   - WIAT-2&3
6. **Memory**
   - WRAML-2, CVLT-2,3,C, NEPSY-2, & RCFT
7. **Attention**
   - BASC-3
8. **Executive Function**
   - BRIEF (various editions)
9. **Affect Regulation**
   - Beck Inventories
10. **Adaptive Behaviour**
    - ABAS-3

Note: Green denotes measures that are not recommended for these specific domains in the 2015 Canadian FASD Diagnostic Guideline.

2. The majority of commonly reported measures are in line with the Guideline

The **three most commonly** reported assessment measures aligned with the recommendations in the Guideline in the brain domains of cognition, academic achievement, memory, executive function, and affect regulation. The **most commonly reported** assessment measure aligned with the recommendations in the Guideline in the brain domains of language, attention, and adaptive behaviour.

3. Many clinicians are proactively updating their battery of assessment measures as new versions are released

For some measures, the 2015 Guideline recommendations are now outdated, and clinicians reported using the newest version.

4. Clinicians reported using a number of measures outside of the Guideline that are worth noting

Survey responses revealed several robust measures that may be considered in future iterations of the Canadian Guideline as it continues to evolve alongside advancing research and practice.

39% are using the NEPSY-2

36% are using the Conners Rating Scales

21% are using the BTA

to assess **attention**

additionally

23% are using the TMT

to assess **executive function**

18% are using the PAI

to assess **affect regulation**

Improving Practice

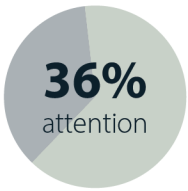
We also identified a number of areas where FASD clinical practice might be improved.

Direct and Indirect Measures

Of the 182 unique tools identified, 136 were direct measures and 46 were indirect measures of assessment.

Direct measures were most commonly used in the following domains:

and least commonly used in the following domains:



Remember: *The Guideline stipulates that direct measures (whenever available) should be considered before indirect measures to assess for brain function in FASD. Moreover, FASD clinicians should take a conservative approach when interpreting and deriving conclusions based on indirect measures.*

Out of Scope Tests

Notably, some clinicians reported using measures outside of the test's intended scope. For example:

SLDT-A
SLDT-E

are recommended to assess executive functioning and adaptive behaviour, but clinicians were also using them to evaluate language.

TOPS-2A
TOPS-3E

are recommended to assess executive functioning, but clinicians were also using them to evaluate language.

Remember: *Diagnostic team members should be armed with the necessary knowledge, training, and expertise to conduct assessments in line with current, evidence-based best practices.*

Using Measures Across Domains

Clinicians reported using a number of measures (24) to assess functioning across multiple brain domains. Measures used most commonly across brain domains included:

Record Review

Was used to assess function in **6 brain domains**: motor skills, neuroanatomy/neurophysiology, academic achievement, attention, affect regulation, and adaptive behaviour.

BASC-2
BASC-3

Clinicians used this measure to assess function in **4 brain domains**: motor skills, attention, executive function, and adaptive behaviour.

The **NEPSY-2**

Clinicians used this measure to assess function in **4 brain domains**: memory, attention, executive function, and adaptive behaviour.

Remember: *The 2015 Canadian Diagnostic Guideline recommends against using a single score to indicate impairment in multiple domains.*

Outdated and Abbreviated Tests

Clinicians reported using outdated measures in several different brain domains.

1. **Motor Skills**
   - MFVPT-3
   - TVPS-3
2. **Language**
   - GFTA-2
   - RBS
   - TOPS-3E
3. **Academic Achievement**
   - WRAT-4
4. **Memory**
   - WRAT-4
5. **Adaptive Behaviour**
   - VABS-2

A number of clinicians also reported using abbreviated tests to measure function in some domains.

Motor Skills

16% reported using the BOT-2 (short form)

Cognition

9% reported using the WNV & **7%** reported using the WASI-2

Remember: *There are some situations where it may be appropriate to use an older version of a measure; however, it is important that this is a conscious decision informed by current evidence and best practice. Similarly, there are limited sitatuations that may warrant the use of an abbreviated* ***battery****, but these circumstances are not common and should be evaluated case-by-case. In all situations, clinicians should use direct, comprehensive, and robust measures to assess brain function in FASD.*

Alignment with Canadian Guideline

In 8 of 10 of the brain domains, the most common assessment measures used were in line with the Canadian Guideline. However, in the domains of **motor skills** and **neuroanatomy/neurophysiology**, the most commonly reported measures were not recommended in the Guideline.

55% of clinicians reported using **Sensory Profile** to assess motor skills

61% of clinicians reported using **Facial Measurements** to assess neuroanatomy/ neurophysiology

Remember: *The Sensory Profile family of tests are indirect measures designed to assess sensory processing. Clinicians should be cautious about using these measures to assess motor skills because of a lack of evidence regarding the accuracy of these measures in the context of FASD assessment. The neuroanatomy/neurophysiology domain is intended to evaluate brain structure or seizures associated with prenatal alcohol exposure. Facial measurements are not an accurate means to evaluate this domain.*

Recommendations

1. All FASD clinicians should be very familiar with the current Canadian FASD Diagnostic Guideline and should have the necessary knowledge, training, and expertise to conduct these complex assessments. Clinicians should have a copy of the Guideline accessible for reference.
2. The Canadian Guideline provides clinicians with a starting point for core assessment measures, and these measures can be added to and adjusted as necessary, based on individual context and informed by emerging research and best practice.
3. Clinicians should update their assessment measures as new versions of tests are published and the validity and effectiveness of these measures are confirmed.
4. Communities of practice should be established for FASD assessment practitioners, particularly in remote areas and provinces with limited FASD clinics.
5. FASD diagnostic teams should continue to seek ongoing evidence-based training on current FASD clinical practices.