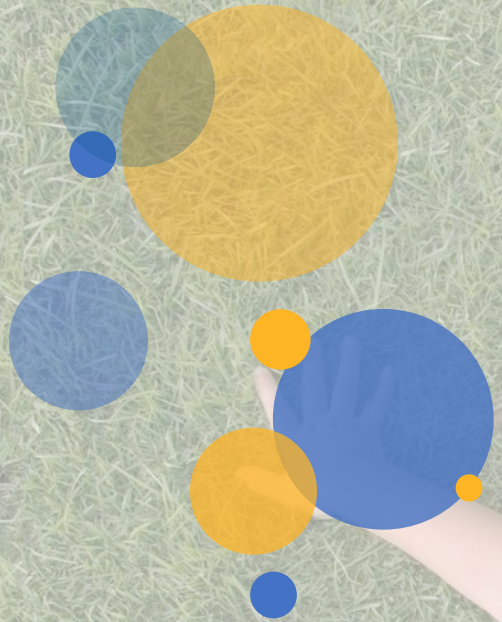


Early Years Conference 2024



● EDI Research Highlights

Research presentations & Panel Discussion

HUMAN
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PARTNERSHIP



Pre-Conference

Dr. Martin Guhn

Associate Professor,
HELP & SPPH, UBC

EDi 20 Years of Data: Research



Early Years Conference 2024

● EDI Research Highlights

EDI research findings from across Canada
and internationally

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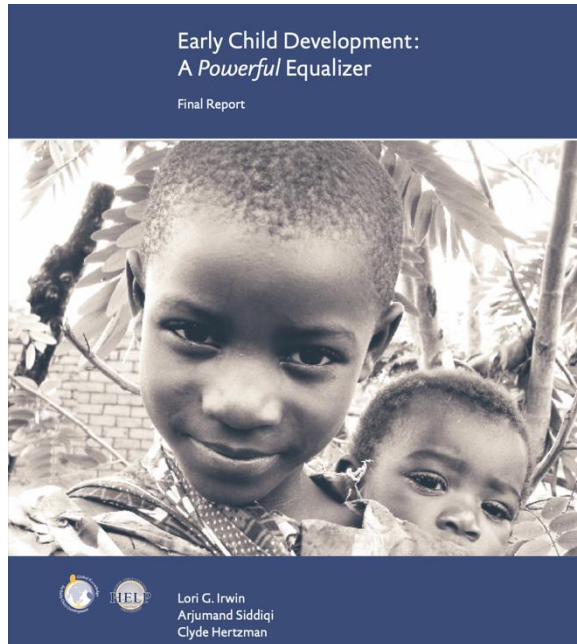
Pre-Conference

Dr. Magdalena Janus

Professor, McMaster University &
SPPH, UBC | HELP, UBC

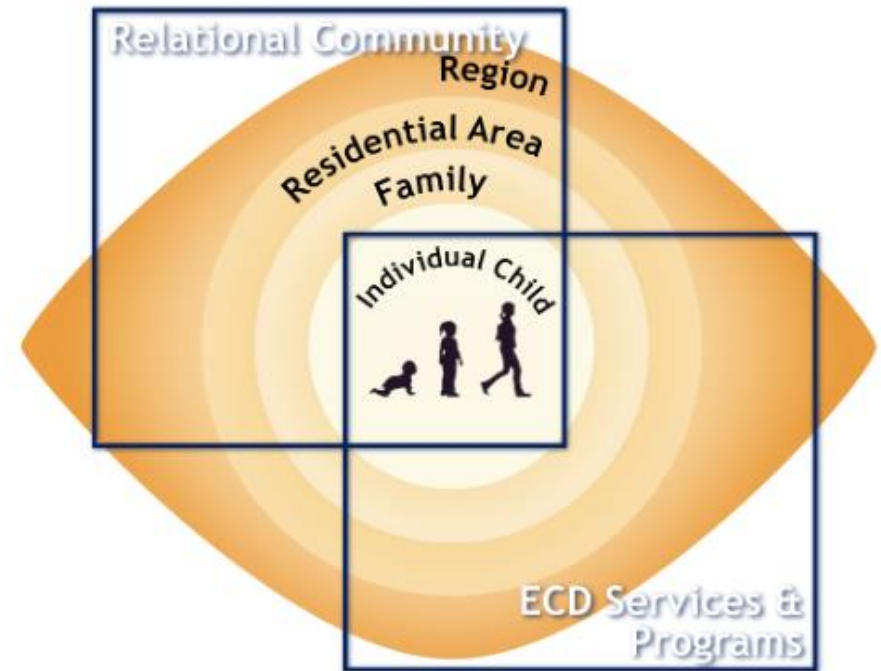


What we all believe in



Investing in improving early childhood context and outcomes makes sense from both developmental and economic perspective

Children are both shaped by and shape their environments: family, residential and relational communities, regional and national programmes and policies





EARLY DEVELOPMENT INSTRUMENT

FAMILY

LEARNING
& CARE

CULTURE



Physical Health and Well-being



Social Competence



Emotional Maturity



Language and Cognitive Development



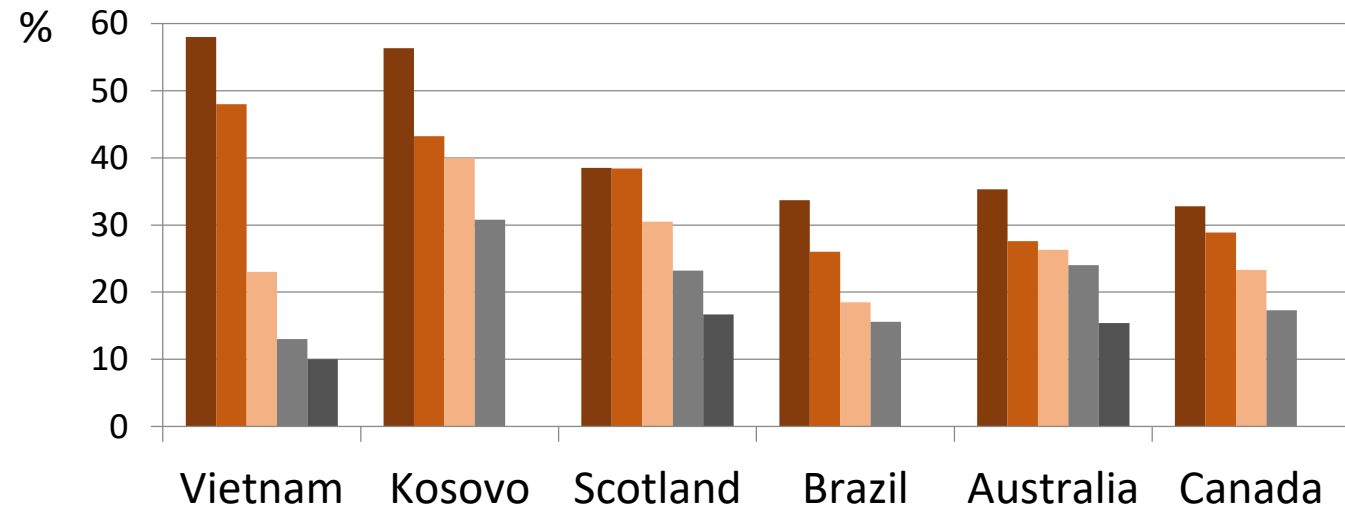
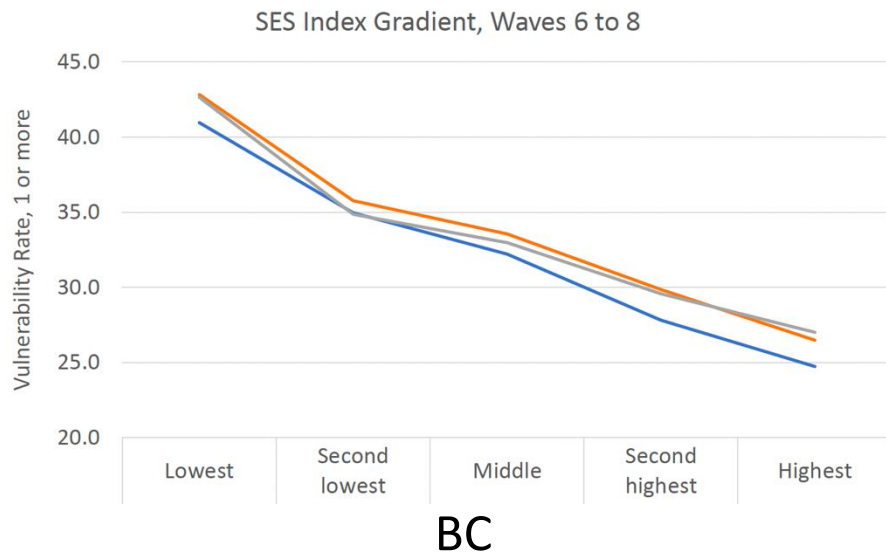
Communication Skills and General Knowledge





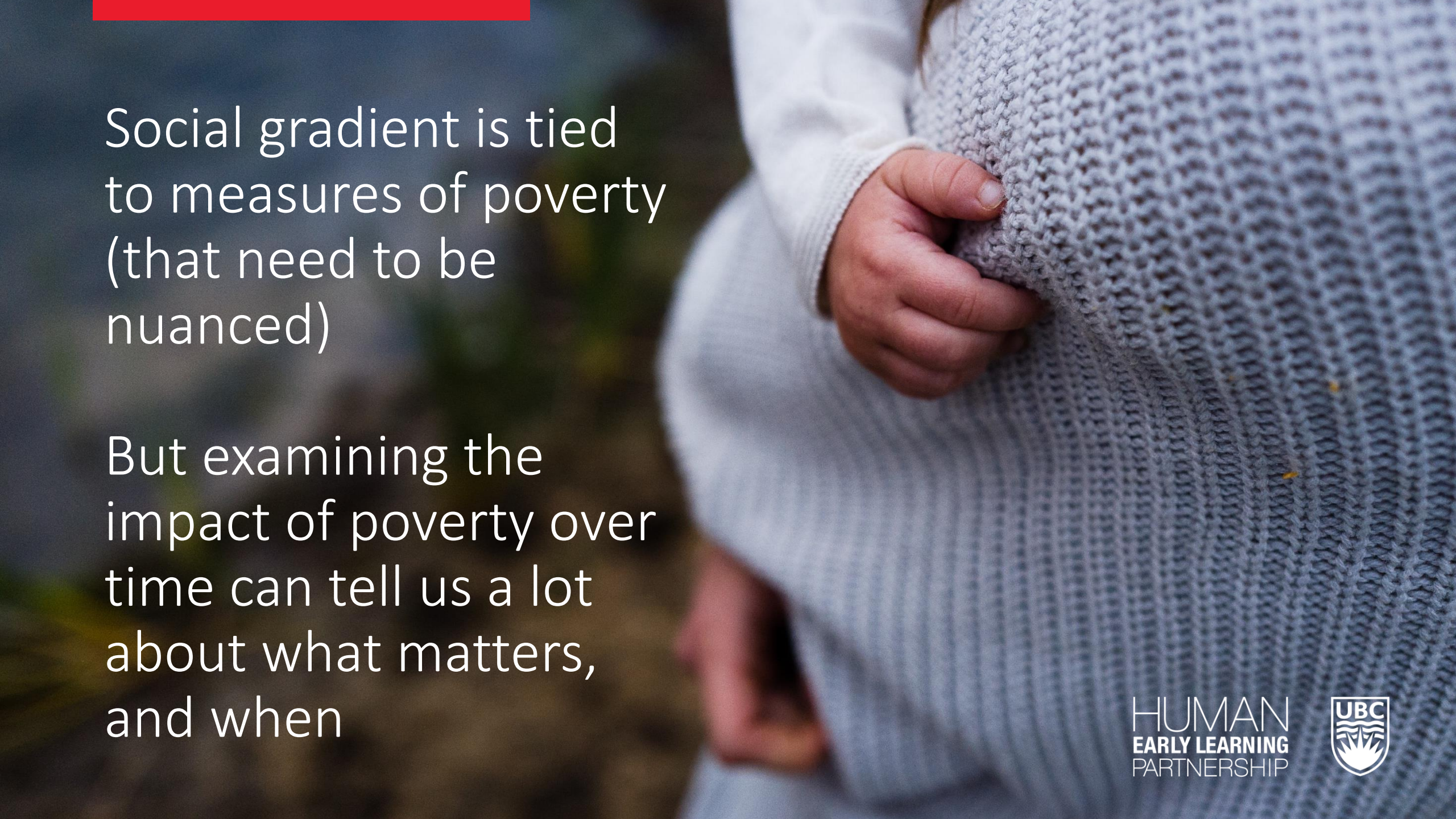
Over the years, we found...

- Child development and learning outcomes measured all over the world demonstrate the “social gradient”
- That means that children from less advantaged families/neighbourhoods have poorer outcomes than those who are more advantaged and that relationship forms a continuous line
- 372 peer-reviewed papers and counting <https://edi.offordcentre.com/resources/bibliography-of-the-edi/>



Population data are good at monitoring patterns of children's outcomes, over time, and in different locations

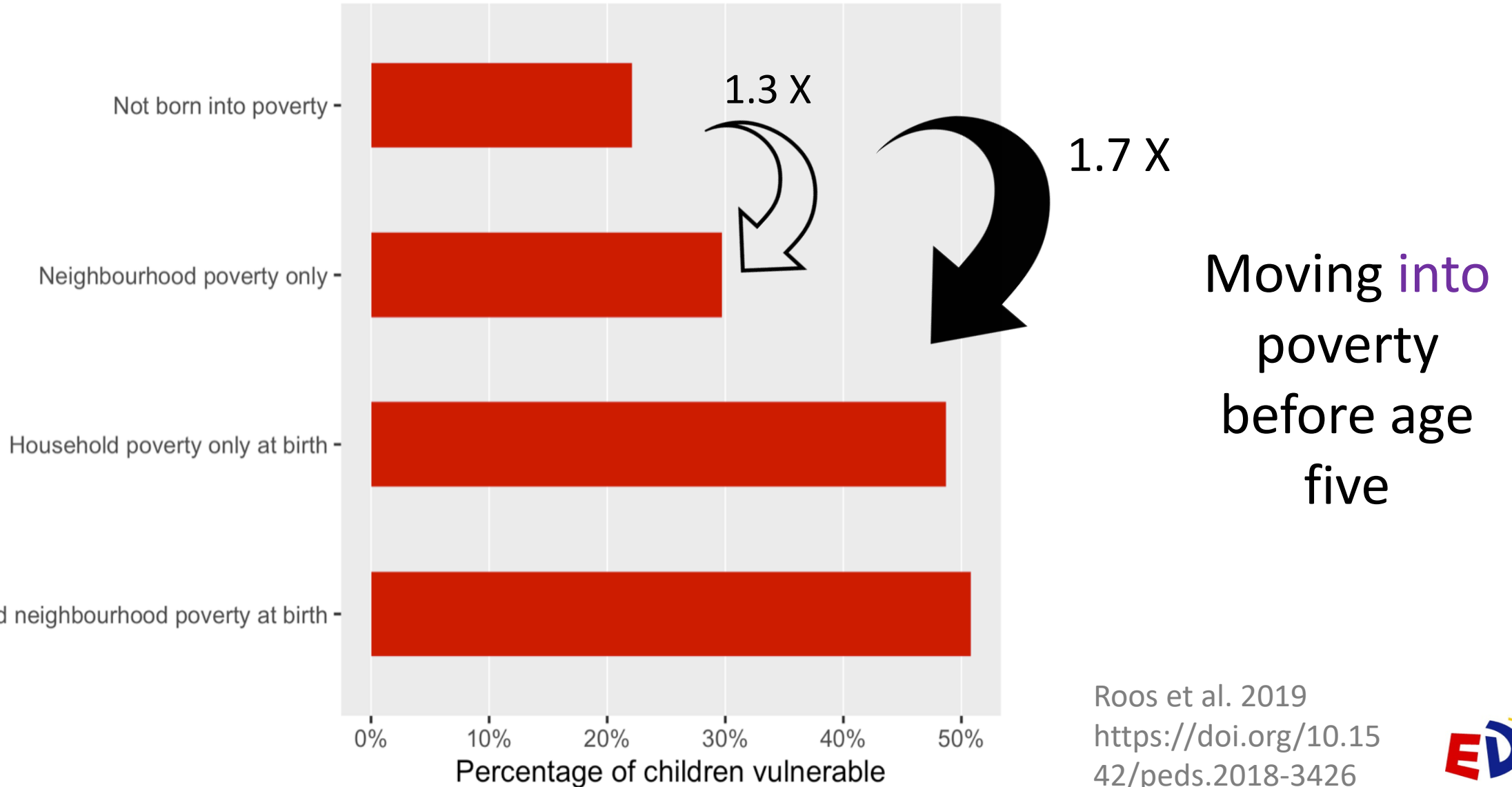




Social gradient is tied to measures of poverty (that need to be nuanced)

But examining the impact of poverty over time can tell us a lot about what matters, and when

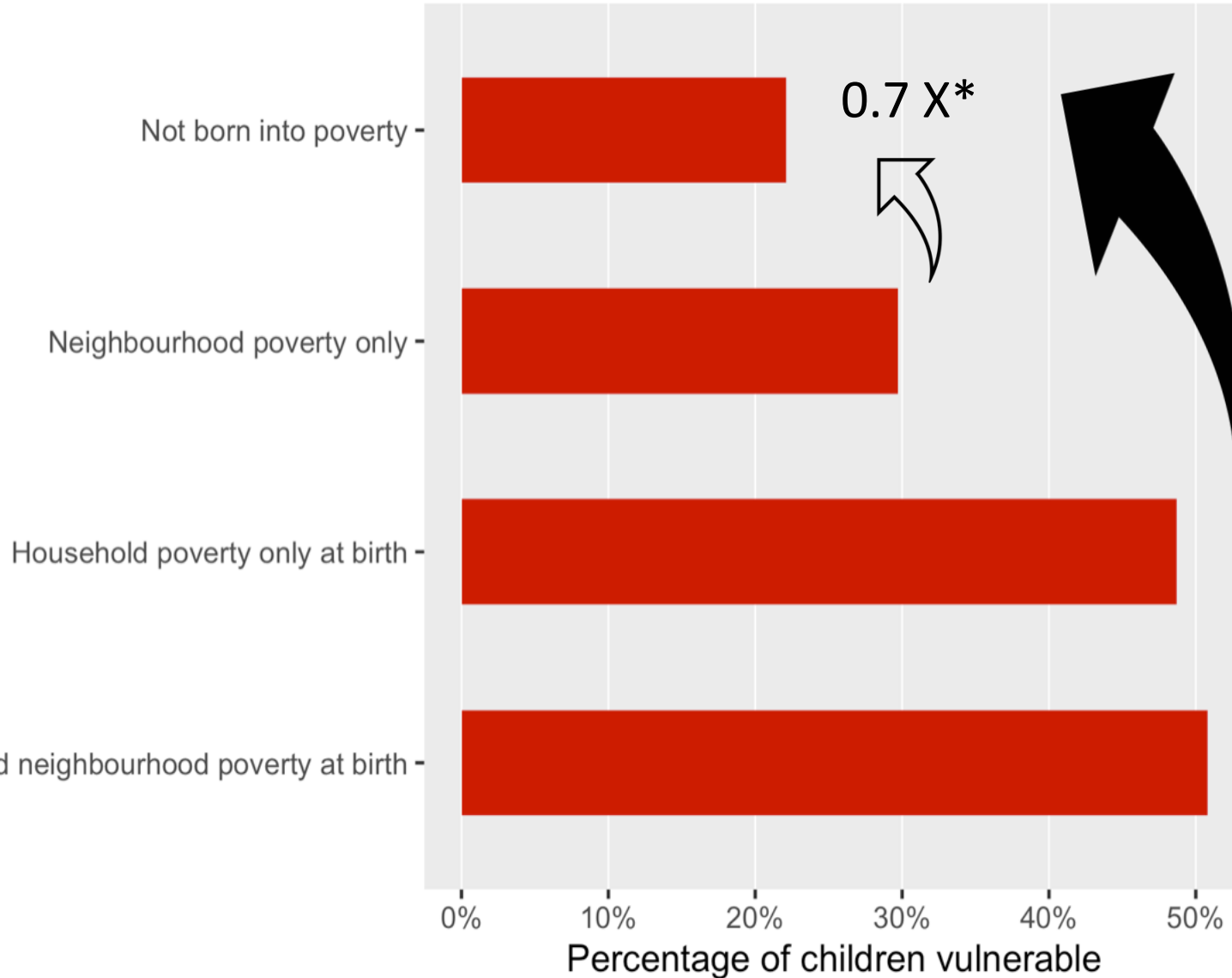
In and out of early poverty: Manitoba, children 0-5 years



Roos et al. 2019
<https://doi.org/10.1542/peds.2018-3426>



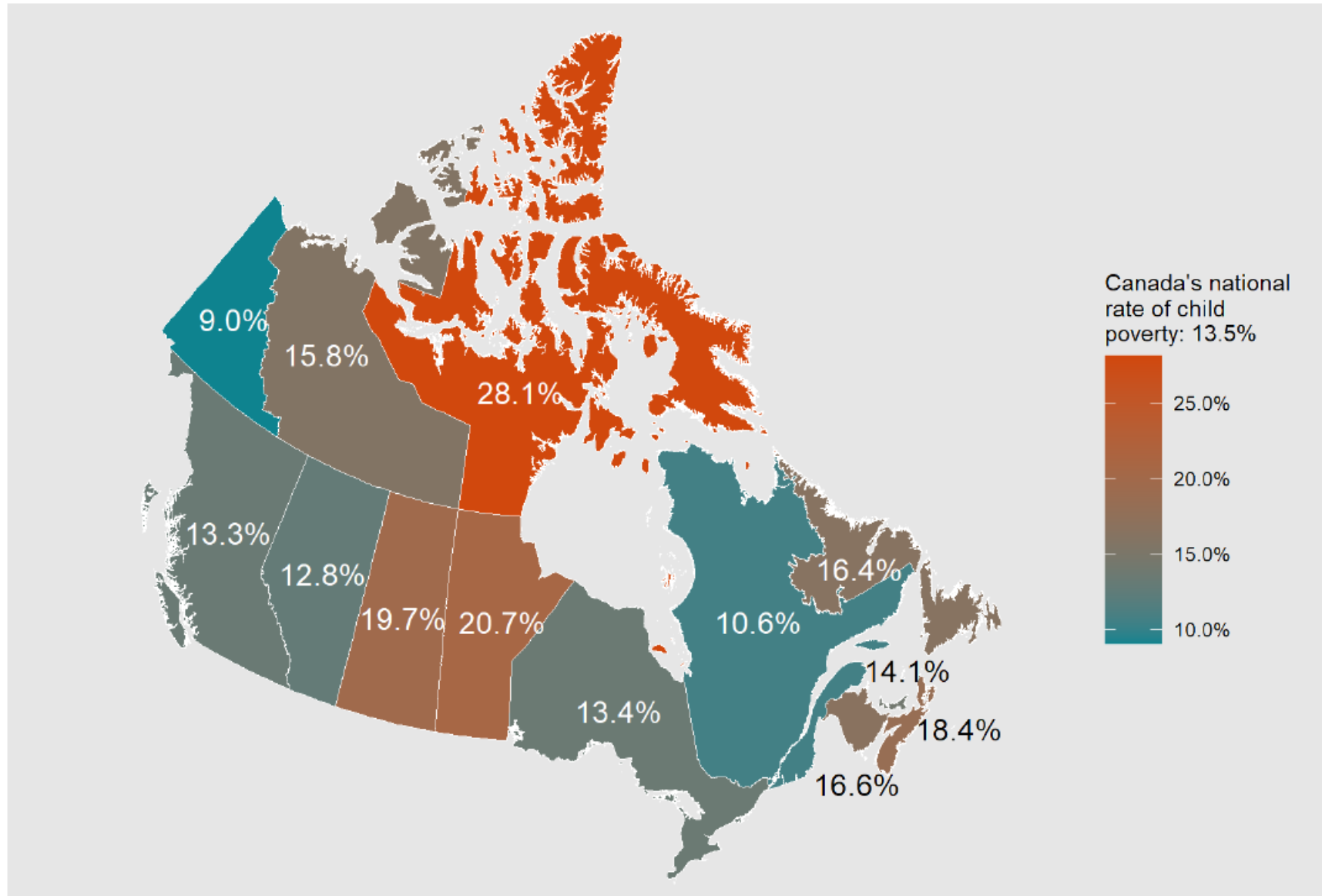
Impact of early poverty: Manitoba, children 0-5 years



0.7 X

Moving **out**
of poverty
before age
five

Figure 3. Child poverty rates across Canada, under 18, 2020



MAYBE???

Campaign 2000 End Child & Family Poverty, 2022 Report Card

<https://campaign2000.ca/pandemic-lessons-ending-child-and-family-poverty-is-possible/>

Source: Statistics Canada Table 11-10-0018-01. After-tax income status of tax filers and dependents based on Census Family Low Income Measure (CFLIM-AT), by family type and family type composition (T1FF), 2020.

A young child with short hair, wearing a red and white striped shirt, is focused on playing with a wooden abacus. The abacus is tilted, and the child's hand is near the bottom. In the foreground, a wooden abacus with colorful beads (red, orange, yellow) is visible. The background is softly blurred, showing a bright, indoor setting.

Preschool
and full time
kindergarten

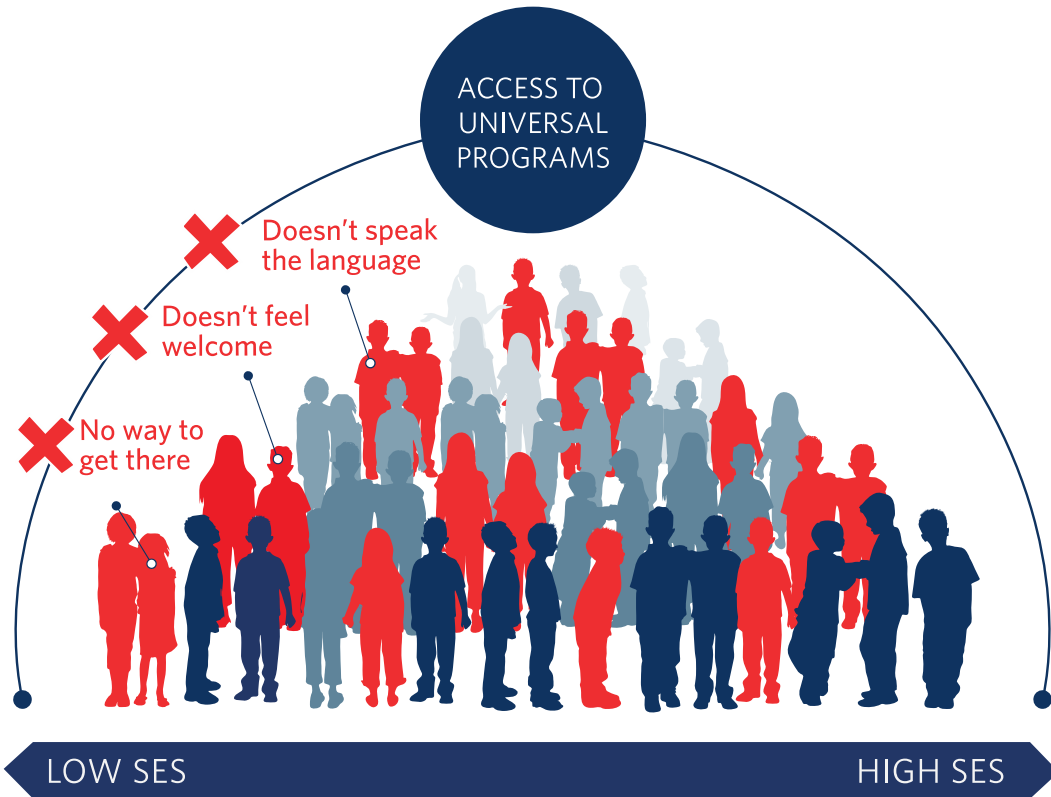
Universal panacea
or a bit of a
smokescreen?...

Preschool and full time kindergarten

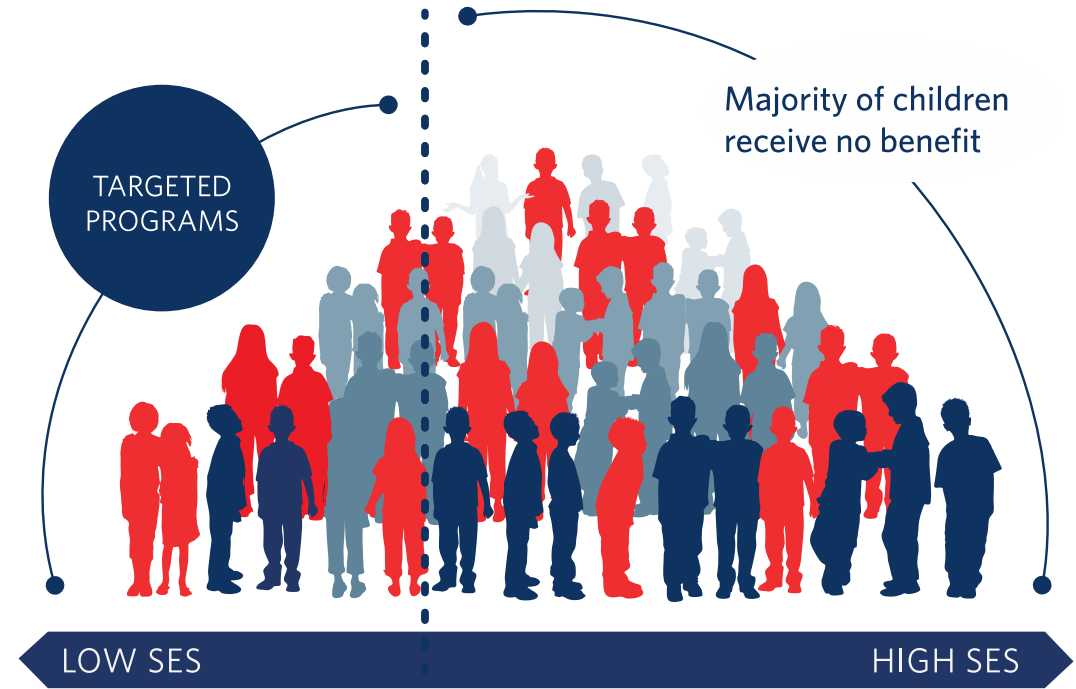
- Most existing evidence indicates that preschool attendance (and junior kindergarten) is associated with better developmental outcomes at school entry and in elementary school
- Full-time kindergarten (BC and Ontario) are **universal interventions**
- They deliver the same support for **all** children without considering the **proportional universality** dilemma



Universality



Proportionate Universality



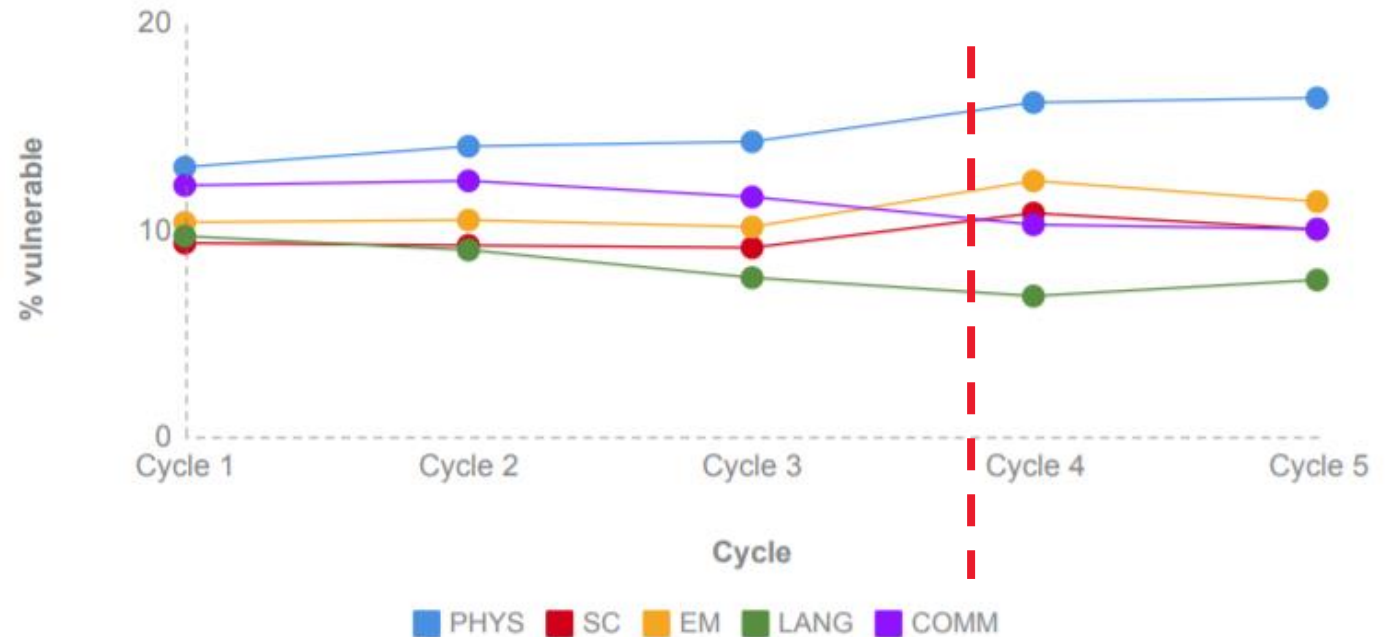
Ontario pre-post Full Time Kindergarten

Children with Special Needs



Cycle 1	4,140 (3.3%)
Cycle 2	4,195 (3.5%)
Cycle 3	4,821 (3.7%)
Cycle 4	5,449 (4.0%)
Cycle 5	6,811 (5.0%)

Percentage of Children Vulnerable by Domain



Children Considered ELL, ALF, or PANA



Cycle 1	13,024 (11.5%)
Cycle 2	13,333 (12.0%)
Cycle 3	14,390 (12.0%)
Cycle 4	14,397 (11.4%)
Cycle 5	19,449 (15.7%)

<https://edi.offordcentre.com/partners/canada/edi-in-ontario-2004-2018/>

<https://edi-offordcentre.s3.amazonaws.com/uploads/2021/03/ONT-C1-C5-Web-Report.pdf>

Lesser known small groups – equity and inclusion

Advantages of the population level coverage:

- Inclusivity of small or underrepresented populations
- For example: Children with special educational needs, or children with specific conditions or health disorders; refugee children



Newcomer children

- Children who are or whose parent is an immigrant or refugee
- Few longitudinal links available outside of BC
- But we know that not speaking the language of instruction in Kindergarten is a disadvantage – at least at the beginning



Children who are English/French learners

Evidence from pan-Canadian data: more likely to show symptoms of anxiety

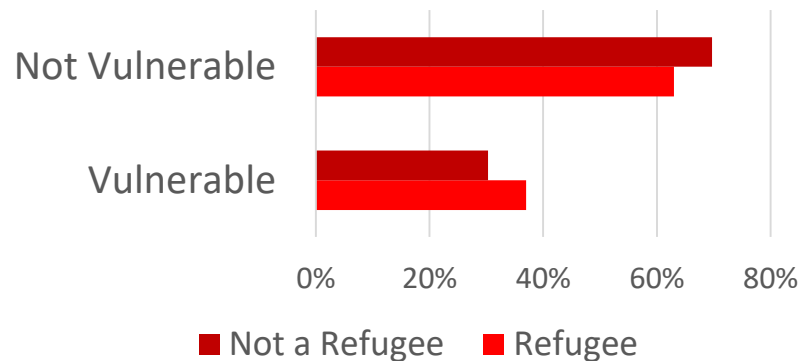
Table 4 Demographic characteristics and vulnerability rates in four EDI domains among anxious and non-anxious children

Janus et al. 2022
<https://doi.org/10.1007/s10578-022-01332-9>

	Anxious %	Non-Anxious %	χ^2	Cramer's V
Demographics				
Male	55.4	51.2	178.1*	0.014
SN	11.1	3.4	4210.0*	0.066
E/FSL	14.2	12.9	37.9*	0.006
Developmental domain vulnerability				
Physical	43.1	11.3	23,446.6*	0.155
Social	42.6	10.3	26,016.3*	0.163
Language-cognitive	27.8	8.8	10,555.8*	0.104
Communication and general knowledge	42.8	13.2	18,029.4*	0.136

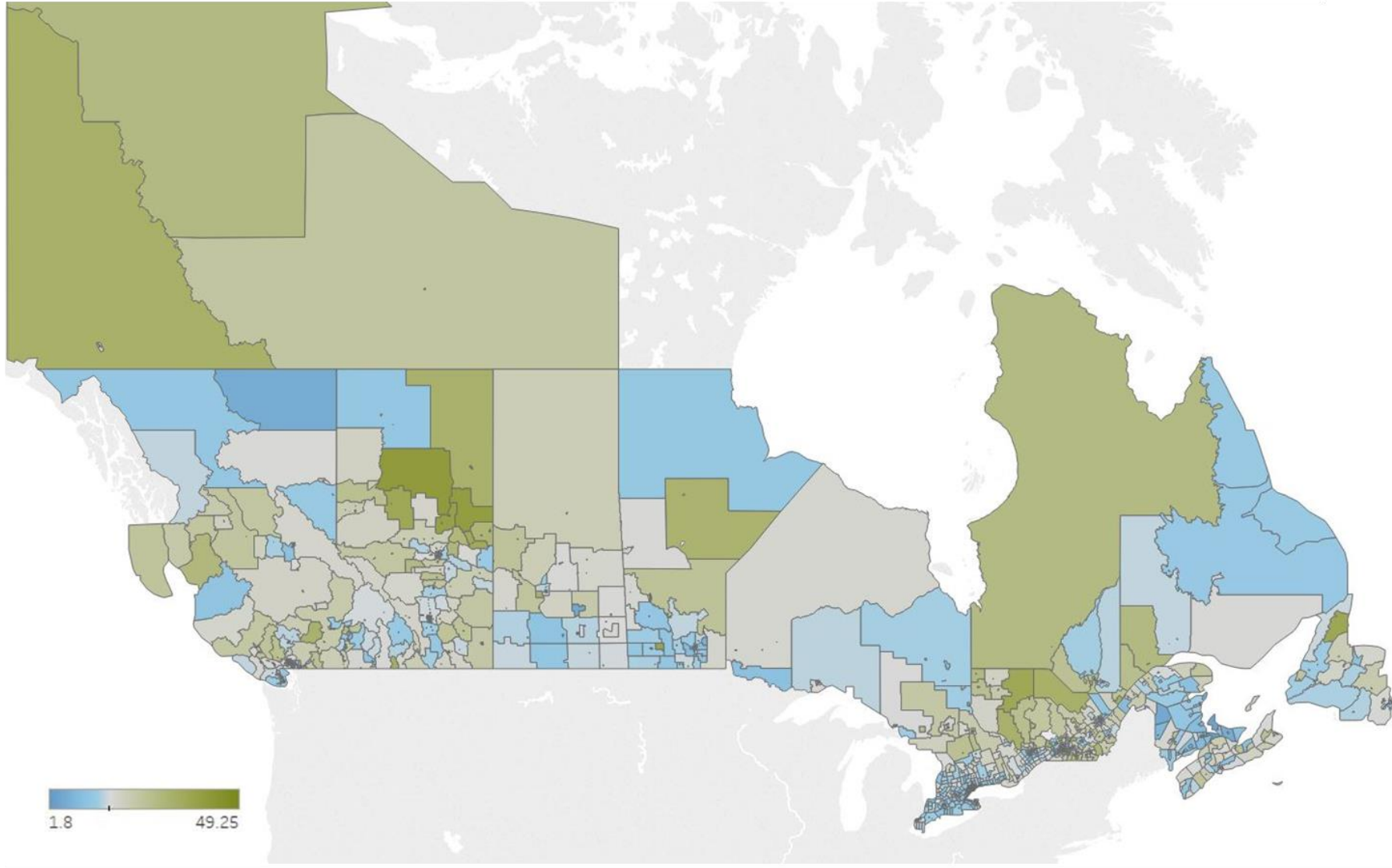
* $p < 0.004$, corrected for multiple comparisons

Evidence from 2015 Ontario data:
 Child or mother is a refugee
 N=3366 (3.2%)



Saunders et al. 2020
<https://doi.org/10.23889/ijpds.v6i1.1407>

Prevalence of childhood health disorders in Canadian neighbourhoods



Excluding neighbourhoods with fewer than 10 children, childhood health disorder prevalence ranged from 1.8 to 49.3%, with an average of 16.8% (SD = 5.97).



Special Needs
classification



12
Functional
impairments



37
Medical
diagnoses

Association of prevalence with SES



OPEN ACCESS

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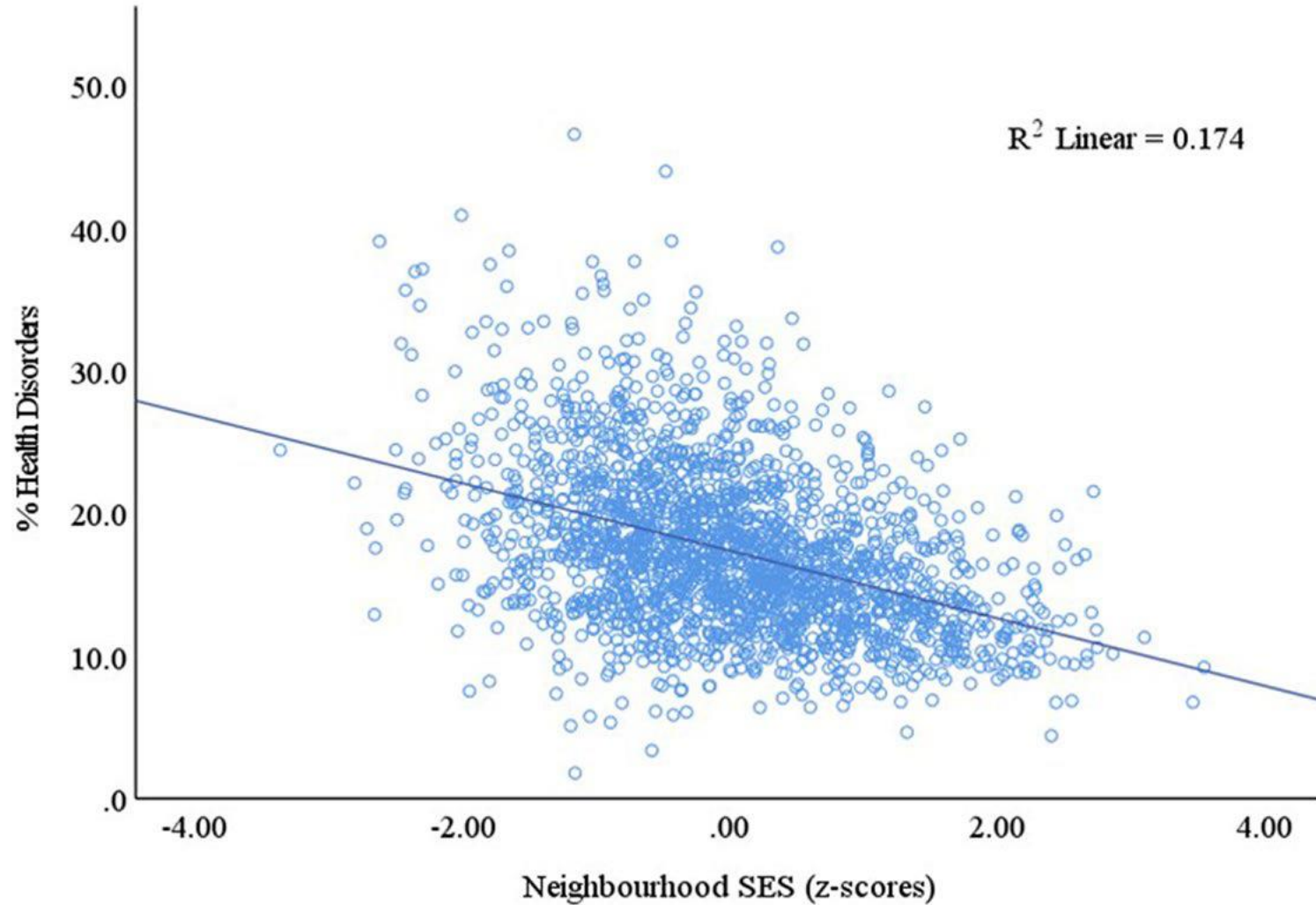
CITATION

Neighbourhood-level socioeconomic status and prevalence of teacher-reported health disorders among Canadian kindergarten children

Magdalena Janus^{1,2*}, Marni Brownell³, Caroline Reid-Westoby¹, Molly Pottruff¹, Barry Forer^{2†}, Martin Guhn^{2†} and Eric Duku^{1†} on behalf of the Canadian Children's Health in Context Study Investigators

¹Offord Centre for Child Studies, Department of Psychiatry and Behavioural Neurosciences, McMaster University, Hamilton, ON, Canada, ²Human Early Learning Partnership, School of Population and Public Health, University of British Columbia, Vancouver, BC, Canada, ³Manitoba Centre for Health Policy, Department of Community Health Sciences, University of Manitoba, Winnipeg, MB, Canada

Association of prevalence with SES



When province/territory (P/T) is added to the model, the R^2 increases to 0.40

P/T associations significant for:

Alberta
BC
Manitoba
Newfoundland and Labrador
Nova Scotia
Ontario
Quebec
Saskatchewan

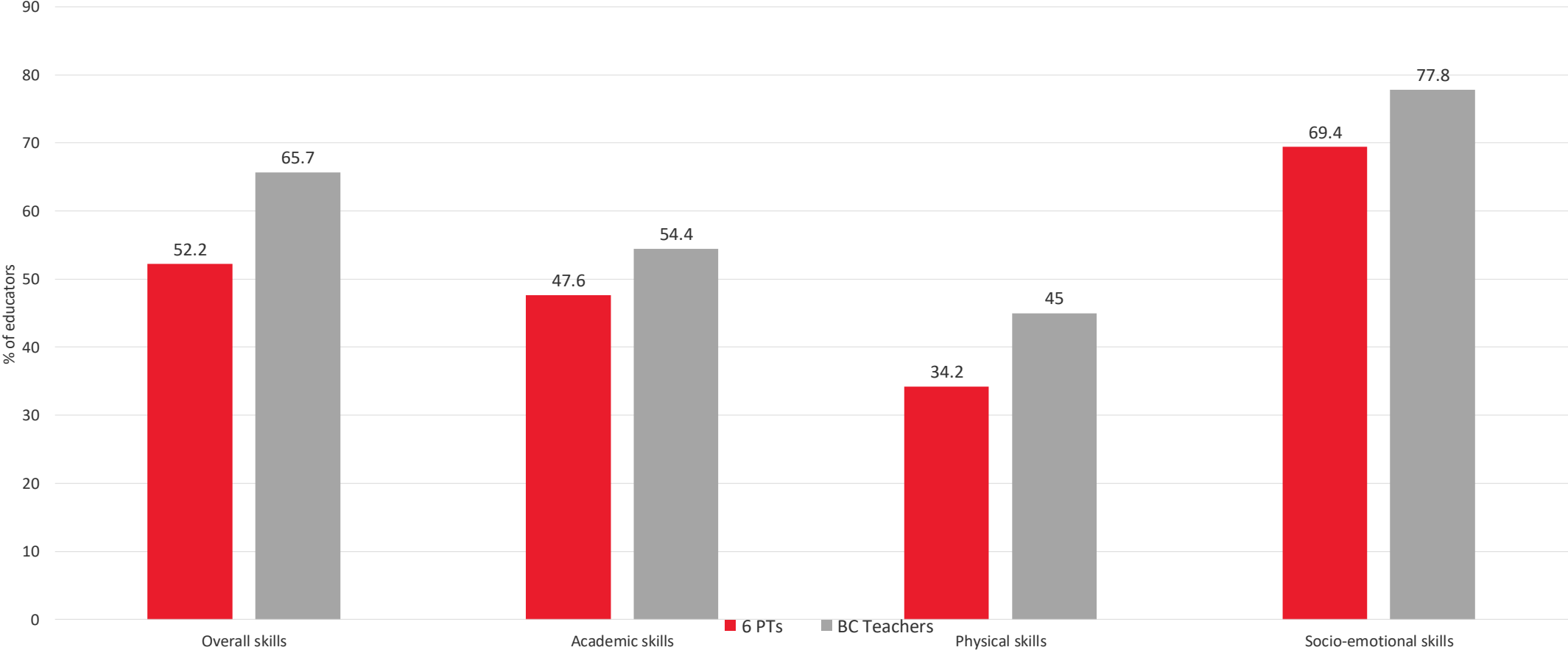


Reality check

"COVID Invasion" (detail) by Leonard (Age group: 4-6 years)

Image: Royal Ontario Museum

Percentages of educators who reported that student skills were “lower or much lower” than pre-pandemic cohorts



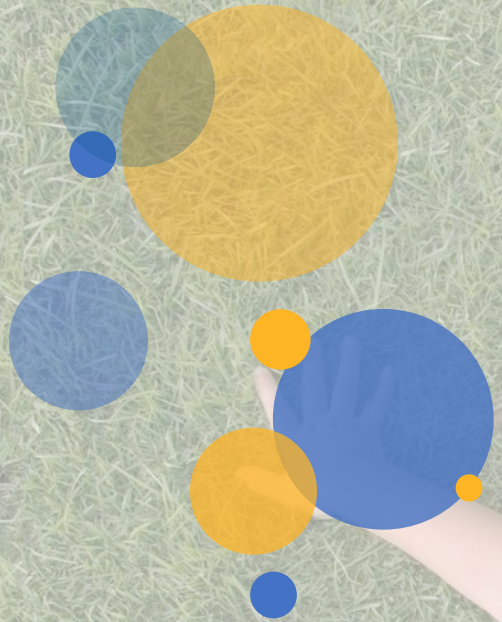
Kindergarten Teachers in all 2023 EDI data collections (except BC, 76% response rate) and Kindergarten Teachers in BC in 2022 and 2023



Summary of EDI Research Findings

- Children born into poverty or those that move into poverty before age 5 are more likely to be vulnerable on the EDI. There is a difference between neighbourhood and household income (EDI-census)
- Early recognition of neurodiversity is helpful because children more likely to access services that support development; many children who have similar developmental profiles in Kindergarten but cannot receive diagnosis, have poorer outcomes over time (EDI-health data-MDI)
- Newcomer children require close monitoring and partnership with families, just like other groups whose development and learning (school readiness) may not be well understood
- Pandemic-related disruptions need to be kept in consideration in comparison of results over time

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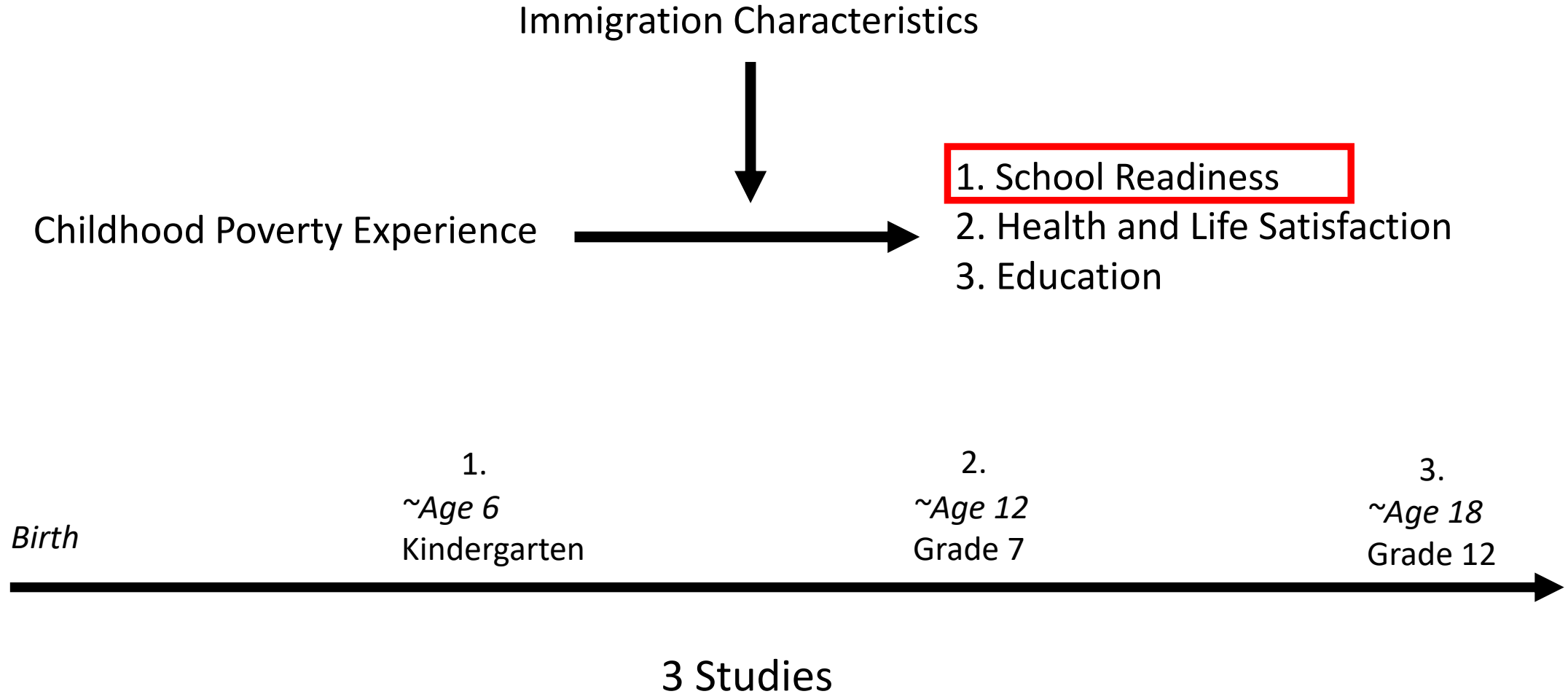
● EDI Research Highlights:

Harnessing the Potential of Data Linkage:
Association of Early Poverty with the EDI

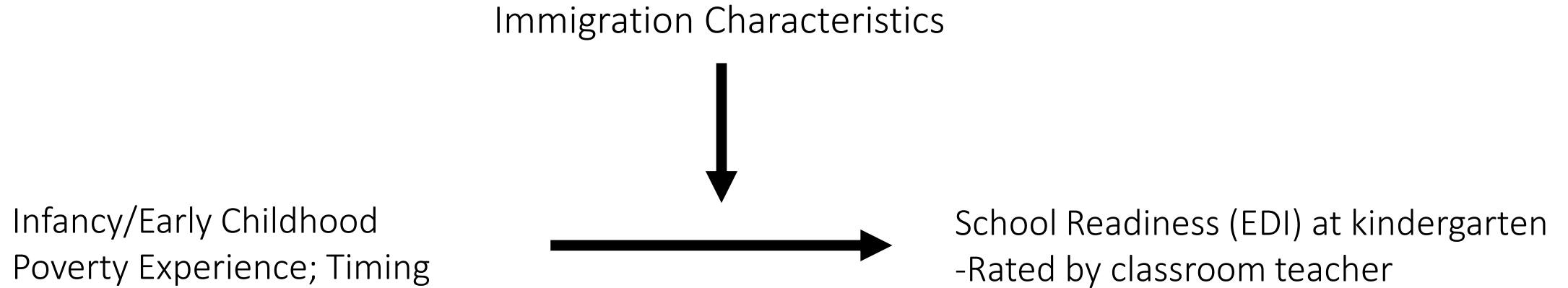
Randip Gill

PhD Student
HELP & SPPH, UBC

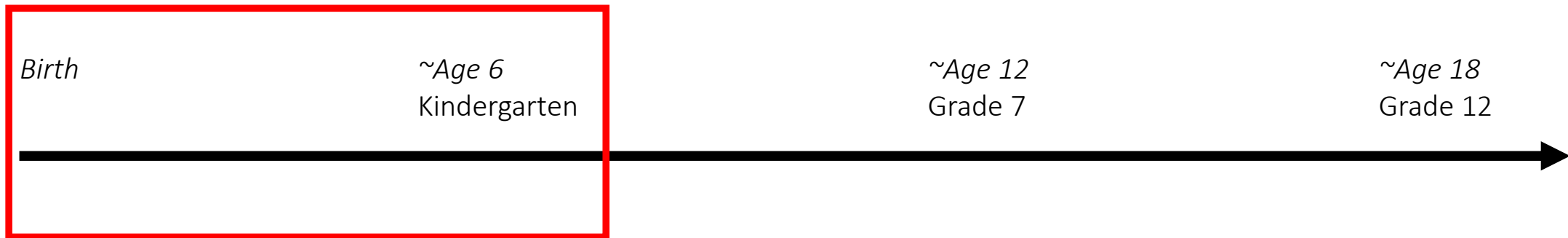
OVERARCHING PROJECT GOAL



STUDY 1: SCHOOL READINESS



Study 1

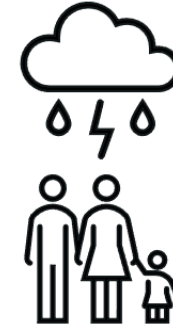


SCHOOL READINESS: POVERTY PREVALENCE AND ASSOCIATIONS

Childhood poverty: 11% in B.C. in 2018 (Ex. 2 Adults, 2 Children: ~\$45 000)⁽¹⁾

Over one third of recent immigrant children⁽¹⁾

Environment⁽²⁻⁶⁾:



Outcomes: Stress dysregulation^(3,4); Cognitive deficits (ex. reading/language) ⁽⁵⁻⁹⁾; Depression⁽¹⁰⁻¹²⁾; Anxiety^(13,14); Antisocial behaviour⁽¹⁵⁾ and more...

Poverty Timing

- Consistent, earlier poverty → Worse outcomes^(16,17)
- Transitions out of poverty → Better outcomes^(16,18)

LITERATURE GAPS

1. Lack consideration of immigration characteristics^(10,13,17)

- Newcomer challenges: discrimination, social exclusion⁽¹⁹⁾
- Health decline and barriers to access^(20,21)

2. Scope of poverty observation

- Household or neighbourhood poverty; lack poverty transitions^(22–26)


Goal of Project: Address gaps

DATA SOURCES AND VARIABLES

Study Participants

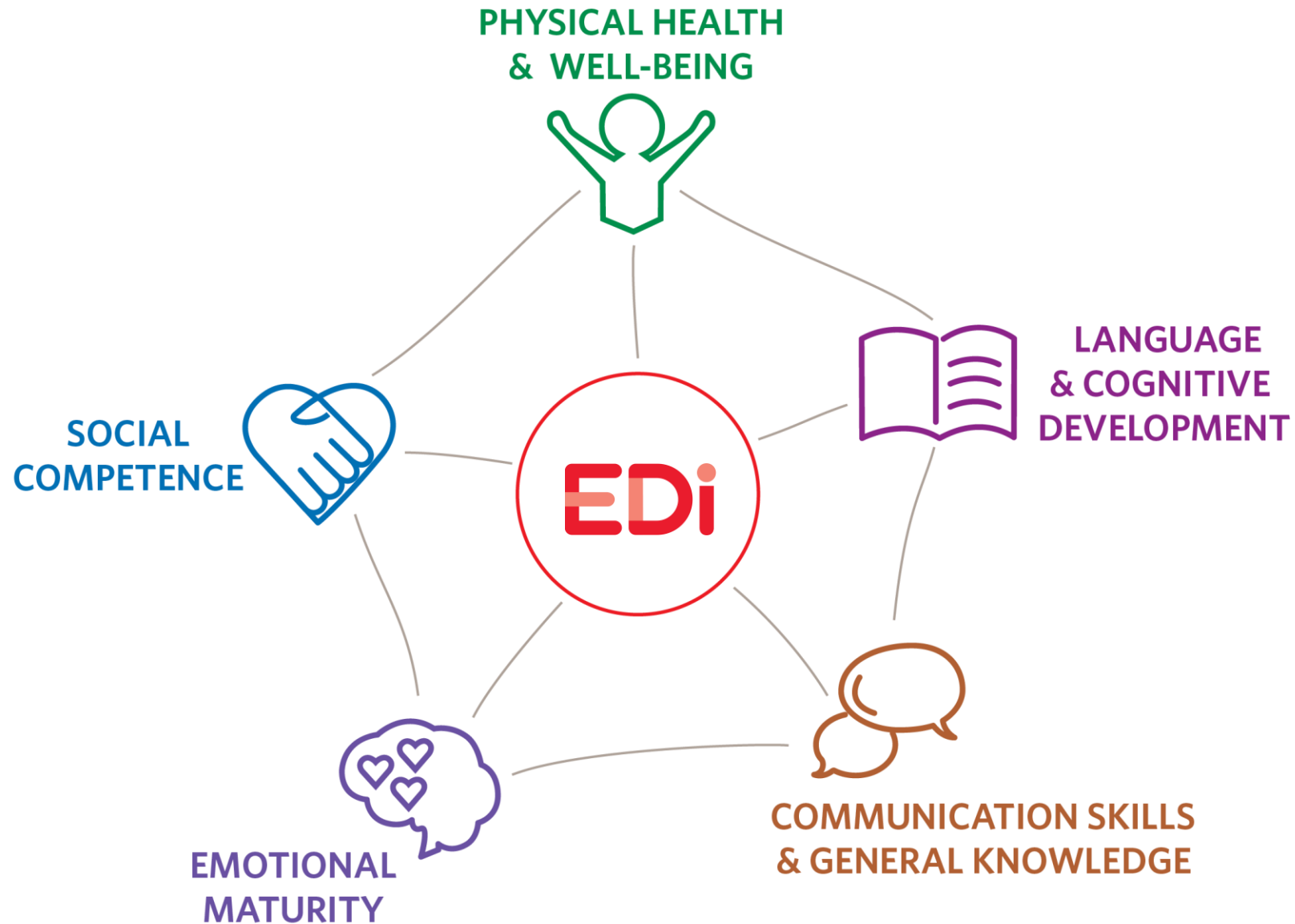
- Linked database, children in 10 selected BC school districts (lower mainland)
- Birth cohort of children born within 1990-2006 (>480,000)
- Latest data entry: March 2017

Linked Data Sources*

- Poverty Exposure:
 - Household Income: Medical Services Plan Insurance (MSP) Subsidy Registration₍₂₇₎
 - Neighbourhood Income: Postal Codes and Census Records₍₂₈₎
- Immigration Records: Immigration, Refugees, and Citizenship Canada (IRCC)₍₂₉₎
- Birth/Parent Characteristics: BC Vital Statistics Agency₍₃₀₎
- **Outcome Data:**
 - School Readiness at KG: Early Development Instrument (EDI; from HELP)₍₃₁₎ 

*The requested data was linked by *Population Data BC*, a center in BC specializing in population-level data linkage, using a probabilistic-deterministic approach ₍₃₂₎

The Early Development Instrument (EDI)



DATA SOURCES AND VARIABLES

Exposure of Interest: Poverty (4 Categories)

- Household Poverty (HH) : MSP subsidy due to low income (ex. 2014: <\$30,000) - From MSP reg.
- Neighbourhood Poverty (NH): Lowest income-quintile for NH – From Census
- “Combined” Poverty: Having both HH and NH poverty concurrently
- No Poverty: Neither household or neighbourhood poverty

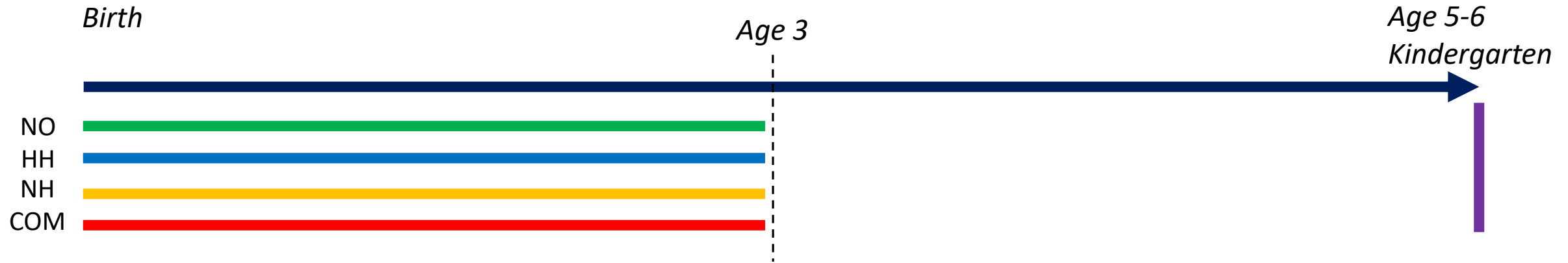
Immigration Background: Immigrant Generation Status

- “Non-immigrant” – Neither child or parents migrated to Canada
- “Second-generation immigrant” – At least one parent migrated to Canada

Outcome: School Readiness

- Vulnerability in 2+ EDI school readiness domains at KG
- Inclusion Requirement: Children born in BC and present from birth to age 5; linked to EDI
 - Sample of >15 000

School Readiness: Poverty Experience Analyses



Exposure: Poverty between ages 0-2

- = No Poverty (NO) (58%)
- = Household Poverty Only (HH) (12%)
- = Neighborhood Poverty Only (NH) (22%)
- = Combined Poverty (COM) (8%)

Outcome: Early Development Instrument (EDI)

"Vulnerable" (yes/no) = Below normative percentile cutoff (<10%)
On 2+ domains

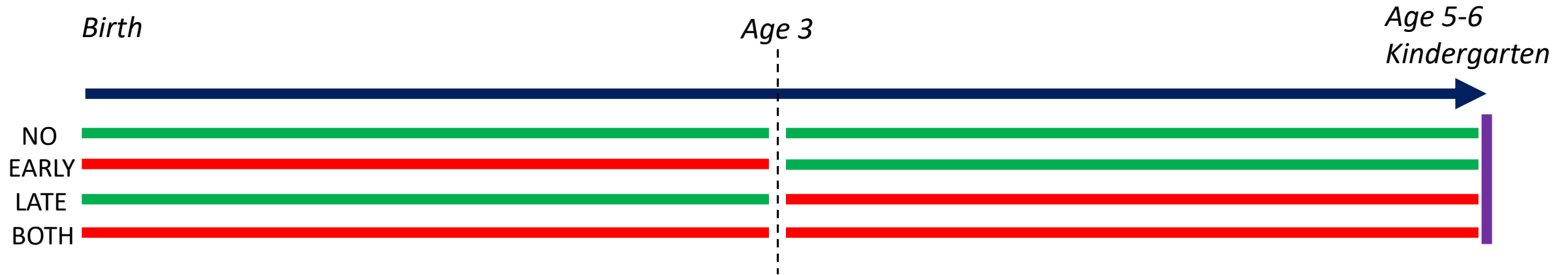
Analysis 1: Poverty Experience; Logistic Regression

Adjusted Variables: Child's Sex, Birthweight adjusted for gestational period, Parental marital status at childbirth; Maternal age at childbirth; Age at EDI assessment

Analysis 2: Poverty Experience stratified by Immigrant Generation (Non-Imm.; 2nd-gen)

Adjusted Variables: Same as analysis 1

School Readiness: Poverty Timing Analysis



Exposure: Combined Poverty between age 0-2 and/or 3-5

4 Groups:

NO: No Poverty 0-2 OR 3-5

EARLY: Poverty 0-2 BUT NOT 3-5

LATE: No Poverty 0-2 BUT Poverty 3-5

BOTH: Poverty 0-2 AND 3-5

Outcome: Early Development Instrument (EDI)

"Vulnerable" (yes/no) = Below normative percentile cutoff (<10%)

On 2+ domains

Analysis 3: Timing Category Analysis; Logistic Regression

Adjusted Variables: Same as analysis 1 and 2

School Readiness: Findings⁽³⁵⁾

Analysis 1

- Combined poverty at age 0-2 was associated with 107% higher odds of vulnerability in 2+ more EDI domains at kindergarten in comparison to no poverty group
- Association of combined poverty with vulnerability was larger than household only poverty or neighborhood only poverty

Adjusted odds ratios (aOR) describing the association between poverty exposures and vulnerability on Early Development Instrument (EDI) domains.

Characteristic	Group	Vulnerable on 2+ Domains aOR [95% CI]
Poverty Exposure Between Age 0 to 2	No Poverty	Ref
	Combined	2.07 [1.74;2.47]***
	Household Only	1.54 [1.31;1.82]***
	Neighbourhood Only	1.49 [1.30;1.70]***

Gill et al. (2024)

School Readiness: Findings

Analysis 2 (Stratified Analysis)

- Poverty was associated with higher vulnerability in school readiness for both non-immigrants and 2nd gen. immigrants
- Combined poverty association larger for non-immigrants than for 2nd gen. immigrants

Adjusted odds ratios (aOR) describing the association between poverty exposures and vulnerability on Early Development Instrument (EDI) domains, stratified by immigrant generation status.

Characteristic	Group	Vulnerable on 2+ Domains aOR [95% CI]
<u>Non-immigrants Analyses</u>		
Poverty Exposure Between Age 0 to 2	No Poverty	Ref
	Combined	2.40 [1.92;3.00]***
	Household Only	1.50 [1.22;1.84]***
	Neighbourhood Only	1.58 [1.35;1.85]***
<u>Second Generation Immigrants Analyses</u>		
Poverty Exposure Between Age 0 to 2	No Poverty	Ref
	Combined	1.63 [1.22;2.17]***
	Household Only	1.54 [1.16;2.04]**
	Neighbourhood Only	1.26 [0.98;1.63]

*p < 0.05, **p < 0.01, ***p < 0.001

School Readiness: Findings

Analysis 3 (Timing Analysis)

- Combined poverty at any timepoint (Age 0-2, 3-5 or both) was associated with similarly higher odds of vulnerability in 2+ domain outcomes, regardless of timing

Adjusted odds ratios (aOR) describing the associations between poverty exposure timing with vulnerability on Early Development Instrument (EDI) domains.

Characteristic	Group	Vulnerable on 2+ Domains aOR [95% CI]
Combined Poverty Timing Category	No Poverty	Ref
	0-2 and 3-5	2.50 [1.97;3.17]***
	0-2 Only	2.35 [1.84;3.01]***
	3-5 Only	2.58 [1.97;3.38]***

*p < 0.05, **p < 0.01, ***p < 0.001

School Readiness: Discussion

Strengths

- Population-based, linked dataset
- High participation: >80% children in participating SDs in EDI
- Consider both HH + NH poverty separately and together; immigrant + birth factors

Limitations

- MSP subsidy as proxy for HH income; Opt-in program
 - Most vulnerable children possibly excluded (possible underestimation of effect)
- Inclusion required birth in BC – First generation immigrants excluded

School Readiness: Discussion

Conclusion and Implications

- Policy: Timing + Targeting of interventions (ex. Child benefits)
 - Combined poverty impact (most vulnerable)
 - Early and consistent supports; reduce barriers

Future Directions

- Examine expansion of income interventions (e.g., Canada Child Benefit; COVID Benefits)
- Further explore mechanisms from poverty to developmental domains for intervention
 - e.g. Access to opportunities, material supports, social supports
- Qualitative inquiry into association of poverty and outcomes; Immigration background

Questions?

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@HumanEarlyLearningPartnership



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Data Disclaimer:

Access to data provided by the Data Steward(s) is subject to approval, but can be requested for research projects through the Data Steward(s) or their designated service providers.

All inferences, opinions, and conclusions drawn in this publication are those of the author(s), and do not reflect the opinions or policies of the Data Steward(s).

The UBC Vancouver campus is situated within the traditional, ancestral and unceded territory of the x^wməθk^wəyəm (Musqueam) People.

Early Years Conference 2024

● EDI Research Highlights

The developmental well-being of children from refugee backgrounds in BC: Preliminary findings from a mixed methods study

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Dr. Monique Gagné Petteni

Research Associate

HELP, UBC



The Study

Aim

To investigate the developmental well-being of children from refugee backgrounds in BC.

Part 1

Quantitatively examined Early Development Instrument (EDI) scores for refugee children in BC (with immigrant and non-immigrant reference groups).

Part 2

Explore (corroborate, expand, and elaborate on) the EDI results through focus groups with BC educators and settlement workers who work with children from refugee backgrounds.



The Method

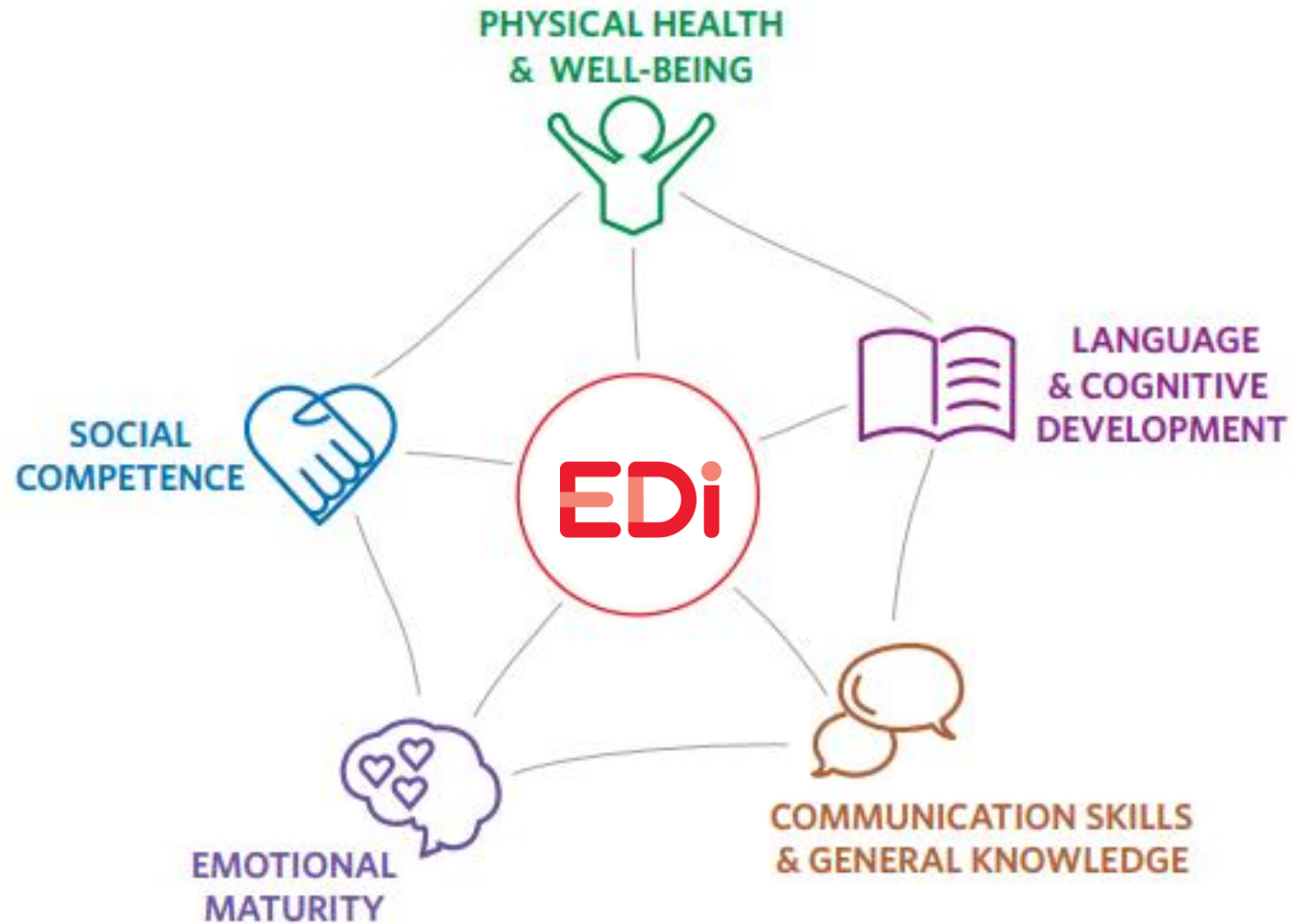
Part 1 (quantitative)

- EDI data were linked to migration records (Immigration, Refugees, & Citizenship Canada)
- Children with an EDI record in BC between 2005 and 2018 (N = 233,813)
- $N_{\text{refugee}}=899$; $N_{\text{immigrant}}=9037$

Part 2 (qualitative)

- Semi-structured focus groups with educators and settlement workers (7 participants; zoom)
- For each domain: Do the EDI results surprise you? What is your experience with the [EDI domain] of refugee children?
- Data were transcribed, coded, and grouped to identify common patterns/themes within and across the EDI domains.

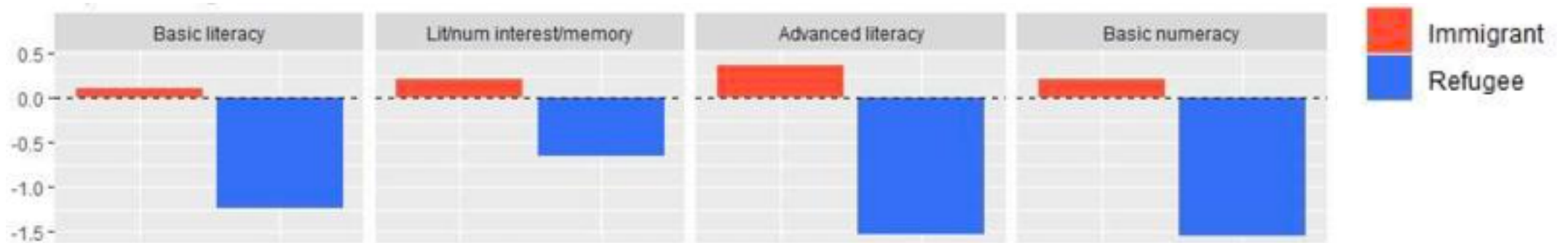
The Early Development Instrument





Language and Cognitive Development : EDI results

Adjusted regression coefficients*:



*(Adjusted to age, sex, ELL status). The dotted (0) line represents the non-migrant children reference group.

Overall, refugee children had lower EDI scores across all language & cognitive development subdomains (vs. reference group).



Language and Cognitive Development : Undefined/undiagnosed struggles to learn

- Participants shared examples of children from refugee backgrounds struggling to learn or retain information despite their enthusiasm, in what they described as something beyond an English language barrier.
- Children's struggles to learn or retain knowledge are often written off as an English language competency issue with learning assessment and diagnosis being passed on to later years.

*“they [refugee students] have a high interest. Like, they want to learn, but...there’s something else going on that’s preventing that from happening, and not just language”
(Educator, A, FG1).*



Language and Cognitive Development : Impacts of trauma

- Educator and settlement worker participants reflected on and had unanswered questions about perceived impacts of trauma in refugee children's language and cognitive development competencies, particularly memory and retention.
- Participants expressed concern over the misuse of the "trauma" term in the school system as an explanation for any learning/memory retention issues, and a justification to not further explore an official learning diagnosis.

"I got told this year – because I'm just advocating and fighting and complaining, and you know, whatever I can do to be that squeaky wheel: ... Well, they have trauma brain, so deal with it...there's no designation for them, and so you're not going to get any help anyways" (Educator, A, FG1).



Communication & General Knowledge : EDI results

Adjusted regression coefficients*:



*(Adjusted to age, sex, ELL status). The dotted (0) line represents the non-migrant children reference group.

Refugee children had a **significantly lower** EDI score in the communication & general knowledge domain (vs. reference).



Communication & General Knowledge : Cultural/Western contexts

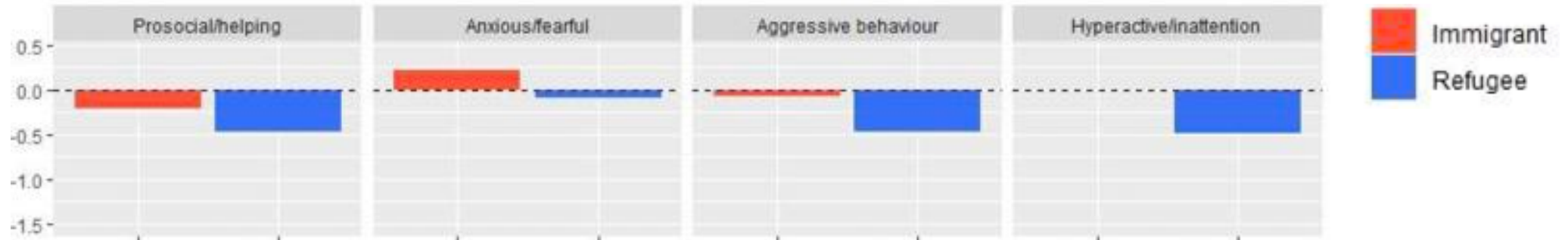
- Participants underscored that refugee children were not lacking knowledge, but the unfamiliar environmental context, materials, and knowledge of formal Canadian schooling all impact communication and demonstration of general knowledge within a Canadian context.
- Refugee children oftentimes have not had exposure to learning/play-based materials that are common in Canadian classrooms (e.g., readers or the images in the readers, like a hippopotamus).

“we all have knowledge, but their knowledge is different, right?...They’re coming in a different setting and knowledge changes, what is regarded as knowledge. So, I think that’s the hardest piece for them.” (Educator, B, FG1).



Emotional Maturity : EDI results

Adjusted regression coefficients*:



*(Adjusted to age, sex, ELL status). The dotted (0) line represents the non-migrant children reference group.

Overall, refugee children had **significantly lower EDI scores** across emotional maturity subscales, except 'anxious and fearful' (vs. reference).



Emotional Maturity :

Contextually maladaptive/adaptive behaviour responses

- Reframing low/high emotional maturity to contextually maladaptive/adaptive behaviours.
- They described behaviours they saw as maladaptive in a Canadian classroom (e.g., taking a pencil from the person next to you) that were likely very adaptive in previous refugee contexts (e.g., gathering supplies in a context of scarcity for your family).
- Participants also described witnessing refugee children's exceptionally caring and protective behaviours with friends/family.

Educator B (FG1) shared her experiences of a child who struggled with verbally communicating frustration, often using physical responses (i.e., pushing) when in conflict with a peer. Yet, when that child was "with the other girls that she is fond of, she takes care of them so beautifully. That is where you see that emotional maturity part... they are very responsible."



Overall : Barriers to accessing resources

- Focus group participants outlined a myriad of barriers to accessing resources.
- Participants described early intervention/assessment systems that are not responsive to the needs of refugee children (e.g., requiring children to have solid command of English prior to assessing learning or cognitive delays).
- Overlooked barriers families experience in accessing available supports (e.g., lack of awareness of resources, programs or subsidies, cost barriers, transportation barriers).

“the system is made to diagnose kids who either grew up in Canada or are fluent in English and are really comfortable with the English language. However, that is not really the reality in a lot of our schools.” (Educator, C, FG1)

“...when you phone [people running programs/services] and they speak fluent English, and I’m a refugee mom, what will be my...reaction, right?...Of course, I’m not comfortable talking to you, right? And then, also, if I go to your website, it’s all, like, medical terms, you know, go here, link here, click here, it’s a little bit difficult to navigate, especially if you’re not tech savvy, right? Especially for refugee families, who maybe they don’t have internet, they don’t have laptop...” (Settlement, B, FG2)



Overall :

Proactive/responsive systems and people

- Participants repeatedly highlighted the importance of early assessment and intervention upon settlement in Canada, for children to receive supports as soon as possible and to limit the chances of children simply being passed on from grade to grade.
- A reliance on the creativity and responsiveness of support staff who are “on the ball, even if nothing can officially happen” (Educator, C, FG1).
- Recommendations for a ‘basic orientation’ to introduce concepts, school rules, and expectations in an introductory and safe way (for parents and children).

“I’ve got one of my teachers, she’s like, “You know, if I could just take... if I could just have, like, a Somali/Syrian class, just for the morning, for two hours, and do all of the things around calendar, and how to play, and build all that basic foundational coping language, just in their own little bubble, in a nice little safe place”, then...just imagine, how impactful that would be for them in terms of being able to move on in their learning.” (Settlement, J, FG2)



Discussion

- The importance of understanding children's behaviour and development *in context*
- The depth of the impact of cultural understandings and nuances
- How can our school system be more proactive and responsive to the needs of refugee children? (early, low-barrier assessments and supports)





Acknowledgements and Disclaimers

Data stewards

We are grateful to Population Data BC and the data stewards for facilitating access to data for this project. The study uses data from Immigration, Refugees, and Citizenship Canada (IRCC) and the Human Early Learning Partnership (HELP). Additionally, linkage was facilitated by Ministry of Health and Ministry of Education and Child Care data). Access to data provided by the Data Steward(s) is subject to approval, but can be requested for research projects through the Data Steward(s) or their designated service providers. All inferences, opinions, and conclusions drawn in this publication are those of the author(s), and do not reflect the opinions or policies of the Data Steward(s).

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Thank you to the study team

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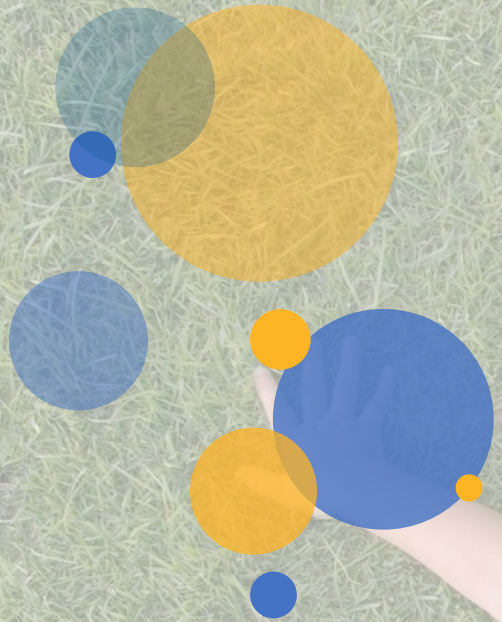


A special thank you

To the educators and settlement workers who gave their valuable time (in the middle of a pandemic) to share their insight, experience, and expertise for this research.



Early Years Conference 2024



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Pre-Conference

● EDI Research Highlights:

DEVELOPMENTAL PROFILES OF CHILDREN ASSESSED FOR AUTISM SPECTRUM DISORDER

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Developmental Pediatrician, BC Children's Hospital
Clinical Associate Professor, UBC
Medical Director, BC Autism Assessment Network

Community Acknowledgement

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Dr. Brenda Poon

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Dr. Martin Guhn

Dr. Gillian Hanley

My colleagues and peers at SPPH, Sunny Hill Health Centre, the BC Autism Assessment Network, and the Division of Developmental Pediatrics at UBC and the BC Children's Hospital



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ASD-



ASD+

British
Columbia
Autism
Assessment
Network

EDi
Early
Development
Instrument
Kindergarten

MDi
Middle Years
Development
Instrument
Grade 4

Population level administrative data: medical status,
diagnostic status, socio-economic status

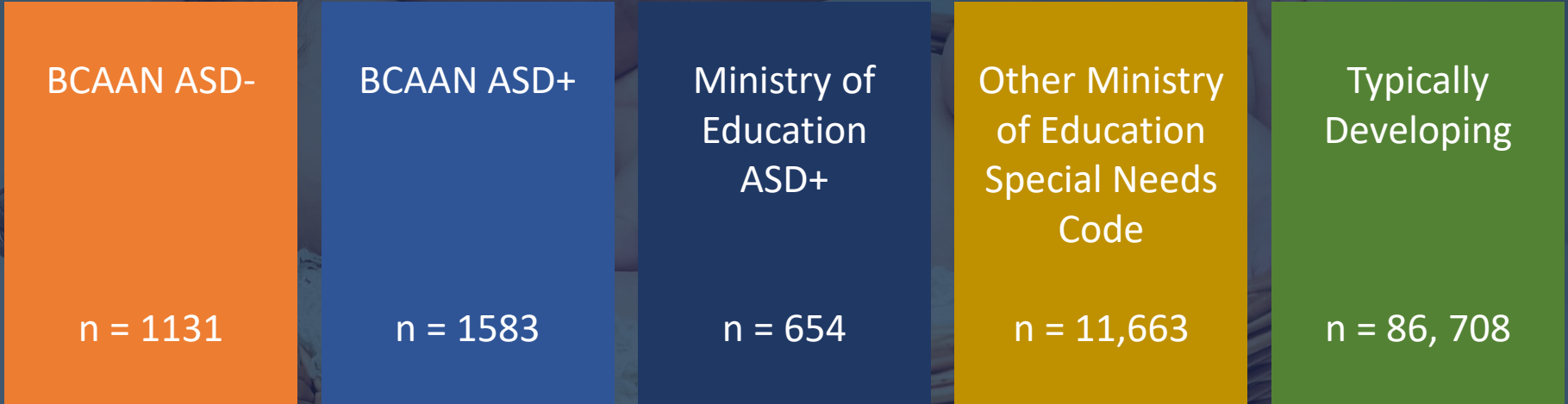


Study Sample

Retrospective cohort

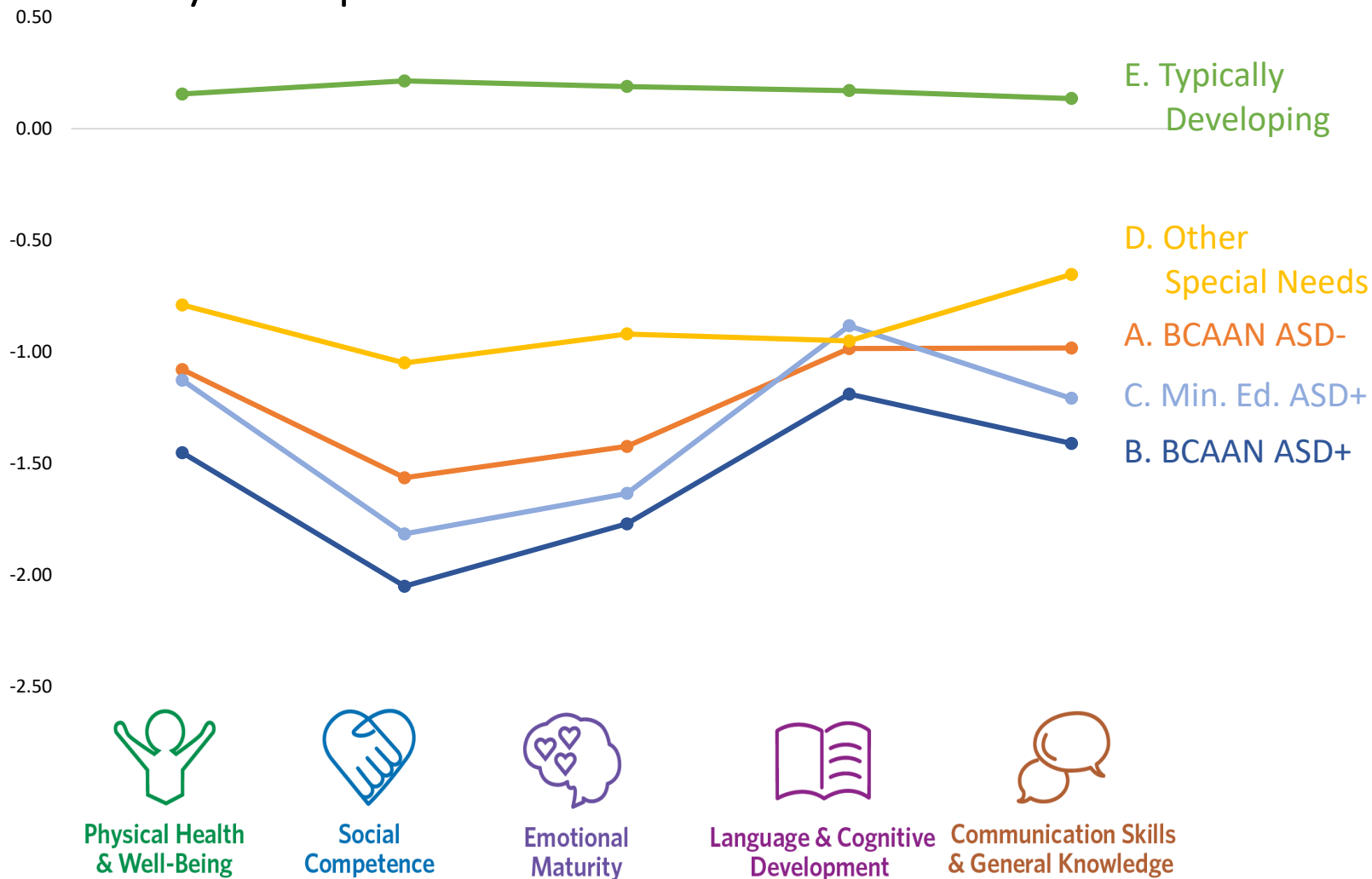
Children born in British Columbia from 2000 to 2008
with follow-up data until December 31, 2016

101,739 children

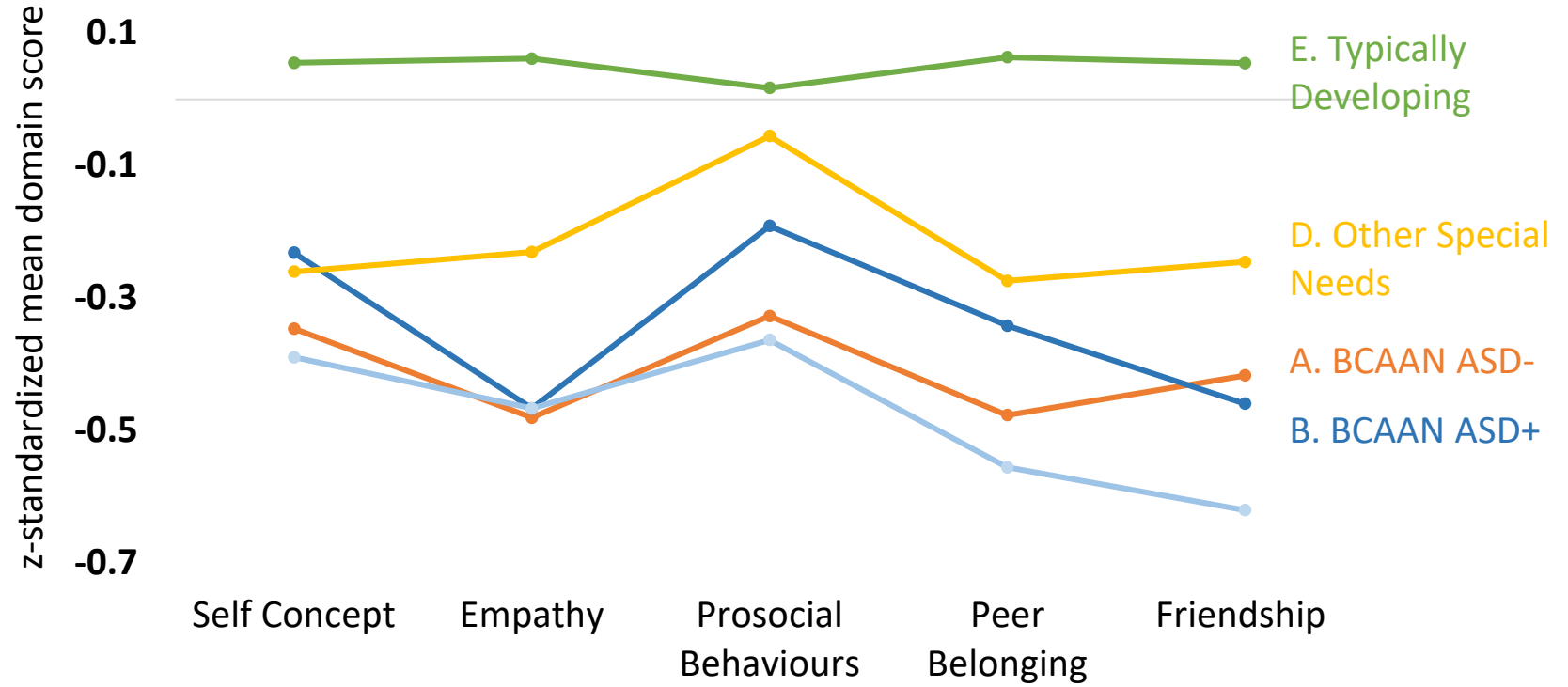


Study Sample
101,739 children

Early Development Instrument Z-Standardized Mean Scores

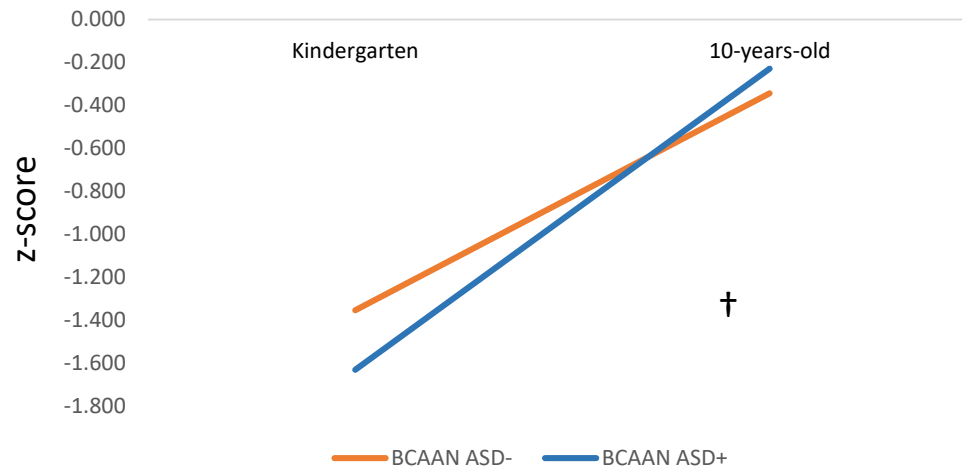


Middle Years Development Instrument Z-standardized Subscale Scores

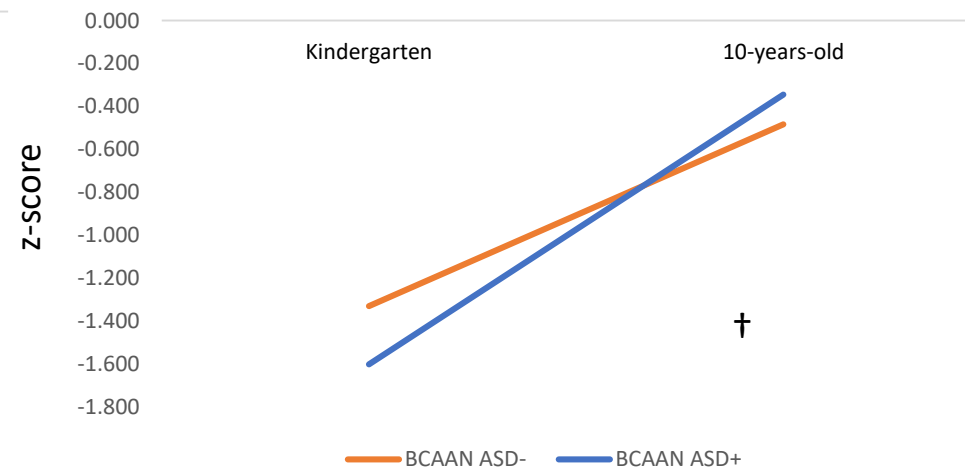


EDI Overall Social Competence and MDI Self Concept, Peer Belonging, and Friendship

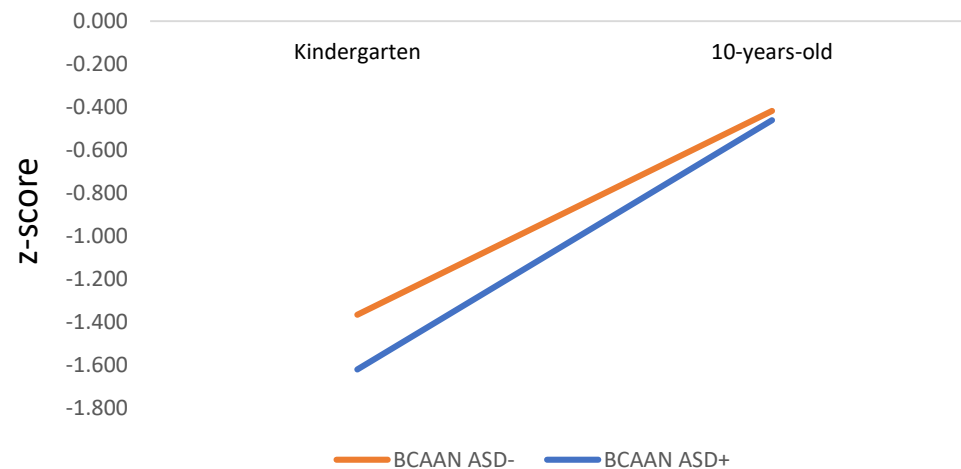
Overall Social Competence and Self Concept



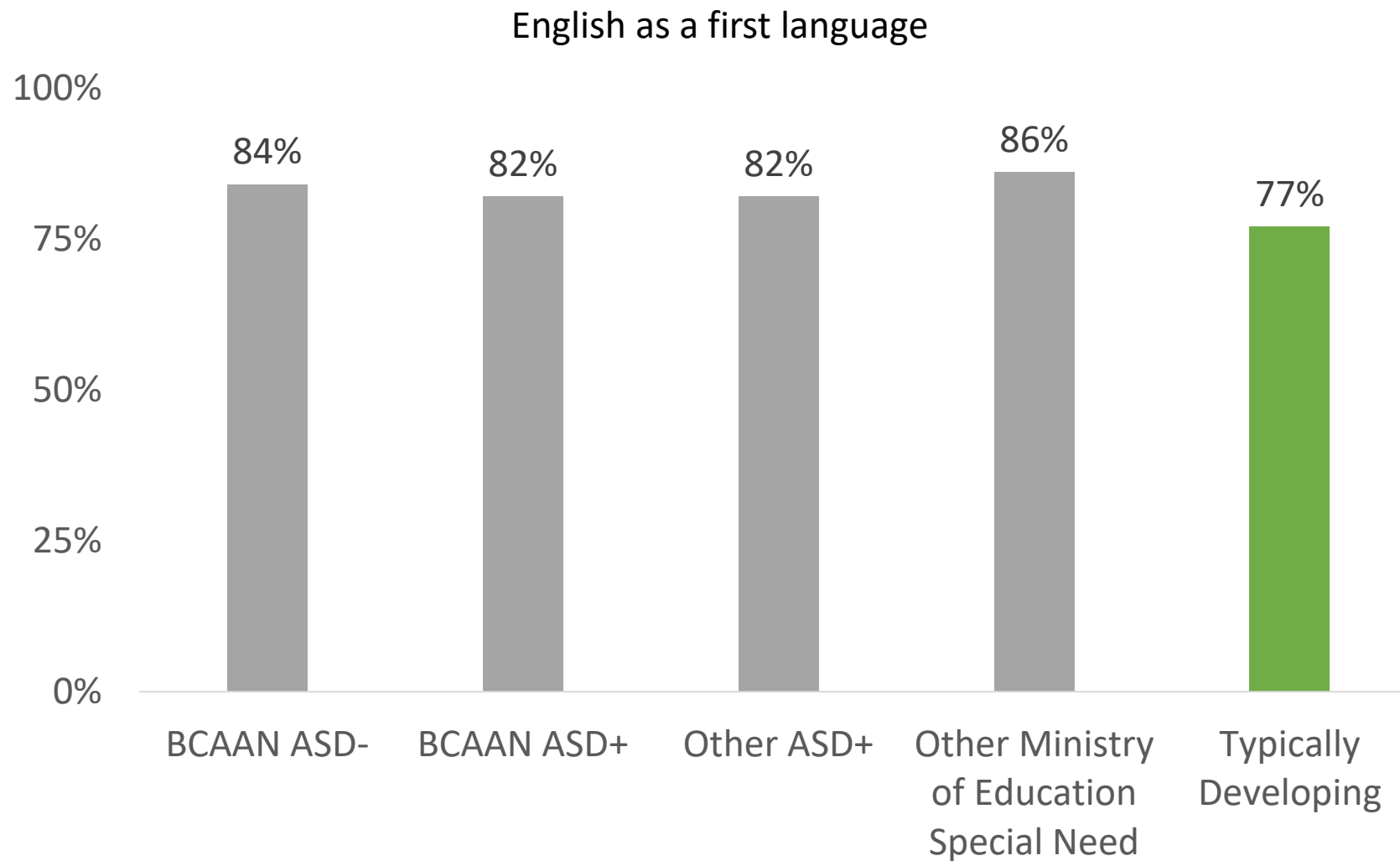
Overall Social Competence and Peer Belonging



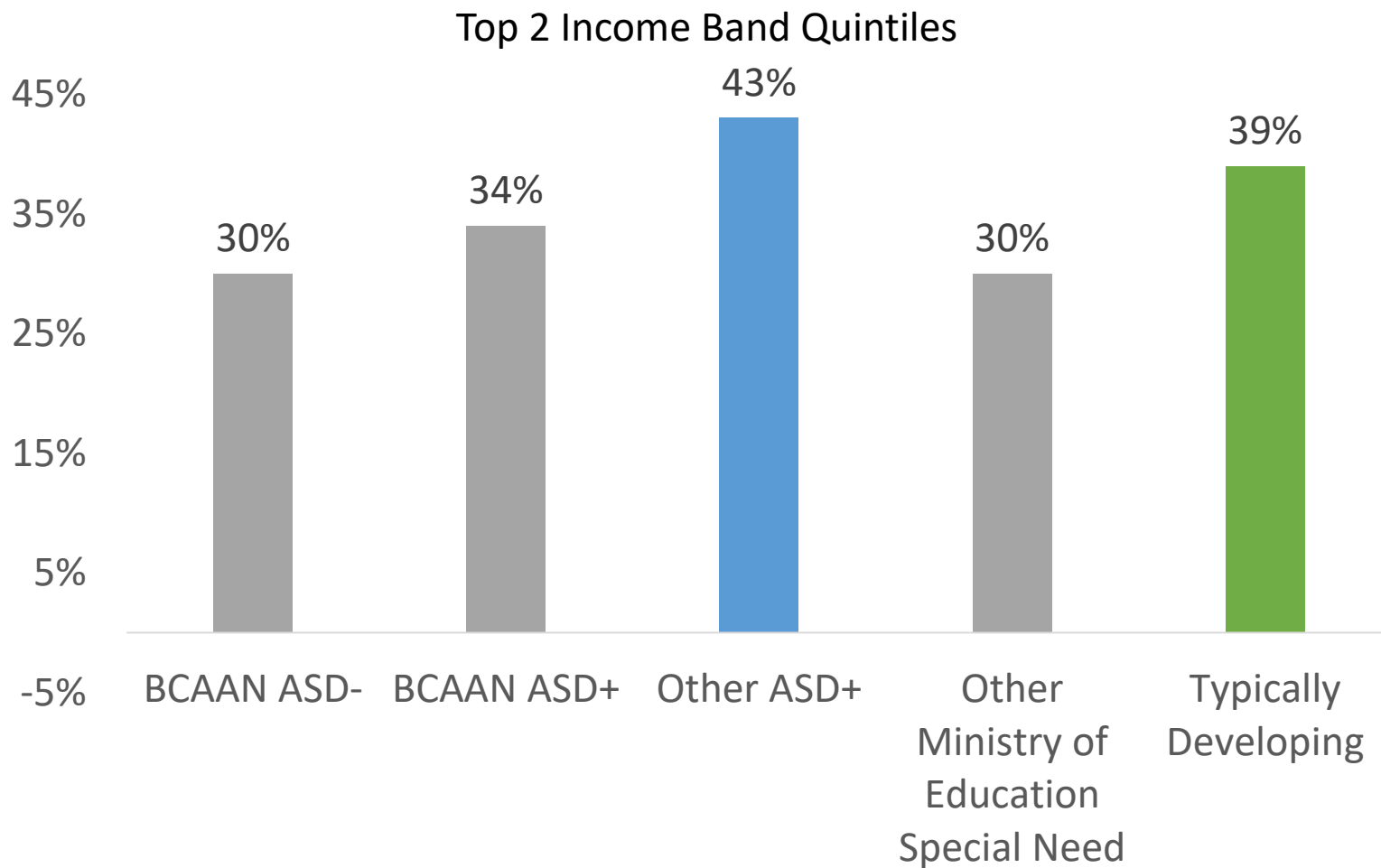
Overall Social Competence and Friendship



Language

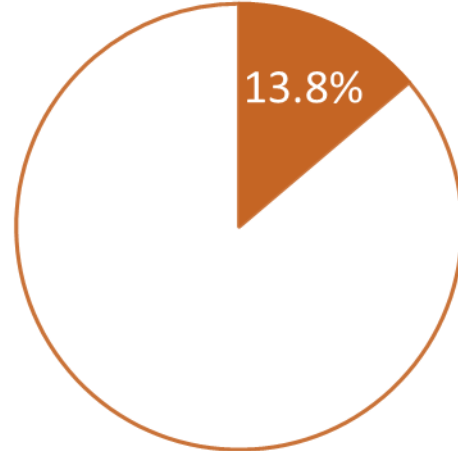


Household Income

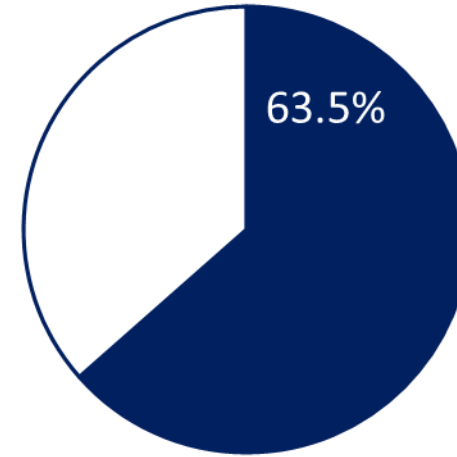


Educational Funding at Kindergarten

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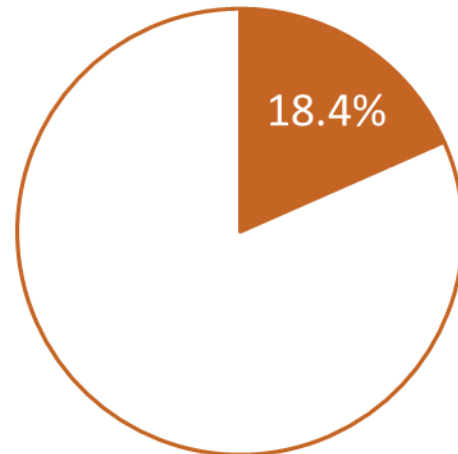


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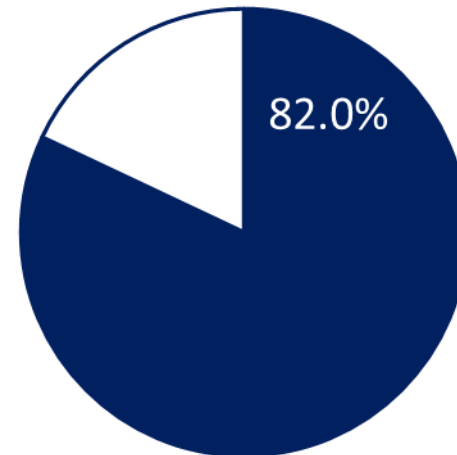


Educational Funding at Grade 4

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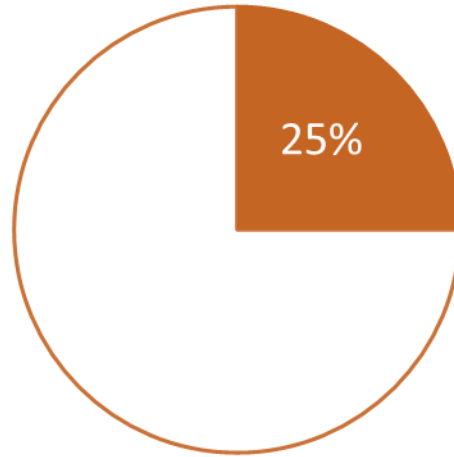


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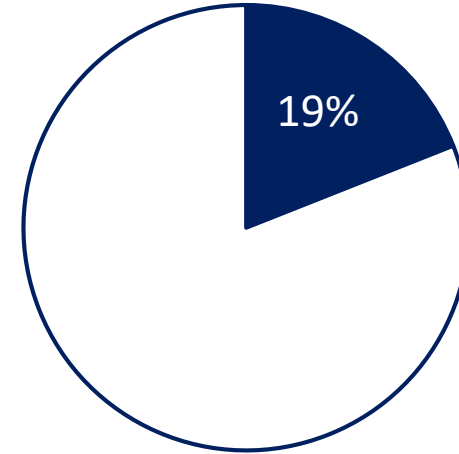


Antidepressant Prescription

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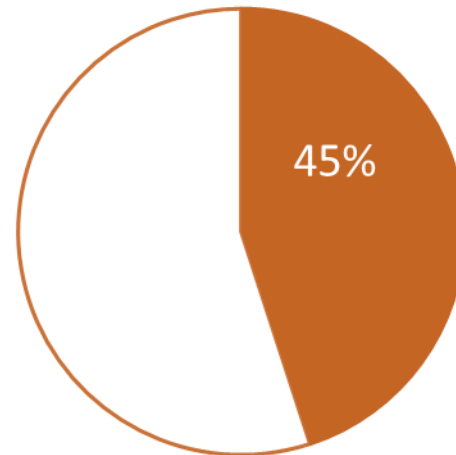


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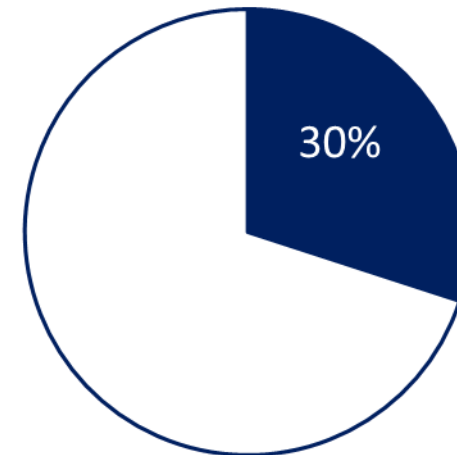


Stimulant Prescription

ASD-



ASD+



Conclusions

Social

- Diagnostic labels
- Socio-economic factors
- Access to assessment and diagnosis

Interventions

- Subgroup of children with ADHD symptoms
- Potential ongoing challenging behaviours and difficulties without adequate supports
- Increased prescription of psychotropic medications

Education

- Less educational funding or recognition of impairments
- Less progress in social skills from kindergarten to grade 4

Implications and Future Directions

1

Data:
Development of
children with unmet
or unidentified needs



2

Equity and Access:
Barriers and
facilitators to access
to assessments and
supports

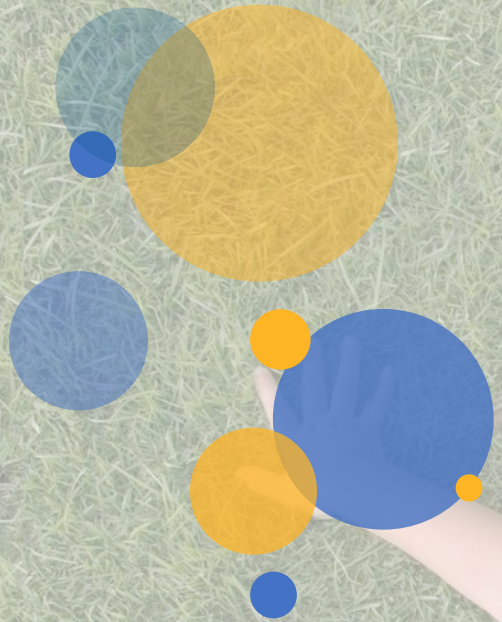


3

Right supports for
the right child at the
right time:
Needs and function-
based community
and educational
supports



Early Years Conference 2024



● EDI Research Highlights

Q&A Panel Discussion:

Dr. Magdalena Janus

Randip Gill

Dr. Monique Gagné Pettini

Dr. Angie Ip

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