

# Effects of culture and bilingualism in linguistic assessment: word naming and comprehension by Nenets-Russian bilinguals and Russian monolinguals in Yamal

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**Introduction.** Language assessment instruments should be made in consideration with or adapted to the linguistic and culture specificity. While there are more than 100 indigenous languages and cultures in Russia (Eberhard, Simons, & Fennig, 2019), the standardized language tests are not usually standardized with consideration of bilingualism and cultural specificities of the populations.

We present results of a pilot study on a standardized test adaptation in a group of ethnic Nenets children, both monolingual Russian speakers and Nenets-dominant Nenets-Russian bilinguals. Nenets is a Samoyed language from the Uralic language family with about 22 600 speakers and 44 600 ethnic population (Eberhard, Simons, & Fennig, 2019).

**Methods.** We present data results of the verb and noun production and comprehension subtests of the KORABLIK test (Clinical assessment of basic linguistic competencies development) – a test for assessment of various linguistic functions in pre-school children.

25 first-graders from the Yamal boarding school took part in the research. 16 of them were Nenets-Russian bilinguals with dominant Nenets ( $M_{age} = 6.63$ ,  $range_{age} = 6-8$ ) and 9 were monolinguals from the Yar-Sale town ( $M_{age} = 6.67$ ,  $range_{age} = 6-7$ ). The control group consisted of 16 Moscow typically developing children ( $M_{age} = 6.19$ ,  $range_{age} = 6-7$ ).

The data analysis was performed in R (R Core Team, 2017). Binary logistic regression models were fitted using the glmer function (Bates, Mächler, Bolker, & Walker, 2015) with the best model evaluated by the backward stepwise approach (Bursac, Gauss, Williams, & Hosmer, 2008). All scripts can be accessed at the following OSF project: <https://osf.io/psf8g/>.

**Results.** The analysis of the Noun and Verb Comprehension and Production subtests indicated significantly lower accuracy for the bilingual group of naming and word to picture matching ( $p < 0.001$ ); and for the group of Yamal children ( $p < 0.05$ ). Nouns were more accurately processed and named, than verbs ( $p < 0.01$ ), and in verb comprehension accuracy in the bilingual and monolingual groups differed less than in noun comprehension ( $p < 0.05$ ).

There was no effect of age in any of the subtests. The analysis also revealed the items to be excluded and replaced by more culturally appropriate ones.

**Discussion.** The results are consistent with previous findings on bilingual word processing and on word processing in general (Berkes, Friesen, & Bialystok, 2018): bilinguals were less accurate, than monolinguals, verbs were produced and processed less accurately than nouns.

This experience could be applied to adaptation of standardized language tests with regard to linguistic and cultural features of the populations.

## References

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