Are refugee bilingual children disadvantaged in their cognitive and linguistic abilities?

Over 5.6 million people fled Syria after the war broke out in 2011, and Turkey hosts 3.4 million of them, including nearly a million children. Ensuring cognitive and linguistic development of these displaced children is an important priority, but the right methods for doing so are currently unclear as we have no systematic information on their cognitive development, or the contexts that promote bilingual language development. For example, it is unclear how their traumatic displacement experiences might impact their development and how their Turkish language skills would develop in the formal and informal environments in which these children are exposed to the language. Indeed, it is also possible that learning Turkish as an additional language may offer children some cognitive advantages.

We report data from an ongoing project that examines the cognitive and linguistic abilities of displaced Syrian children in Turkey, compared to a natural control group matched in age and socioeconomic status: Turkish-Arabic non-refugee bilingual children from the Antakya region. This report is preliminary, because data collection had to cease due to COVID-19; it incorporates assessments of 14 Arabic-speaking (Mean-Age:9;02; 8 females; Age-Range:8:09-10;03) and 23 Antakyan children (Mean-Age:9;01; 11 females; Age-Range: 8:04-10;04). Regardless of their refugee status, all participants attend Turkish state schools with Turkish as the medium of instruction, they receive no schooling in their household language, Arabic.

We measured vocabulary in both languages (using Turkish and Arabic TIFALDI), narrative production and comprehension ability in both languages (Multilingual Assessment Instrument for Narratives, MAIN) (Gagarina et al., 2012; 2019), and also a set of cognitive measures collected in child's dominant language: Forward-digit-span-task for short-term memory, backward-digit-span-for working-memory (Wechsler 1974), Happy-Sad-Test for inhibition (Lagattuta et al., 2011), Wisconsin-Card-Sorting-Task for cognitive-reasoning (Berg, 1948). Following Blom et al. (2014), we conducted three separate multivariate analyses of covariance (MANCOVA) for the vocabulary, narrative, and cognitive measure with refugee-status (refugee, non-refugee) as between-participants variable (Table 1).

While the refugee children had developed Turkish language skills, they still significantly lagged the non-refugee-bilingual children in terms of vocabulary and narrative production (especially at microstrucrural levels), although interestingly, their narrative comprehension scores did not significantly differ. In Arabic, however, the refugee children's linguistic abilities were stronger than the non-refugee bilinguals at macrostructural levels of narratives. Nonlinguistic abilities were roughly similar between the groups, although non-refugee bilinguals scored significantly higher on the working-memory measure, backwards digit span. These results highlight the refugee children's difficulties adapting to Turkish, but their strong Arabic skills and roughly matched cognitive abilities indicate that their development had not been overwhelmed by the trauma of displacement.

The present study has been the first to systematically investigate cognitive and linguistic abilities in refugee- versus non-refugee-bilinguals. Over the next few months, we will analyze in more detail the lexical, grammatical, and discourse features in children's narratives, compare their lexical abilities in both languages, and check how cognitive measures interact with their language skills. These data set the stage for broader, systematic evaluations of language development in this critical group.