

The Association Between School Readiness and Early Academic Outcomes of ESL Children



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Introduction

- School readiness reflects the developmental health in early childhood¹ and is predictive of future academic outcomes
- Children for whom English is a second language (ESL) start school with poor language skills, but later tend to achieve academic skills that are comparable to non-ESL children's
- Mixed results in academic outcomes of ESL children can be accounted for by the variations in English proficiency among ESL children^{2,3}
- The goal of the current study was to investigate the association between English proficiency, school readiness, and Grade 3 reading, writing, and mathematics achievements.

Methods

- Sample: 31,627 children from the 2004/5 and 2006/7 Senior Kindergarten cohorts in Ontario schools

Measures

- Early Development Instrument (EDI)**⁴ is a teacher-completed checklist that assesses school readiness at school-entry in five domains:
 - Physical Health & Well-being
 - Social Competence
 - Emotional Maturity
 - Language & Cognitive Development, and
 - Communication Skills & General Knowledge
- Vulnerable on the EDI: children who scored below 10th percentile on any of the domains
- Grade 3 Achievement test measure literacy and math skills expected by the *Ontario Curriculum*
 - Level 3 or 4: children who met or exceeded the provincial standards

Groups

- ESL Status Group: matched in SK and Grade 3 ESL status (**non-ESL**, **ESL/non-ESL**, **ESL/ESL**)
- Academic Trajectory Group: matched EDI vulnerability and Grade 3 outcomes

Table 1. Trajectory groups

	Vulnerable in SK?	Below Gr 3 expectations?
<i>Continuing on track</i>	No	No
<i>Resilient</i>	Yes	No
<i>Continuing vulnerable</i>	Yes	Yes
<i>Newly vulnerable</i>	No	Yes

Analysis

- To compare the proportions of children from each ESL status group in each of the four trajectory categories, Pearson chi-squares were performed.
- For the post-hoc comparisons, the Bonferroni-adjusted significance level was calculated to be 0.004.
- Separate age-gender comparisons were done.

Table 2. Frequencies of children and demographic data

N = 31,627	Non-ESL	ESL/non-ESL	ESL/ESL
	N (%)	N (%)	N (%)
Total	30,392 (96.1)	562 (1.8)	673 (2.1)
Reading (n = 31,480)	30,661 (96.1)	507 (1.7)	667 (2.1)
Writing (n = 31,573)	30,340 (96.1)	562 (1.8)	671 (2.1)
Mathematic (n = 31,551)	30,319 (96.1)	562 (1.8)	670 (2.1)
Boys (% within ESL status group)	15,377 (50.6)	297 (52.8)	372 (55.3)
	Mean (SD)	Mean (SD)	Mean (SD)
Age at completion of EDI	5.72 (0.30)	5.70 (0.30)	5.65 (0.29)
< 5.72 (% within ESL status group)	15,037 (49.5)	299 (53.2)	401 (59.6)

References

- ¹ Guhn, M., Janus, M., & Hertzman, C. (2007). The Early Development Instrument: Translating school readiness assessment into community actions and policy planning. *Early Education and Development, 18*(3), 369–374.
- ² Garnett, B. (2010). Toward understanding the academic trajectories of ESL youth. *The Canadian Modern Language Review/La Revue canadienne des langues vivantes, 66*(5), 677–710.
- ³ Janus, M., & Offord, D. R. (2007). Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness. *Canadian Journal of Behavioural Science, 39*(1), 1–22.

Results

Figure 1. Average percentages of children from each ESL status group in each trajectory category for reading

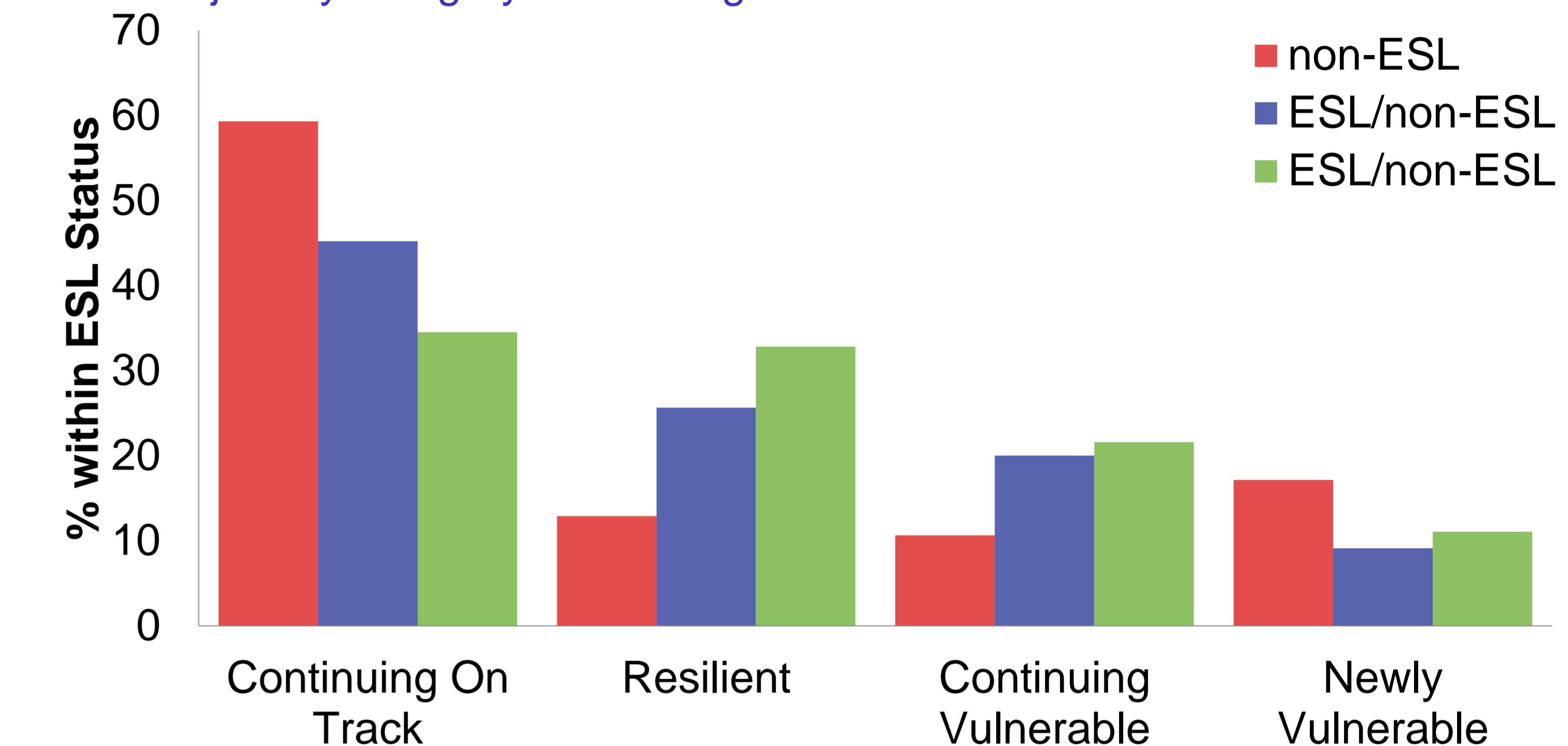
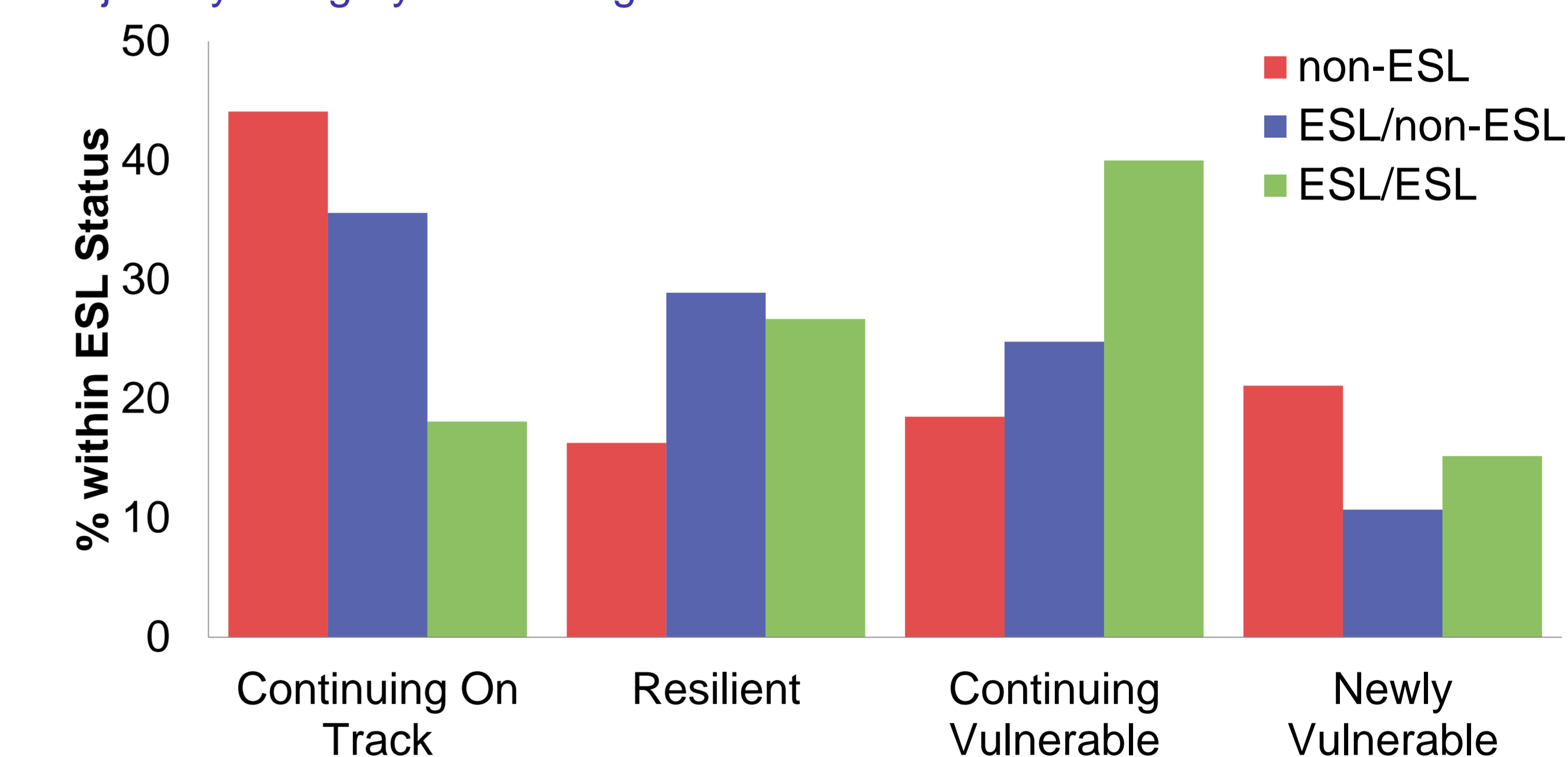


Figure 2. Percentages of younger boys from each ESL status group in each trajectory category for reading



Conclusions

- Boys born later in the year may be the most susceptible to the impediment low English proficiency may have on academic outcomes.
- The development of reading skills depends more on English proficiency than writing and math skills.
- Future research can look at the results in the context of SES and language, as well as cultural diversity.

