Polish-German early bilingualism project

**Project name (Polish pun):**
Maluchy na językach
(*literally, but not quite: Toddlers on languages*)

**Director:** Professor Annick De Houwer, PhD

**AIMS**
- collect longitudinal data on the Polish and German language development of children with Polish and German as two first languages (Bilingual First Language Acquisition, BFLA) and of children who started off hearing Polish and then started hearing German at their child care center or preschool (Early Second Language Acquisition, ESLA)
- compare these two groups of children
- investigate what environmental factors might influence children's development in each language, and
- compare results with those of a demographically similar group of English-German families (the ToddleTalk project; see https://www.habilnet.org/science > Projects), in order to investigate the role of language status (in Germany, English is generally regarded much more positively than Polish)

**PARTICIPANTS**
All in all we managed to secure the cooperation of 17 BFLA and 15 ESLA families (occasionally there are missing data). Recruitment was done by a Polish research assistant in Darmstadt, Germany, who had young children herself and had a large network. She found most of the families in the space of 6 months. All families except one lived in Germany during the 18 months of data collection (the one family lived in Poland). A few families dropped out so we had to start from scratch. Another Polish research assistant (this time in Dortmund) with a young child managed to recruit two more families.

**OVERVIEW DATA COLLECTION** (instruments referenced below):
1) Wave 1 (children aged around 2;0 years): FRAKIS, IRMIK, SDQ, demographic survey
2) Wave 2 (children aged around 2;9 years): FRAKIS, IRMIK, SDQ, demographic survey
3) Wave 3 (children aged around 3;6 years): SDQ, demographic survey
All data are REPORTED data. The reporters are mostly mothers, but also fathers, other family members, child care workers, preschool teachers, or nannies. Data were collected between January 2016 and January 2019.

Language data
FRAKIS & IRMIK

IRMIK: the Polish version of the Toddler CDI (Communicative Development Inventory, Fenson et al., 1993);
Citation: SMOCZYŃSKA, Magdalena (2015). INWENTARZ ROZWOJU MOWY I KOMUNIKACJI SŁOWA I ZDANIA. Instytut Badań Edukacyjnych.

Other than in the original FRAKIS we also asked reporters to underline words children might understand but do not (yet) say.

Other than in the original IRMIK we also asked reporters to underline words children might understand but do not (yet) say.

We asked that as many reporters as possible fill in the FRAKIS as well as the IRMIK, but this did not always happen. When we do have more than one report for the FRAKIS or IRMIK, we use cumulative scores that take into account the best coding for an item (as done in De Houwer, A., M. H. Bornstein & D. L. Putnick (2005). Assessing early communicative ability: a cross-reporter cumulative score for the MCDI. *Journal of Child Language*, 32: 735-758; see also: De Houwer, A. (2019). Equitable evaluation of bilingual children's language knowledge using the CDI: It really matters who you ask. *Journal of Monolingual and Bilingual Speech*, 1(1), 32-54).

a) For the BFLA families, there are both FRAKIS and IRMIK data for 17 children at Wave1. At Wave2 there are IRMIK data for 14 of those BFLA children, and FRAKIS data for 13 of those.

b) For the ESLA families, FRAKIS data are scant at Wave1 (data for only 5 children). There are IRMIK data for 16 ESLA children. At Wave2 there are FRAKIS data for 10 ESLA children and IRMIK data for 15 children.

In all, we collected 106 IRMIK forms and 67 FRAKIS forms.

Measure of Well-Being: the SDQ

As described on the SDQ website (http://www.sdqinfo.com/) the SDQ consists of 25 questions about a child's attributes, phrased positively or negatively. These are divided between 5 rating scales: one referring to emotional "symptoms" (e.g., "Often complains of headaches, stomachaches or sickness"), one about "conduct problems" (e.g., "Often loses temper"), one addressing hyperactivity or inattentiveness or the lack of these (e.g., "Good attention span, sees work through to the end"), one querying peer relations (e.g., "Generally liked by other children"), and, finally, a prosocial scale (e.g., "Considerate of other people's feelings"). The combined results are assumed to yield a reliable measure of socio-emotional well-being (e.g., see Australian Institute of Health
and Welfare (2012). Social and emotional wellbeing: development of a Children’s Headline Indicator. Cat. no. PHE 158. Canberra: AIHW. Norms exist for 10 countries. The SDQ is used in clinical assessments, in before-and-after intervention studies, in epidemiology, in screening for psychiatric disorder, and in research. Importantly, the SDQ can be used for all children, regardless of their mental health status.

The SDQ is designed for children aged 2 to 16, with a separate form for children aged 2-4. This is the one we used. Usually parents and/or teachers fill out the scales. (Children older than 11 may also fill out somewhat adapted scales themselves.)

At current count (November 2019) the SDQ is available in 107 languages, including American Sign Language and British Sign Language (there are video versions). For some languages versions in different regional varieties are available. All these different language versions have been fully psychometrically validated. We used the SDQ in both Polish and German. Parents or grandparents selected the language they wanted for filling in the paper form (child care workers and preschool teachers were asked to fill in the German forms). We collected a total of 177 SDQ forms, each with 25 answers, yielding a total of 4,425 data points.

Scoring was done through the SDQ website and is straightforward.

**Demographic surveys to measure exposure information and more**

Dr. De Houwer developed several demographic online surveys. They were administered through SurveyMonkey. Mostly mothers filled out the surveys, but several fathers did so as well. We collected a total of 128 surveys.

At each wave parents were asked about their family’s composition and the target child’s residences and longer (> week) trips, target child health, who took care of the child (both in and out of the home), the languages the target child understood and spoke, and the languages other family members spoke (and with whom, and in what circumstances).

Additional questions:

i. The Wave1 survey also included several questions querying parents’ attitudes towards each language, child bilingualism, and aspects of child language development.

ii. The Wave2 survey had questions about each parent’s language proficiency in any language they might know.

iii. The Wave3 survey asked questions about parents’ linguistic interaction with the target child and about how they felt if their child did not answer in the language they addressed the child in. Wave3 also had several little scenarios of children saying specific things in specific circumstances. Parents were asked to indicate to what extent their child resembled the sample children. Their answers are supposed to give a very broad picture of children’s level of language development in each language (it was impossible to test children directly; besides, there are no standardized instruments for 3.5-year-olds in both Polish and German that can measure their level of language development).

**Coding and data processing**

Most of the data have been coded and the analytic work has started.

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