# Behavioural Profiles of Kindergarten Children with Fetal Alcohol Spectrum Disorder



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# INTRODUCTION

- Fetal alcohol spectrum disorder (FASD) is the leading developmental disability in Canada<sup>1</sup>
- No reliable method for diagnosing FASD exists<sup>2</sup>
- Because children with FASD share behavioural similarities with other disorders, they may be misdiagnosed<sup>3</sup>
- FASD underdiagnosis has led to gross underestimates of prevalency, contributing to a lack of awareness of drinking during pregnancy

# **PURPOSE**

 Compare the developmental health of three groups of kindergarten children in Ontario and Manitoba: those with FASD only, those with FASD and comorbidities, and their typically-developing peers

# **METHODS**

Sample: 133,995 kindergarten children

	Ontario	Manitoba
No FASD	111,718	22,127
FASD Only	65	56
FASD + Comorbidities	3	26

Measure: (Early Development Instrument)
The EDI is a teacher-completed measure
of children's developmental health at
school entry in five different domains



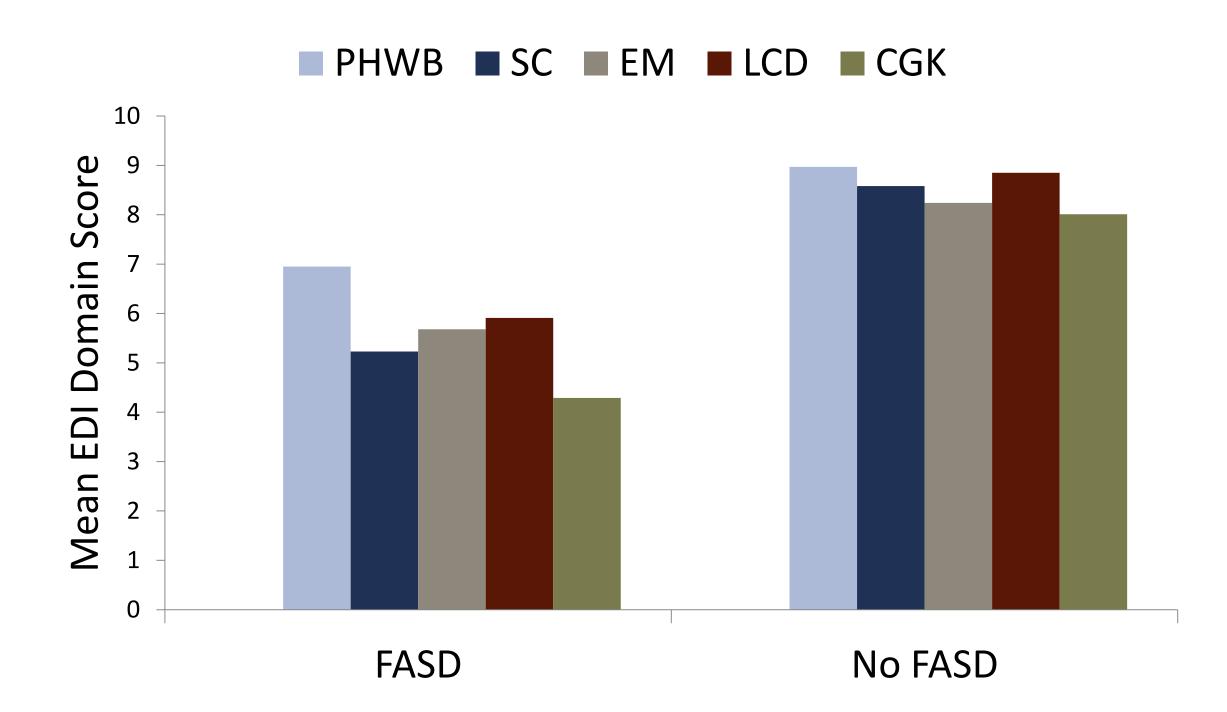
- 1. Physical Health & Wellbeing (PHWB)
- 2. Social Competence (SC)
- 3. Emotional Maturity (EM)
- 4. Language & Cognitive Development (LCD)
- 5. Communication Skills & General Knowledge (CGK)

# RESULTS

### **FASD** in Manitoba and Ontario

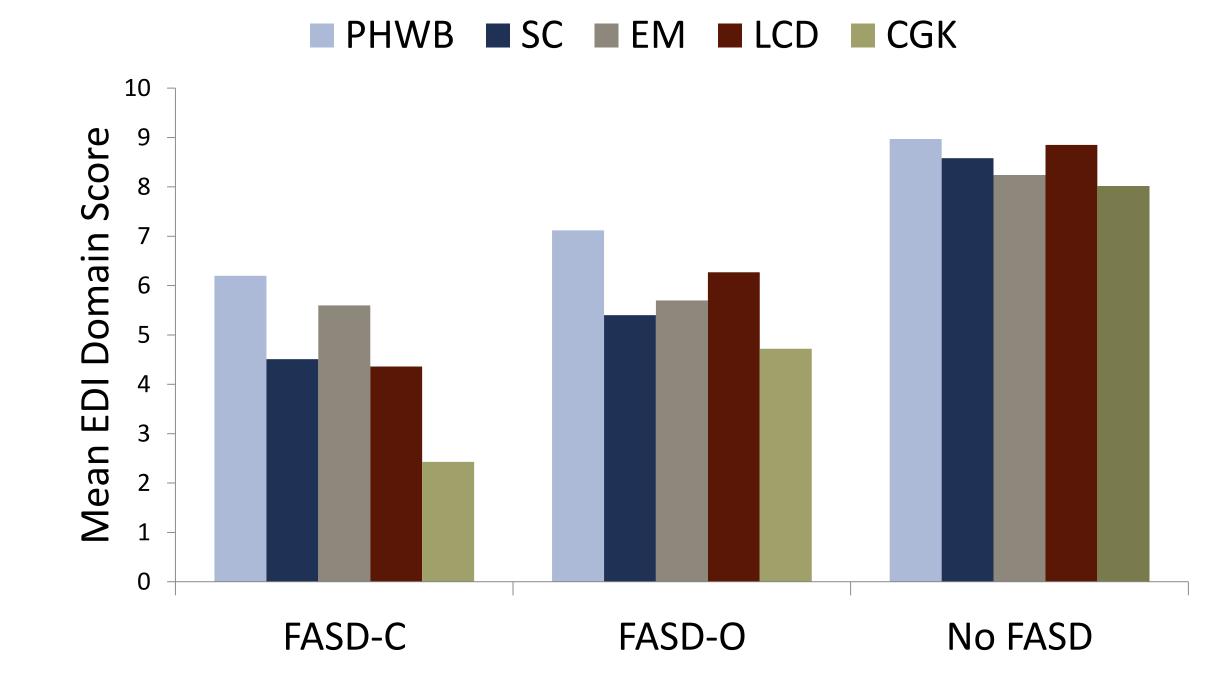
**Results 1:** No significant differences on EDI scores between children with FASD across provinces

#### FASD vs. No FASD



**Results 2:** Children with FASD score significantly lower on all developmental domains than typically developing children

# FASD Only vs. FASD + Comorbidity



**Results 3:** FASD-C scores significantly lower on all developmental domains except emotional maturity

# RESULTS

Children with comorbidities differ significantly on the following subdomains:

#### FASD-C scores worse than FASD-O

Physical independence, overall social competence, readiness to explore new things, basic literacy, basic numeracy, interest in numeracy/literacy + memory

#### **FASD-C** scores better than FASD-O

Aggressive behaviour

# CONCLUSIONS

- Children with FASD and comorbidities possess unique behavioural profiles and can be distinguished from children who only have FASD
- Comorbidities negatively impact the development of children with FASD

# FUTURE DIRECTIONS

- Investigate FASD in additional provinces
- Examine and compare the effects of specific disorders on FASD
- Investigate the rates at which disorders tend to cooccur with FASD

# REFERENCES

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