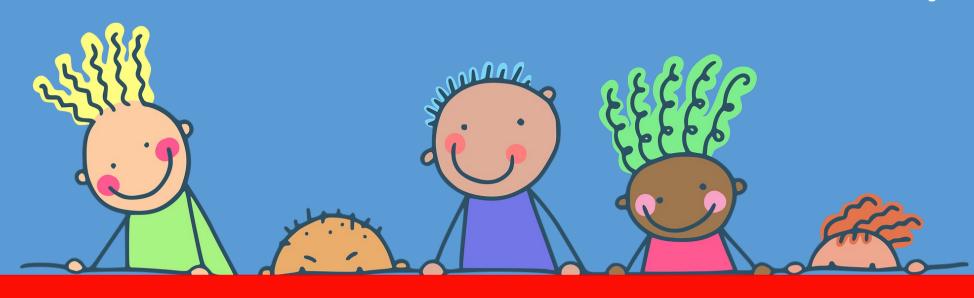
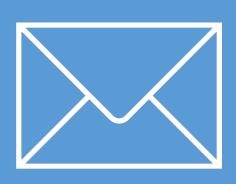
Early Childhood Education and Care in Luxembourg Is attendance influenced by immigration background and socioeconomic status?

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1. Background

Educational inequalities are a well-known challenge in the Luxembourgish school system. Early childhood education and care (ECEC) might help close the gap between different student groups, as it has been found to have positive effects on children's cognitive and language development, especially for the disadvantaged (Bennet, 2021). However, according to the Matthew effect, those who would benefit most from a social service are less likely to access it than the less needy (Bonoli et al., 2017). Aptly, disadvantaged children have been found to access ECEC services less than other children (Vandenbroeck & Lazzari, 2014).

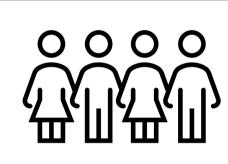
For Luxembourg, this relationship of ECEC attendance and family background has not yet been investigated comprehensively.

2. Research Questions

In the Luxembourgish context of high immigration and educational inequalities,...

- 1. Are children with a low **socioeconomic status** (SES) less likely to attend ECEC services?
- 2. Are children with an **immigration background** less likely to attend ECEC services?
- 3. Do advantaged and disadvantaged children differ in the **intensity** of their attendance of ECEC services?

3. Methods



Sample:

n = 4.969 first-graders in
Luxembourgish schools,
only highest and lowest SES
quartile, pooled data collected
in the ÉpStan (school
monitoring programme) from
2018 to 2021, 47.7 % without
immigration background

Measure:

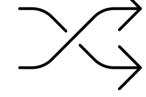
Parent questionnaires
with retrospective
self-report questions:

– on ECEC attendance
(crèche for 0 – 4 year olds

(crèche for 0 – 4 year olds, précoce for 3 – 4 year olds)

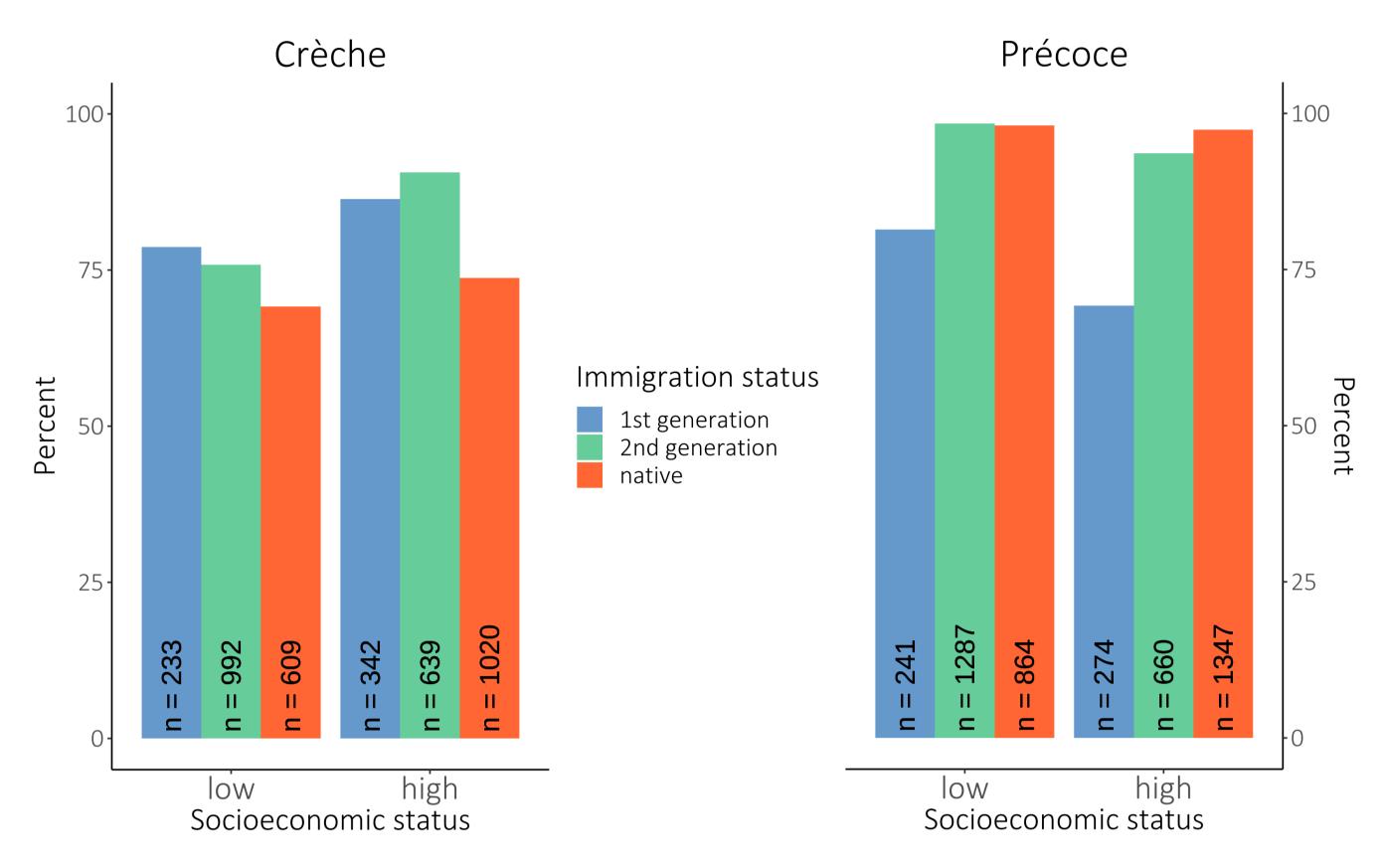
on family background(HISEI, country of birth)

Analysis:

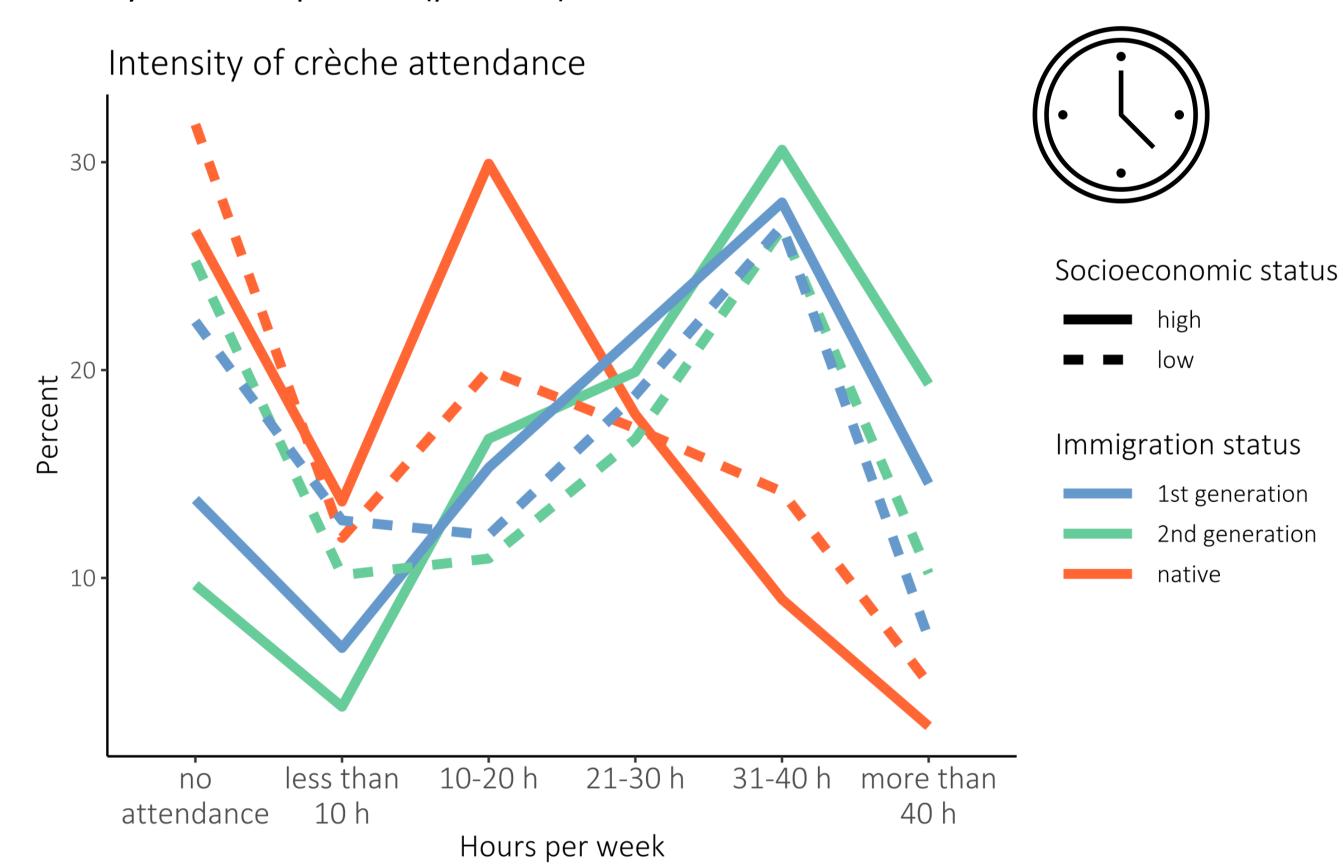


RQ 1 & 2 Logistic Regressions (separately on *crèche* and *précoce* attendance) with SES groups, immigration and interaction term **RQ 3** ANOVA with hours per week in *crèche* as dependent var., including SES, immigration and interaction term as independent var.

4. Results



- 1. Holding all other factors constant:
- children with a low SES are 21 % less likely to attend *crèche* than children with a high SES (p = 0.02)
- no significant SES difference in précoce attendance (p = .30)
- 2. Holding all other factors constant:
- 1st gen. immigrant children are 2x more likely to attend *crèche* and 94 % times less likely to attend *précoce* (p < 0.01) than native children
- 2^{nd} gen. immigrant children are 3x more likely to attend *crèche* (p < .01), and 61 % less likely to attend *précoce* (p < 0.01) than native children



- 3. Holding all other factors constant:
- children with a high SES are more likely to attend creche for more hours (p < .01) than children with a low SES
- native children attend *crèche* for fewer hours than children with immigration background (p < .01)
- SES seems to have a larger impact on attendance intensity for native children than for children with immigration background (p < .01)
- précoce has fixed hours and is therefore not analysed

5. Conclusions

- > Socioeconomic status and immigration background are tied to ECEC attendance and intensity in a complex interplay.
- ➤ Benefits of ECEC services in Luxembourg might in some cases not reach those who need them the most.

Further research

- Focus on the role of **home languages** and languages used in ECEC services
- Examine potential **beneficial effects of ECEC** with different characteristics (intensity, language) on academic achievement in Luxembourg





Bennett, J. (2012). ECEC for children from disadvantaged backgrounds: Findings from a European literature review and two case ECEC studies. European Commission. Bonoli, G., Cantillon, B., & Van Lancker, W. (2017). Social Investment and the Matthew effect. The uses of social investment, 66-76.

Vandenbroeck, M., & Lazzari, A. (2014). Accessibility of early childhood education and care: A state of affairs. European Early Childhood Education Research Journal, 22(3), 327–335. https://doi.org/10.1080/1350293X.2014.912895