# Can language skills in Luxembourgish be a stepping stone to German? Evidence against the transfer assumption

Lena Maria Kaufmann<sup>1</sup>, Constanze Weth<sup>2</sup>, Antoine Fischbach<sup>1</sup>, & Caroline Hornung<sup>1</sup>









# 1. Background

Literacy acquisition depends strongly on language skills such as phonological awareness, comprehension of phoneme and grapheme mappings, and understanding the instruction language. In the Luxembourgish school system, children usually learn to read and write in German, a language which most of them do not speak at home or learn in early childhood education settings.

Due to the clear similarities between the languages Luxembourgish and German (Landert, 2007, in Weth 2018), many policymakers and teachers had assumed that the promotion of Luxembourgish as a "stepping stone" or "Vehikularsprache" would be enough to prepare the children for the German language; that Luxembourgish language skills could be transferred into German language skills (Kühn, 2008; MENJE, 2016; Sattler, 2022).

# 2. Research Questions

In consideration of the increasing heterogeneity of the Luxembourgish student population, we test this assumption for different student populations:

➤ Do we find evidence that Luxembourgish is a stepping stone to German at the beginning of Cycle 2 for all children?

In case this assumption is correct, the pattern of performances in both language tests is expected to be similar for all four home language groups, even if the level of performance is different.

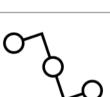
## 3. Methods

## Sample:



n = 5.920 first-graders (50.8 % male) in Luxembourgish schools without any missing data, data collected in the ÉpStan (school monitoring programme) in 2022, 43.4 % without immigration background, 42.7 % do not speak Luxembourgish and/or German (further indicated as Lux\*) with their parents

## Analysis:



ANOVA on the difference score between Luxembourgish and German listening comprehension with betweenfactor home language groups

# Measures:



Listening comprehension (of words, syntax, and texts) in

- Luxembourgish
- German (easier and therefore psychometrically not comparable to Lux.)
   More details in table below.

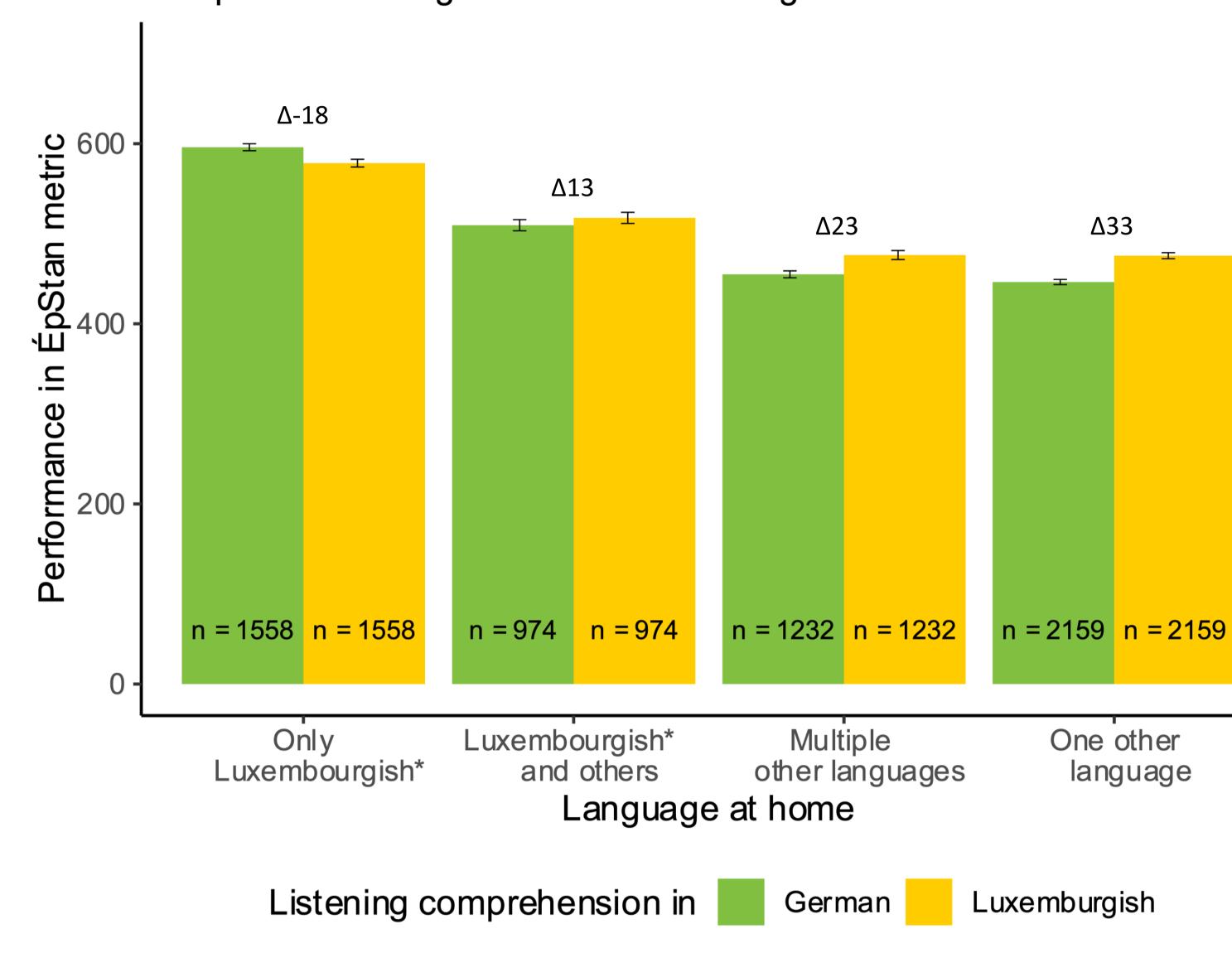
Home language groups categorize between children who speak with their parents:

- only Luxembourgish\*
- Luxembourgish\* and other languages
- Multiple languages, but not Luxembourgish\*
- One language, but not
   Luxembourgish\*

	Luxembourgish			German		
<b>.</b>	Item diff.	N	SD	Item diff.	N	SD
Level 1/Socle	-1.1437	16	.68711	-1.3436	12	.88149
Level 2/Avancé	.1176	15	.60674	1223	15	.39159
Total	5334	31	.90465	6651	27	.89094

# 4. Results

Comparison of listening comprehension performance Sample: 5923 first graders in Luxembourgish schools 2022



- We found a statistically significant difference in the difference score  $\Delta$  (Luxembourgish-German listening comprehension) by the four home language groups, (F(3)= 134.5, p < 0.001)
- A Tukey post-hoc test revealed that all home language groups significantly differed in their difference between Luxembourgish and German.
  - Only Luxembourgish\* speaking children: German listening comprehension performance higher than Luxembourgish listening comprehension
  - For all other language groups: German listening comprehension performance lower than Luxembourgish listening comprehension
  - The gap between these two performances is greatest for those children not speaking Luxembourgish\* at home.

# 5. Conclusions

### Summary

- Not all children can transfer their comprehension skills in Luxembourgish to German, the language of literacy acquisition.
- A high level of Luxembourgish language skills seems to be essential for higher listening comprehension in the instruction language German. This is more likely for children speaking Luxembourgish\* at home.

## Implications and further research

- As knowledge of the instruction language is crucial for processing all further school content and thus the basis for a fair school system, students should be prepared for the language of literacy acquisition in early childhood education and care.
- The amount of contact with German in media at home seems to be promising in preliminary analyses and will be investigated further. SES seems to matter less here (Hornung et al., 2023).





Hornung, C., Kaufmann, L. M., Ottenbacher, M., Weth, C., Wollschläger, R., Ugen, S., & Fischbach, A. (2023). Early childhood education and care in Luxembourg. Attendance and associations with early learning performance. Luxembourg Center of Educational Testing (LUCET). https://doi.org/10.48746/EPSTANALPHA2023PR

Kühn, Peter (2008). Bildungsstandards Sprachen: Leitfaden für den kompetenzorientierten Sprachenunterricht an Luxemburger Schulen. Luxemburg: MENFP.
MENJE. (2016). Sprache und Sprachen in der frühen Kindheit. Konzept früher sprachlicher Bildung im luxemburgischen Kontext. Sattler, S. (2022). Curriculum und Mehrsprachigkeit: Planung und Gestaltung sprachlicher Identität in Luxemburg. In Curriculum

und Mehrsprachigkeit. transcript Verlag. https://doi.org/10.1515/9783839460016
Weth, C. (2018). Schrifterwerb in Luxemburg. In T. Lenz & I. Baumann (Eds.), Nationaler Bildungsbericht Luxemburg 2018 (pp. 142–151). University of Luxembourg/SCRIPT.