# Mapping the scope of pain assessment in studies of youth with brain-based developmental disabilities: A systematic review

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## **The Problem**

Pain occurs more often in youth with brain-based developmental disabilities than their peers. Yet, their pain is difficult to ascertain, we do not know how their pain is being assessed.

# Methods

Registered on PROSPERO (CRD42021237444)

Academic database searches included: CINAHL, Medline, Web of Science, CENTRAL, PsychINFO, and EMBASE

### **Inclusion Criteria**

- Children 3-24 years old with a brain-based developmental disability
  - Individuals with a diagnosis of a brain-based disorder (e.g., autism spectrum disorder, ADHD, FASD, cerebral palsy, intellectual or learning disabilities), and individuals at high risk for a brainbased disorder (e.g., preterm birth, congenital heart disease, genetic anomaly).
- Pain experience of any kind (e.g., acute, chronic)
- Empirical studies [quantitative or qualitative], review articles, commentary, editorials, letters to the editor
- Published in English
- Behavioural or patient-reported assessment measures (e.g., self-report, observer-report, behavioural observation)







## **Our Goal**

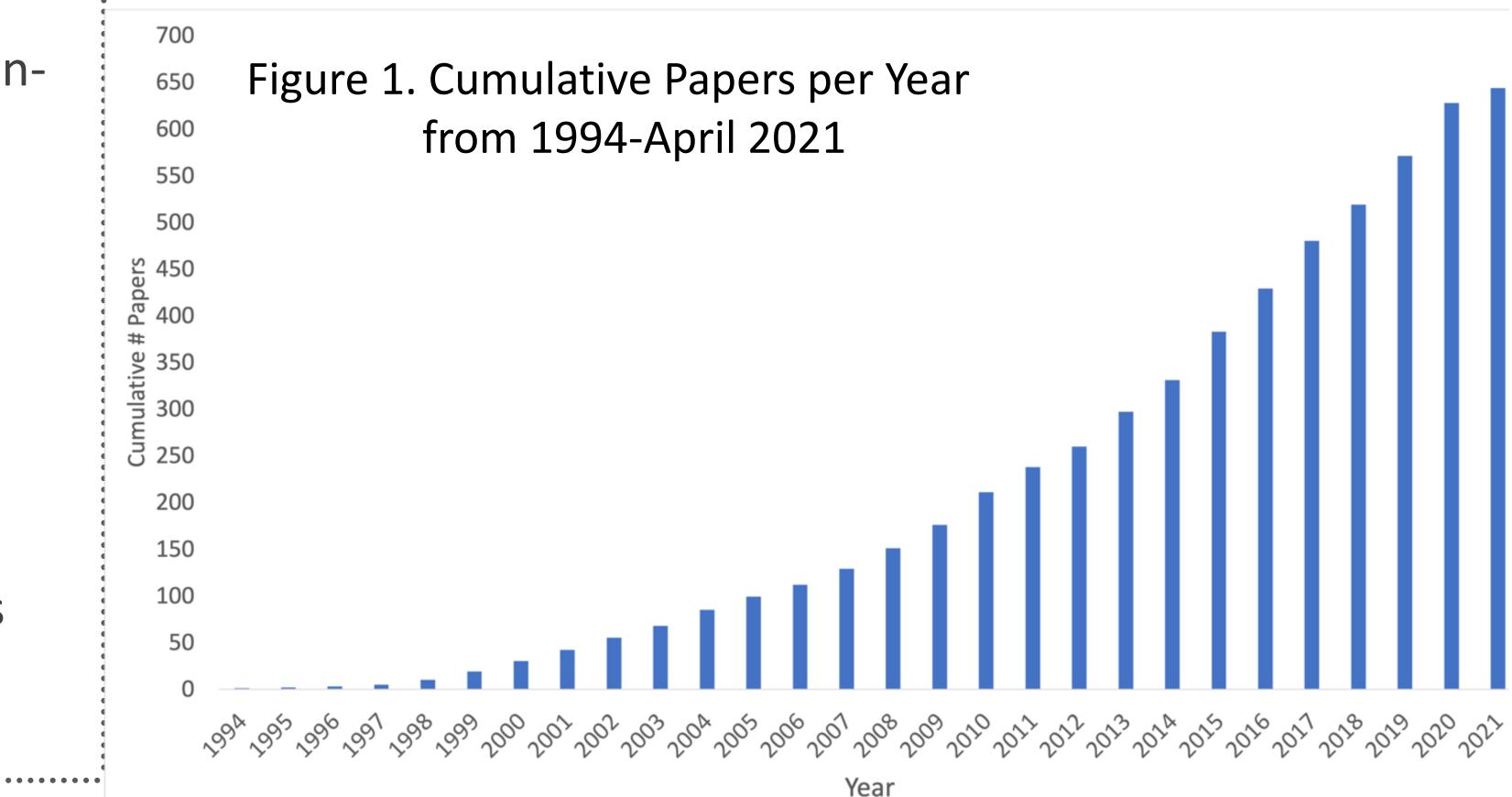
To identify and map the scope of self and observer-reported pain assessment measures of youth with brain-based developmental disabilities.

# Conclusions

Pain assessment for youth with brainbased developmental disabilities predominantly focuses on pain severity/intensity via observer-report.



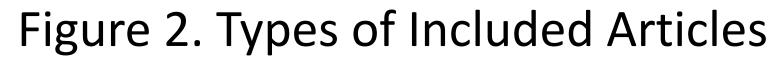


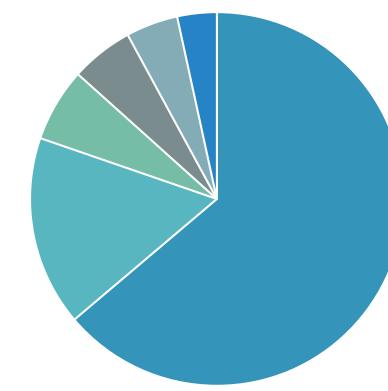




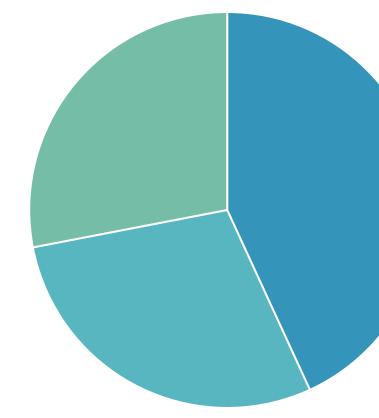


Parents/caregivers, health professionals (pain, complex care, neurodevelopmental disabilities), and researchers across Canada.









• 644 articles met inclusion criteria

- ADHD (n=25; 3.9%)
- Other (n=191; 29.7%)

Next Steps

**#PartneringForPain #PartenairesPourLaDouleur** 

#### **Our Team**

| Quantitative | e N=411 |
|--------------|---------|
| Review       | N=106   |
| Mixed        | N=41    |
| Commentar    | yN=35   |
| Qualitative  | N=29    |
| Case Study   | N=22    |

Figure 3. Proportion of Articles Assess Type of Pain

| Chronic | N=217 |
|---------|-------|
| Acute   | N=145 |
| Both    | N=141 |

#### • 9,117 non-duplicate records were screened

• Patient populations included: cerebral palsy (n=307; 47.6%) intellectual disability (n=64; 9.9%) Autism Spectrum Disorder (n=57; 8.8%) • 18 self-report and 30 observer-report measures were used Phase 2 of this review will provide

recommendations based on further analyses and the findings of this review.

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