

Accent Perception in Bilingual Children Acquiring Italian

Paulina Hafner, Svenja Krieger and Tanja Kupisch

Heritage Language Week 2026 - Teaching and Learning Heritage Languages:
Multilingualism, Identity, and Innovative Methods

Frankfurt, 18.02.2026

Motivation

Production studies

- Accent in bilingual children's production rated by (adult) homeland raters
- Most (BUT not all) child heritage speakers (HSs) are accented in their minority language (e.g. Kupisch et al., 2021; Kupisch et al., 2024; Wrembel et al., 2019)

But what about accent perception in child HSs?!

What do we know about accent perception in monolingual children?

perception perspective



Capacity to deal with accent variation is present early in life

- children as young as 5 years of age are able to distinguish their own accent from a perceptually distinct foreign accent (e.g., Floccia et al., 2009; Girard et al., 2008)

However, learning to cope with unfamiliar accents continues through adolescence

- throughout the school years, children's processing of other-accented speech still improves (Bent, 2018)
- they exhibit a growing recognition of their own language variety, but telling apart less distinct accents is more challenging (Jones et al., 2017; McCullough et al., 2019)

How about bilingual children?

perception perspective



Accent classification in the majority language of child HSs

= children's ability to distinguish between and/or categorize accents

- **bilinguals differed from monolinguals** in the categorization of unfamiliar accents, but not familiar ones

e.g., Evans & Tomé Lourido (2019) for bilingual children in the U.K.

Accent comprehension in the majority language of child HSs

= children's ability to comprehend accented speech

- **no difference** between monolinguals and bilinguals (Evans & Tomé Lourido, 2019)
- **children** appear to develop to **be specialized** for the **accents** they hear most within their **immediate community** (McCarthy & Evans, 2019)

Stereotyping (Friendship Choice Tasks)

- **children prefer** people who speak their **native language** and in a **native accent** (De Jesus et al., 2017; Kinzler et al., 2009)
- **accent trumps race** (Kinzler et al., 2009)

RQ1: Do child HSs differ from monolingual children in their perception of monolingual and bilingual accents in their HL?

H1: YES

- bilingual and monolingual children categorize familiar accents similarly (Evans & Tomé Lourido, 2019)
- BUT: bilingual children perform better than monolinguals in categorizing unfamiliar accents (Evans & Tomé Lourido, 2019)

H2: NO

- **quality and quantity of input differs**
 - quantitatively less
 - qualitatively different
- (some) parents and siblings might speak with an accent (for parents De Leeuw et al 2010, Hopp & Schmid, 2013; for siblings Kupisch et al., 2021, Kupisch et al., 2024)
- bilinguals grow up outside of homeland and are exposed to L2 speech
- by contrast, monolinguals get exposure to foreign accented speech very rarely, although they might hear regional dialects

RQ2: What individual-level factors determine accent perception in the HL?

AoT (Age at time of testing)

- bilingual and monolingual raters become increasingly better at perceiving the phonemes of their target language(s) (e.g., Goriot et al., 2020; Ramon-Casas et al., 2021)

bilingual raters

AoO in the ML (Age of onset in the majority language)

- in production, an earlier AoO in the majority language has been shown to increase the likelihood of a perceivable accent in the HL (e.g., Kupisch et al., 2021; Kupisch et al., 2024; Wrembel et al., 2019)

HL use (Heritage language use)

- in production, child HSs who use their HL more are less likely to be perceived as accented (e.g., Kupisch et al., 2021; Kupisch et al., 2024; Wrembel et al., 2019)

Time spent in heritage country

- in production, child HSs who have spent more time in the heritage country are less likely to be perceived as (foreign) accented (e.g., Kupisch et al., 2014; Laméris et al., 2024)

Methods

Global Accent Rating

- Online meeting via Zoom (Yuan 2024)
- 40 speech samples
(elicitation, storytelling task)
(length: ~10 seconds)

Speakers' profile

N speakers
(gender: m, f, other)

Mean age

bilingual children

20 (12, 8, 0)

7.5
(range: 6-9)

monolingual children

20 (10, 10, 0)

7.5
(range: 6-9)



Parla come un bambino italiano o una bambina italiana?

sì

no

Figure 1: Presentation design
[Does this child talk like an Italian boy or an Italian girl?]
[yes – no]



Parla come un bambino italiano o una bambina italiana?

sì

no

Figure 2: Presentation design
[Does this child talk like an Italian boy or an Italian girl?]
[yes – no]

Methods

Raters' profile

bilingual child raters

monolingual child raters

N raters
(gender: m, f, other)

30 (14, 16, 0)

27 (15, 12, 0)

Mean age

9.07
(range: 5-12)

8.34
(range: 5-12)

AoO of majority language

0.9
(range: 0-4)

-

HL use

2.32
(range: 1.33-3.33)

-

Time spent in heritage country per year

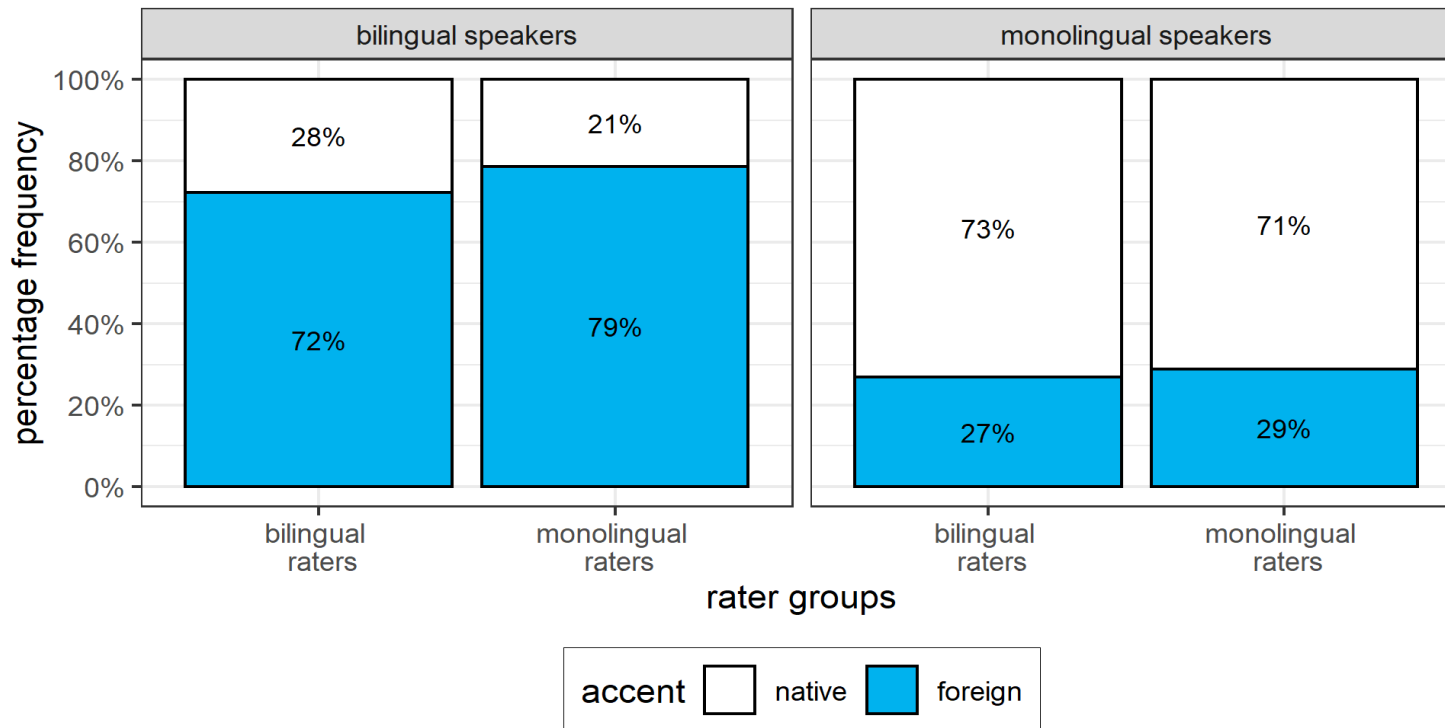
3 months or more: 2
1-2 months: 8
1-3 weeks: 5
less than a week: 15

-

Results

Statistical analysis: Generalized linear mixed-effect regression models (GLMMs) in R

Figure 1. Frequency of perceived accent across speaker and rater groups.



Regardless of the rater group:

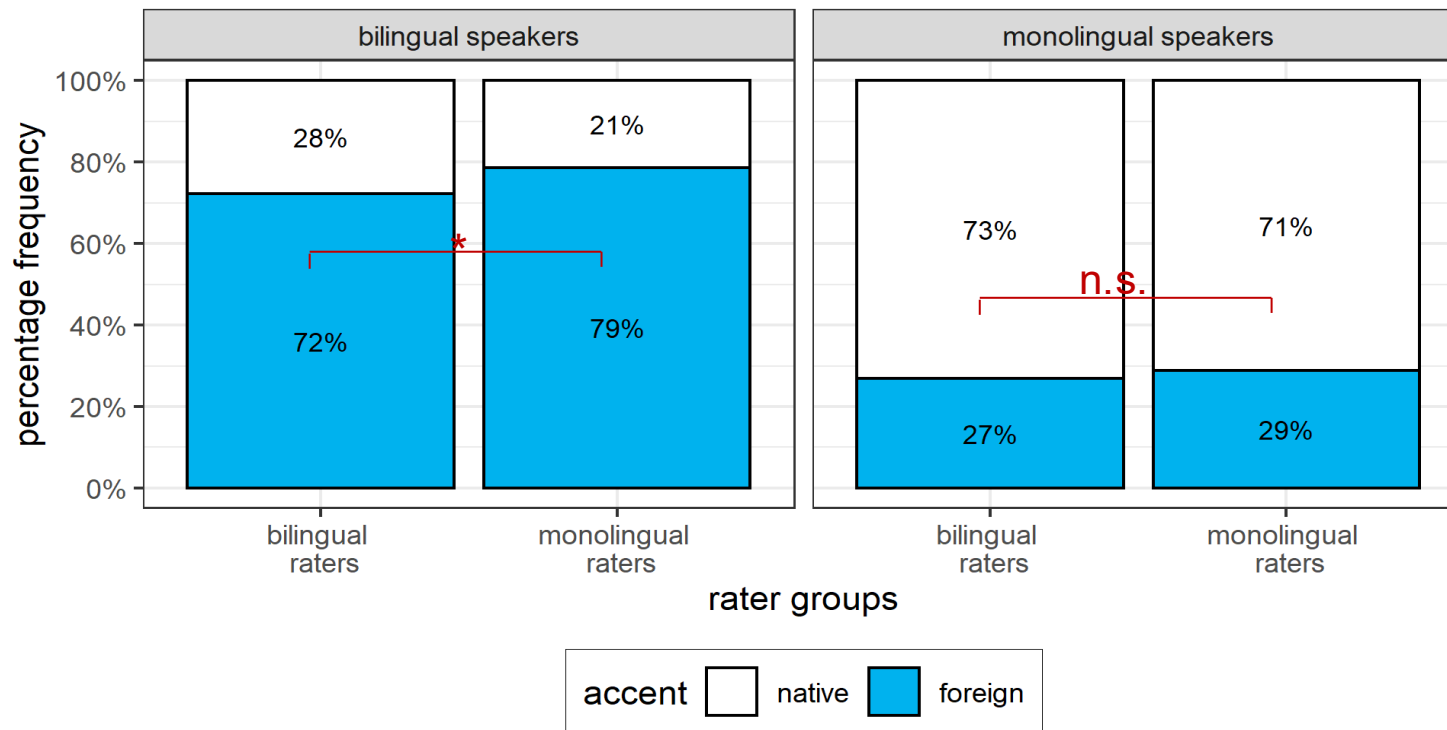
- Bilingual: mostly rated as foreign
 - Monolingual: mostly rated as native
- reliable **differentiation between speaker groups**

Results

perception perspective

Statistical analysis: Generalized linear mixed-effect regression models (GLMMs) in R

Figure 1. Frequency of perceived accent across speaker and rater groups.



- **Bilingual raters** perceive **bilingual speech more native-sounding** than monolingual rater
($\beta = 0.76$, $SE = 0.32$, $z = 2.38$, $p < .05$)

- Bilingual and monolingual raters perceive **monolingual speech similarly**
($\beta = 0.76$, $SE = 0.32$, $z = 2.38$, $p < .05$)

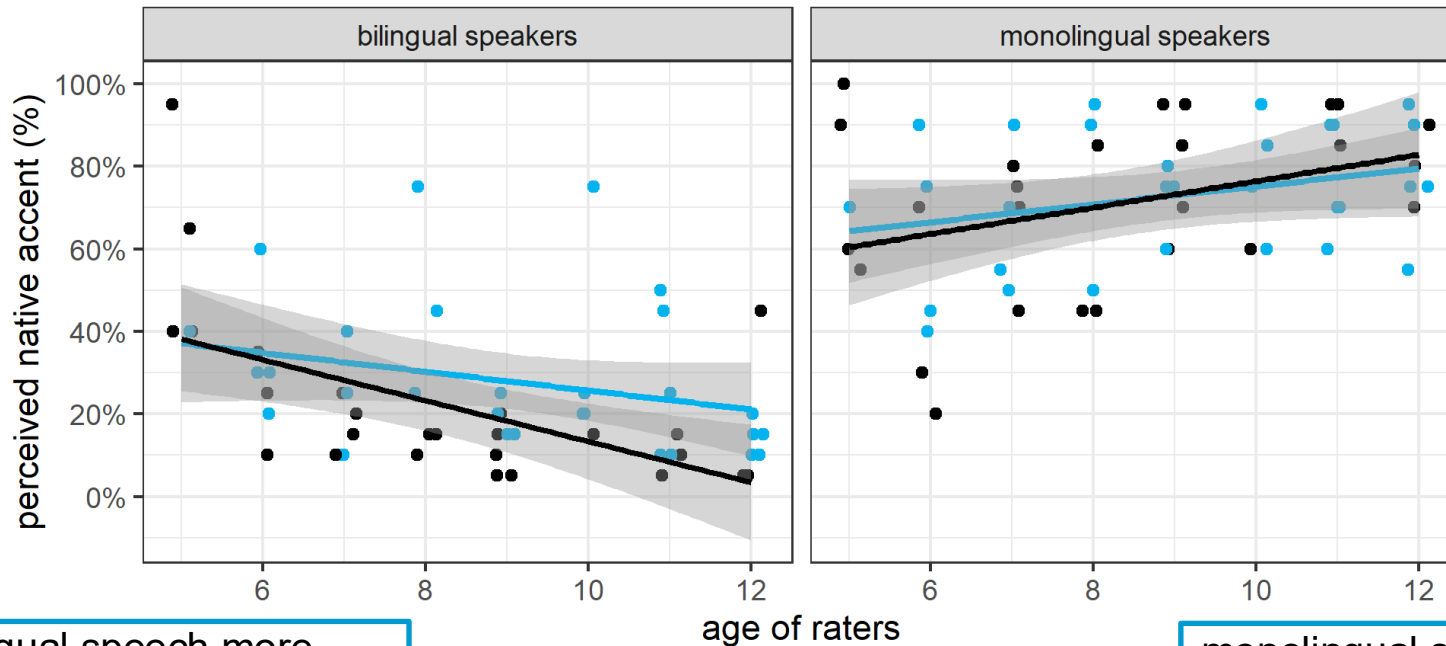
Results

perception perspective



Age at time of testing effect

Figure 2. Perceived native accent across rater and speaker groups taking into account the age of raters.



bilingual speech more often rated as foreign with increasing rater age

($\beta = 0.27$, $SE = 0.07$, $z = 3.86$, $p < .001$)

monolingual speech more often rated as native with increasing rater age

($\beta = -0.16$, $SE = 0.07$, $z = -2.46$, $p < .05$)

Results

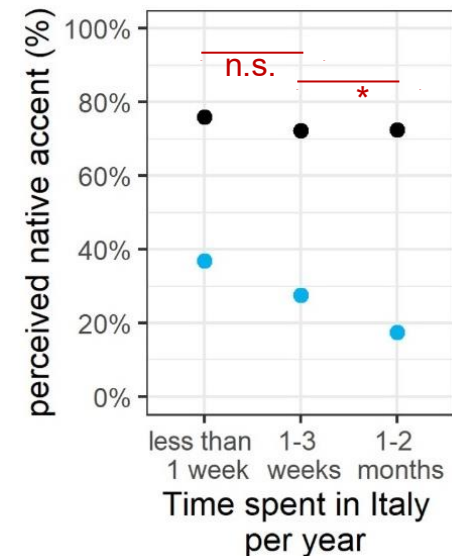
perception perspective



Individual differences in bilingual accent perception

- **Age of Onset in German:** no effect
($\beta = 0.30$, $SE = 0.16$, $z = 1.89$, $p = .06$)
- **Italian use:** no effect
($\beta = -0.20$, $SE = 0.32$, $z = -0.62$, $p = .54$)
- **Time spent in Italy:**
 - children are more likely to perceive accent as foreign when staying in Italy for one/two months
($\beta = 0.82$, $SE = 0.40$, $z = 2.04$, $p < .05$)
 - no difference for bilinguals with shorter stays than three weeks
($\beta = -0.49$, $SE = 0.41$, $z = -1.18$, $p = .24$)

Figure 3. Perceived native accent across speaker and rater groups considering time spent in Italy.



Discussion

RQ1: Do bilingual children perceive accent in the same way as monolingual children?

- Bilingual children seem to categorize accents in the same way as monolingual children (in line with Evans & Tomé Lourido, 2019)
 - **high perceptive skills** on the phonological level in HL acquisition
- **subtle but still significant differences** between the two rater groups
 - deviating **perceptual system** in some bilingual children due to differences in quality and quantity of input?
 - some bilingual children are less harsh because they are more familiar with **heritage accent?** (e.g., De Leeuw et al. 2010 for accent in migrants; Kupisch et al., 2021 for accent in siblings)

Discussion

RQ2: What individual-level factors determine accent perception?

Age at time of testing

both bilingual and monolingual raters **become more consistent with age** in categorizing heritage and monolingual accent (e.g., Goriot et al., 2020; Kan and Schmid, 2019; Rodríguez, 2021)

AoO in the ML

no effect → in contrast to production studies
(e.g. Kupisch et al., 2021; Kupisch et al., 2024)

HL use

no effect → in contrast to production studies
(e.g. Kupisch et al., 2021; Kupisch et al., 2024)

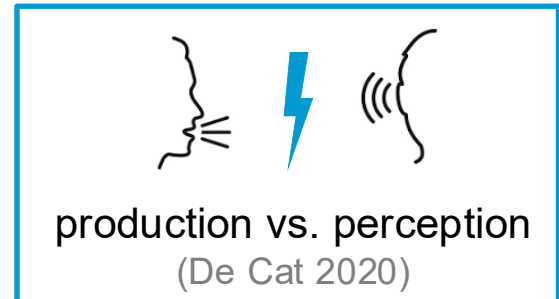
Time spent in heritage country

more time in the heritage country

→ more likely to perceive accent as foreign (e.g. Laméris et al., 2024 for production)

→ more fine-grained perception and differentiation between Italian regional accents

bilingual raters



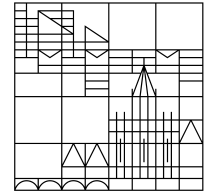
Conclusion

Our study

- provides evidence that **bilingual children categorize accents similarly as monolingual children** but **subtle differences** between bilingual and monolingual raters are observed
- underlines that monolingual and bilingual children become **more consistent with age**
- shows that **accent perception in bilinguals** is modulated by **time spent in the heritage country** (parents' homeland)
- **quality of input** may be **more decisive** for **accent perception** than amount of use and timing of exposure (Krieger et al., 2026; McCarthy & Evans, 2019)

References

- Bent, T. (2018). Development of unfamiliar accent comprehension continues through adolescence. *Journal of Child Language*, 45(6), 1400-1411. <https://doi.org/10.1017/S0305000918000053>
- De Cat, C. (2020). Predicting language proficiency in bilingual children. *Studies in Second Language Acquisition*, 42(2), 279-325. <https://doi.org/10.1017/S0272263119000597>
- De Jesus, J.M., Hwang, H. G., Dautel, J. B., & Kinzler, K. D. (2017). Bilingual children's social preferences hinge on accent. *Journal of Experimental Child Psychology*, 164, 178-191. <https://doi.org/10.1016/j.jecp.2017.07.005>
- De Leeuw, E., Schmid, M. S., & Mennen, I. (2010). The effects of contact on native language pronunciation in an L2 migrant setting. *Bilingualism: Language and Cognition*, 31(1), 33-40. <https://doi.org/10.1017/S1366728909990289>
- Evans, B. G., & Tomé Lourido, G. (2019). Effects of Language Background on the Development of Sociolinguistic Awareness: The Perception of Accent Variation in Monolingual and Multilingual 5- to 7-Year-Old Children. *Phonetica*, 76(2-3), 142-162. <https://doi.org/10.1159/000493983>
- Floccia, C., Butler, J., Girard, F., & Goslin, J. (2009). Categorization of regional and foreign accent in 5- to 7-year-old British children. *International Journal of Behavioral Development*, 33(4), 366-375. <https://doi.org/10.1177/0165025409103871>
- Girard, F., Floccia, C., & Goslin, J. (2008). Perception and awareness of accents in young children. *British Journal of Developmental Psychology*, 26, 409-433. <https://doi.org/10.1348/026151007X251712>
- Goriot, C., McQueen, J. M., Unsworth, S., van Hout, R., & Broersma, M. (2020). Perception of English phonetic contrasts by Dutch children: How bilingual are early-English learners? *PLoS ONE*, 15(3), e0229902. <https://doi.org/10.1371/journal.pone.0229902>
- Hopp, H., & Schmid, M. (2013). Perceived foreign accent in L1 attrition and L2 acquisition: the impact of age of acquisition and bilingualism. *Applied Psycholinguistics*, 34, 361-394. <https://doi.org/10.1017/S0142716411000737>
- Jones, Z., Yan, Q. Y., Wagner, L., & Clopper, C. G. (2017). The development of dialect classification across the lifespan. *Journal of Phonetics*, 60, 20-37. <https://doi.org/10.1016/j.wocn.2016.11.001>
- Kinzler, K. D., Shutts, K., DeJesus, J., & Spelke, E. S. (2009). Accent trumps race in guiding children's social preferences. *Social Cognition*, 27(4), 623-634. <https://doi.org/10.1521/soco.2009.27.4.623>
- Krieger, S., Geiss, M., & Kupisch, T. (2026). Accent Perception in Heritage Speakers of Italian and Migrants from Italy. *Heritage Language Journal* 23, 1-25. <https://doi.org/10.1163/15507076-bja10053>
- Kupisch, T., Barton, D., Hailer, K., Klaschik, E., Stangen, I., Lein, T., & van de Weijer, J. (2014). Foreign Accent in Adult Simultaneous Bilinguals. *Heritage Language Journal*, 11(2), 123-150. <https://doi.org/10.46538/hlj.11.2.2>
- Kupisch, T., Kolb, N., Rodina, Y., & Urek, O. (2021). Foreign accent in pre- and primary school heritage bilinguals. *Languages*, 6(2), 96. <https://doi.org/10.3390/languages6020096>
- Kupisch, T., Canzi, M., Ferin, M., Geiss, M., Reiber, M., & Speck, P. (2024). How Bilingual Experience Shapes Accents in German-Italian Primary School Children. *Heritage Language Journal*, 21(1), 1-30. <https://doi.org/10.1163/15507076-bja10030>
- Laméris, T. J., Kubota, M., Kupisch, T., Cabrelli, J., Snape, N., & Rothman, J. (2024). Language change in Japanese-English bilingual returnee children over the course of five years: Evidence from accent-rating. *Second Language Research*, 41, 1-26. <https://doi.org/10.1177/02676583241230854>
- Leiner, D. J. (2024). *SoSci Survey* (Version 3.5.02) [Computer Software]. <https://www.soscisurvey.de/>
- McCarthy, K., & Evans, B. (2019). The perception of familiar and unfamiliar accents by bilingual and monolingual children. *Proceedings of the International Congress of Phonetic Sciences 2019*.
- McCullough, E. A., Clopper, C. G., & Wagner, L. (2019). Regional dialect perception across the lifespan: Identification and discrimination. *Language and Speech*, 62, 115-136. <https://doi.org/10.1177/0023830917743277>
- Ramon-Casas, M., Cortés, S., Benet, A., Lleó, C., & Bosch, K. (2021). Connecting perception and production in early Catalan-Spanish bilingual children: language dominance and quality of input effects. *Journal of Child Language*, 50(1), 155-176. <https://doi.org/10.1017/S0305000921000787>
- Rodríguez, N. M. (2021). *The Perception and Production of Lexical Stress among Early Spanish-English Bilingual Children*. New Brunswick: Dissertation der State University of New Jersey. <https://doi.org/doi:10.7282/t3-r3hk-rd50>
- Wrembel, M., Marecka, M., Szewczyk, J., & Otwinowska, A. (2019). The predictors of foreign-accentedness in the home language of Polish-English bilingual children. *Bilingualism: Language and Cognition*, 22(2), 383-400. <https://doi.org/10.1017/S0272263119000408>
- Yuan, E. S. (2024). *Zoom* (Version 5.15.5) [Computer Software]. <https://www.zoom.us>



Thank you for your attention!

Paulina Hafner

paulina.hafner@uni-konstanz.de