

Kindergarten Prevalence of Children with Special Educational Needs in Ontario and their Developmental Health at School Entry



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EARLY DEVELOPMENT INSTRUMENT

BACKGROUND

- One in every nine school-age children in Ontario has special educational needs (SEN) as a result of developmental disorders¹
- However, the distribution of SEN is unequal among schools
- There is strong evidence establishing the association between prevalence of childhood disability and neighbourhood socioeconomic status (SES)²
- Multiple studies have also cited neighbourhood SES as a prominent factor in determining childhood developmental and learning outcomes³
- Currently, it is unknown whether unequal distribution of SEN kindergarten prevalence among schools is associated with a child's developmental outcomes

PURPOSE

- This study aims to explore school-level prevalence of SEN in kindergarten and examine its association with child development outcomes and neighbourhood SES

METHODS

- **Study Design:** Retrospective Cohort Study
- **Sampling:** Data obtained from Cycle III of the **Early Development Instrument (EDI)**⁴, a teacher completed assessment of children's development in five domains and Grade 3 EQAO test scores will be used
- **Outcome Measures:** Mean and % Vulnerability across five developmental domains: physical, social, emotional, language & cognition, communication & general knowledge
- **Analyses:**
 - EDI Data and school postal codes will be linked
 - Determine whether neighbourhood SES acts as a moderator between SEN prevalence and developmental outcomes via regression methods
- **Preliminary Data**

Baseline Descriptives		
Mean Age	SEN	5.71 ± 0.35
	non SEN	5.68 ± 0.41
SEN Prevalence		3.7%
Prevalence range		0.6-85.7%
No. of schools		3587
No. of school boards		75
Range of schools within school boards		4-399

RESULTS

Figure 1. Mean Domain Scores

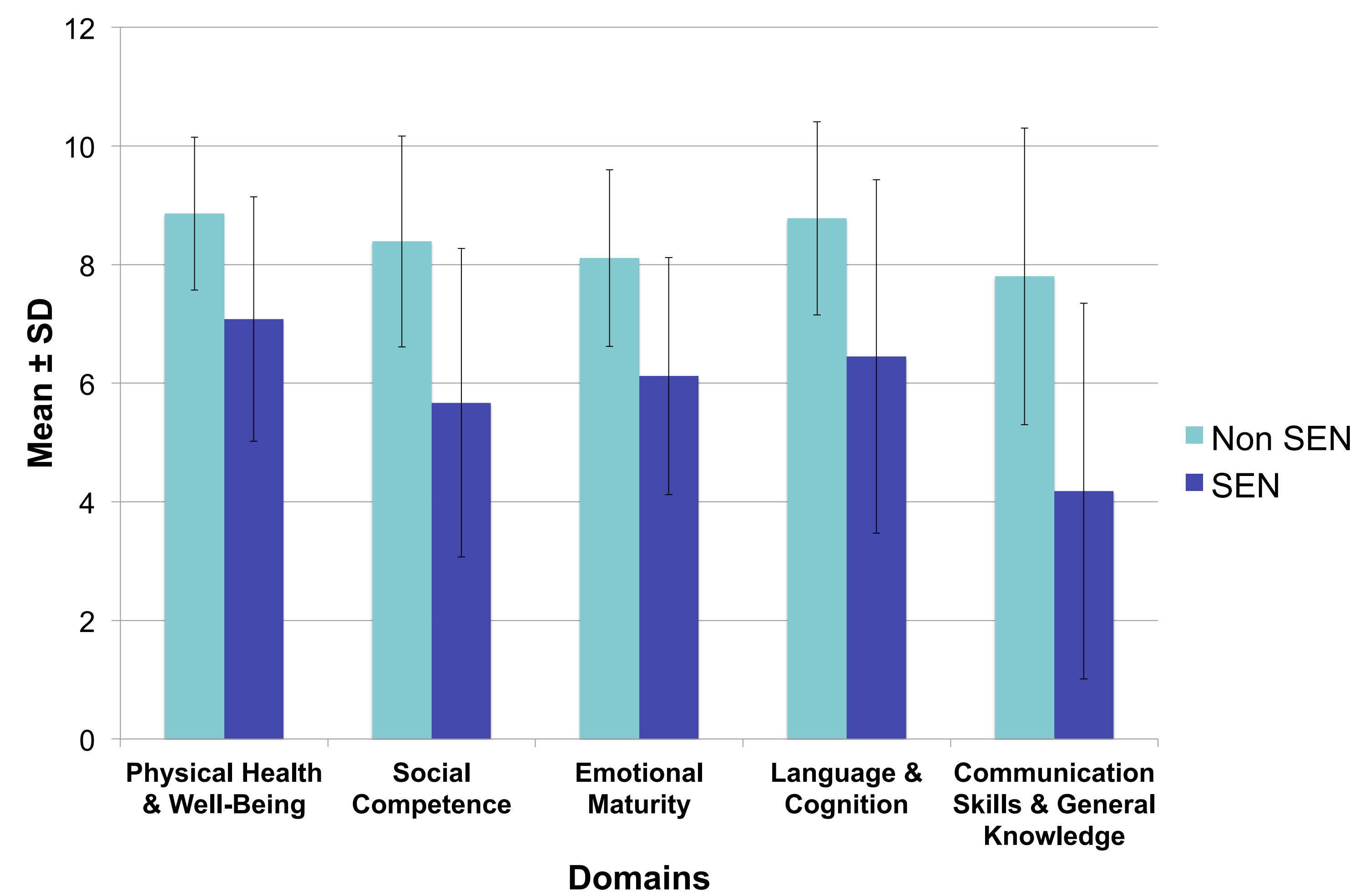
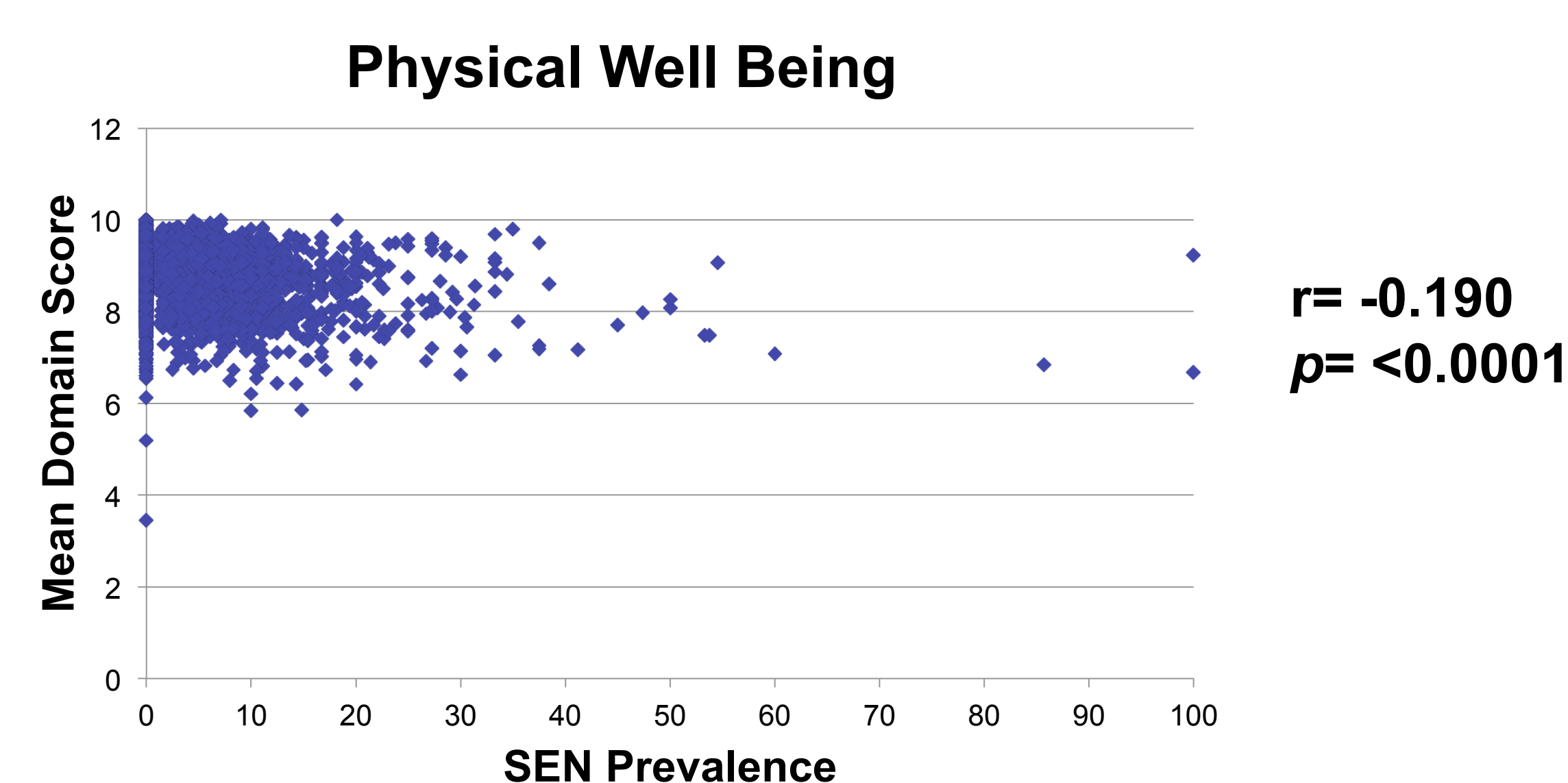


Table 1. Baseline Characteristics

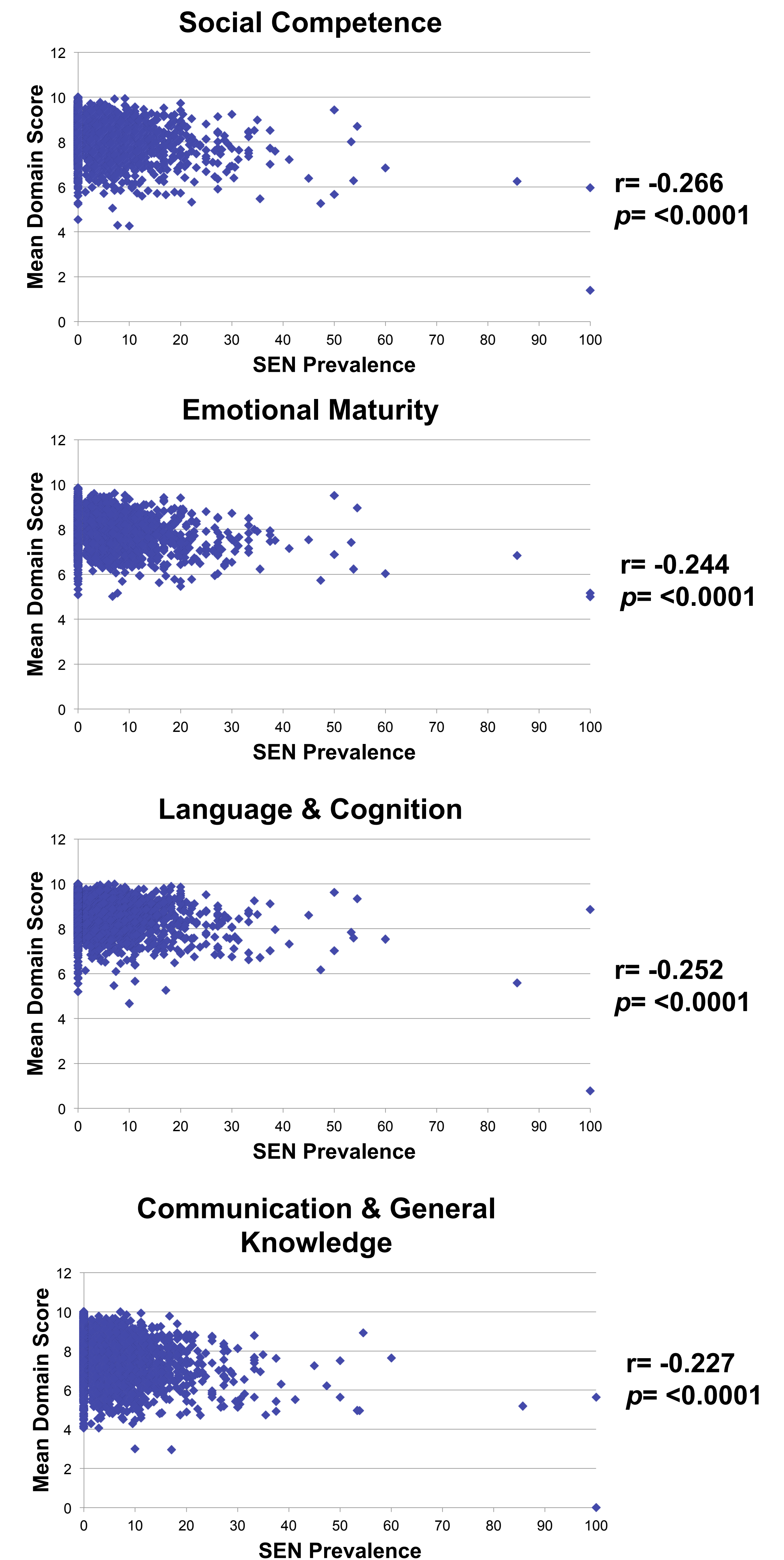
Values are n(%)

	Non SEN (n=119 494)	SEN (n=4821)
Females	59155 (50)	1436 (30)
E/FSL	13937 (12)	668 (14)
Vulnerability (Lowest 10th percentile)		
Physical Health and Well-Being	16996(14)	2556 (53)
Social Competence	10822 (9)	2342 (49)
Emotional Maturity	12054 (10)	2376 (50)
Language and Cognition	9097 (8)	1822 (38)
Communication Skills & General Knowledge	13749 (12)	2851 (59)
Low on at least 1 domain	32937 (28)	3877 (80)
Low on 2 or more domains	15953 (13)	3106 (64)

Figure 2. Mean Domain Scores Across SEN Prevalence



RESULTS



DISCUSSION/SUMMARY

- Higher SEN Prevalence associated with lower scores across all five domains (weakly correlated)
- Large variation in SEN Prevalence — relationship between SEN distribution and children's concurrent/long-term outcomes using school neighbourhood SES as a moderator remains to be explored
- Results from this study will provide population-level data to help inform policy surrounding SEN resource allocation