MindUP with Kindergarten Children: Impacts on Behaviour, Executive Functioning, and Resiliency

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- LDCSB primary division educators and elementary administrators
- Graduate students including (currently): Courtney Cadieux, Melissa Read, Emilia Pacholec

Funded with contributions from the Public Health Agency of Canada and the Ontario Trillium Foundation
Objectives

- Briefly review the MindUP program
- Describe university-school board partnership to evaluate MindUP
- Share findings from evaluation
What is MINDUP™?

• Social emotional learning program
• 15 lessons
• Integration into daily teaching practice
• Importance of brain breaks
Research Base for MindUP

• Research-based and CASEL accredited

• Shown to:
  • reduce stress,
  • improve academic performance,
  • strengthen concentration abilities,
  • enhance perspective taking, empathy and kindness

• Supports growth mindset

• Most studies have been fairly small and focused on mid-late elementary years
How did the university-school board partnership launch?

- Original identification of common interests
- Partnership building phase
- Engaging other stakeholders at LDCSB
- Complementary trauma-informed framework and MindUP
- Training offered each year to educators
## Research Design

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<tr>
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<th>Comparison Classrooms</th>
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<tbody>
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<td>Pilot year (2016-2017)</td>
<td>15 JK/SK classrooms in 8 schools (235 students)</td>
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<td>Evaluation year</td>
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- Educators complete pre- and post- ratings for each child each year
- Measures for evaluation year include the BASC and the BRIEF
- Educators also complete additional surveys and participate in a focus group
Selection of schools

- Social Risk Index
- Interest from educators and administrators
- Other opportunities/burdens
- Considerations specific to comparison schools
Findings - Students

- Looked at pre-post ratings of:
  - Behavioural symptoms (BASC-3; two age versions)
  - Executive functioning (BRIEF-P and BRIEF 2)
  - Adaptive skills (BASC-3)
- Overall benefits in all three areas
- Educator surveys and focus groups helped provide the story behind the numbers!
Behavioural Symptoms Declined

- Significant decrease relative to comparison classrooms
- Intervention classrooms started with much higher scores
- Boys start off with higher scores
- Decrease for both male and female students (but no interaction)
- Added value for 2nd year particularly for boys
Changes in Behavioural Symptoms
Changes in Executive Functioning Deficits
Changes in Adaptive Skills

Adjusted Predictions of Time*Exposure with 95% CIs

- Total sample
- Male sample
- Female sample

Legend:
- Control
- Exposure 1 yr
- Exposure 2 yrs
Findings-Educators

“My students love the chime and it is like magic to calm them after lunch recess.”

“I think it’s really great in that they can assess their own behaviour in a different way.”

“There was tremendous change in the empathy that kids feel towards other kids with MindUP.”

“Kids love learning about their brain and how it works. I even got some feedback from a parent that said their child has been discussing his amygdala with them.”
Research & Evaluation Challenges

- Implementation fidelity
- Tracking students across schools and districts
- Ensuring buy-in from subsequent cohorts of educators
- Easy to lose a whole class by having one teacher who is unavailable to complete measures
- Potential labour disruption for 2019-2020 year
Partnership Success Factors

- Respect
- Regular communication
- Flexibility
- Shared vision
- Engaging different stakeholder groups at LDCSB
Summary

• First year demonstrated strong feasibility
• Second year – decreases in behavioural symptoms and executive functioning deficits
• Added benefit of two consecutive years of programming
• Qualitative data from teachers helps tell the story
The Path Ahead

- Continuing to follow students this year and next
- Adding EQAO results and learning skills (from report cards)
- Adding self-report measures in grade 3
- Focus on building sustainability
  - Training for comparison schools
  - Development of video story
  - Development of local trainers
Questions and Comments?

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Research information: https://www.csmh.uwo.ca/