

# Speech and Language Impairments in Kindergarten: Prevalence and Association with Developmental Outcomes

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## Speech and Language Impairments (SLIs) in Children

- SLIs are associated with...
  - Disabilities in reading and writing<sup>2</sup>
  - Social cognitive impairments<sup>1</sup>
  - Poorer motor skills<sup>4</sup>
- Extremely limited data on prevalence rates

## Early Development Instrument (EDI)

- 103-item population-based, teacher-completed questionnaire<sup>3</sup>
- Measures development in kindergarten children across 5 domains:
  - Physical Health and Well-Being
  - Social Competence
  - Emotional Maturity
  - Language and Cognitive Development
  - Communication Skills and General Knowledge



## Research Questions

1. What is the prevalence of SLIs in kindergarten children who attended school in Ontario, Manitoba or British Columbia?
2. How are SLIs associated with child development?

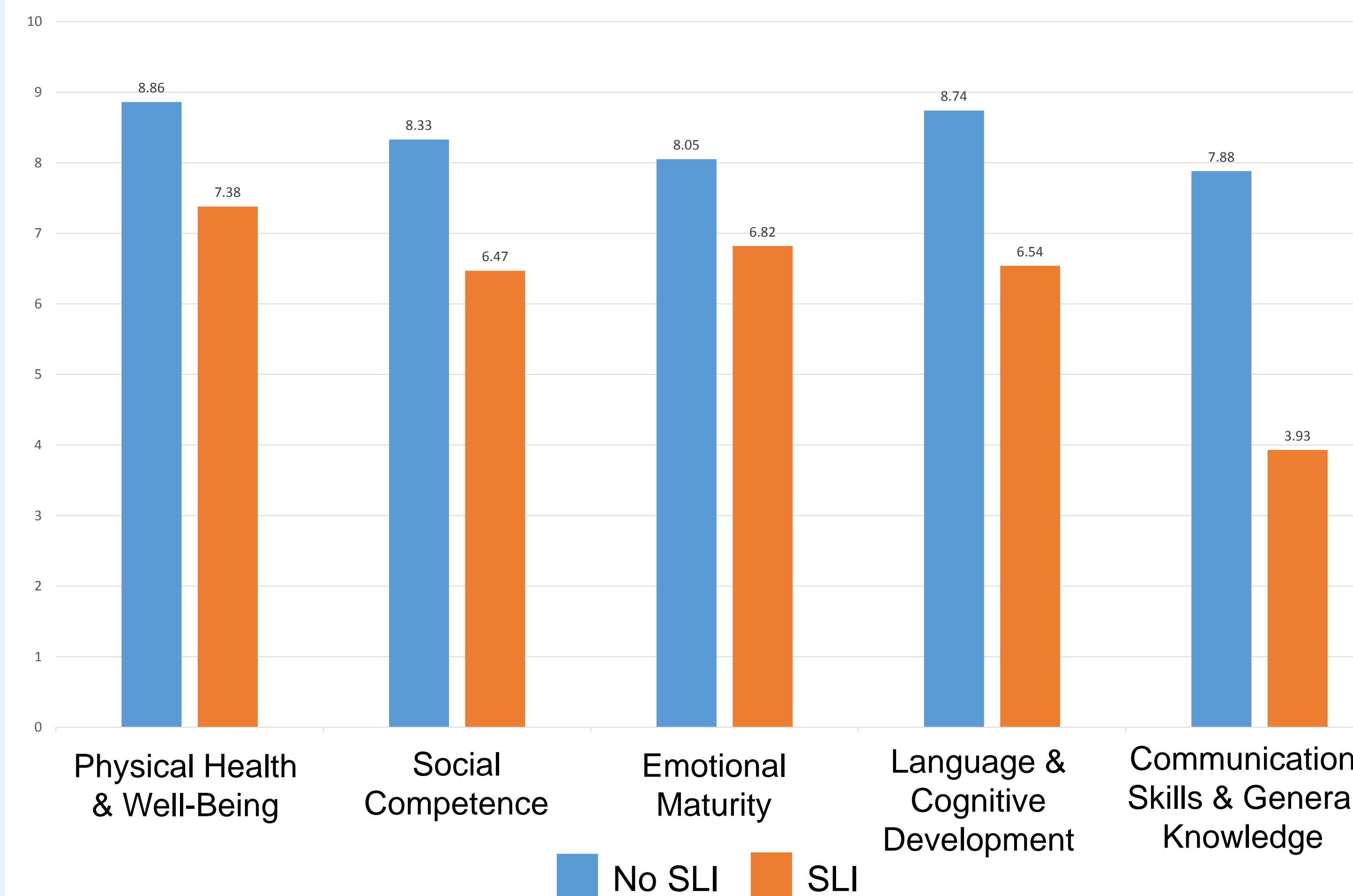
## Methods

	Sample Sizes	Years Collected
<b>ON</b>	492,317	2005-2015
<b>MB</b>	82,394	2005-2009, 2011, 2013, 2015
<b>BC</b>	162,135	2004-2012, 2015

- Inclusion criteria:
  - In senior kindergarten
  - In class more than one month
  - No more than one missing EDI domain

## Results

Mean EDI Scores for Children without vs. with SLIs



- Range of effect sizes (partial  $\eta^2$ ): .030-.111
  - With covariates:
    - Gender: .026-.107
    - Age: .030-.112
    - E/FSL status: .031-.122
    - Special Needs status: .013-.078

## Results

### Demographics of Children with SLIs

	ON	MB	BC
Overall Prevalence Rates	4.99%	6.47%	6.32%
% Male	68.4%	66.5%	67.3%
% E/FSL	12.8%	7.3%	14.5%
% Special Needs	31.1%	24.3%	18.6%

- No significant age differences were observed

## Conclusions

- SLI prevalence is higher in Manitoba and British Columbia than in Ontario, which may suggest differences in effectiveness of early identification
- Children with SLIs had lower EDI scores than children without SLIs

I would like to thank Magdalena Janus, Caroline Reid-Westoby, and the rest of the Offord Centre's EDI team for their guidance and support throughout this project.

## References

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