Exploring Child and Family Profiles Among ASDetect Users in Australia and Poland

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1 INTRODUCTION

Early identification of autism enables earlier support and improves the quality of life for children and their families. ASDetect (asdetect.org) is a free mobile application for caregivers, designed to monitor social attention and communication development in children aged 11–30 months, with key assessments at 12, 18, and 24 months. ASDetect was developed by Barbaro and colleagues at the Olga Tennison Autism Research Centre (OTARC) in Melbourne, Australia. It is based on the Social Attention and Communication Surveillance (SACS) framework (Barbaro et al., 2022). ASDetect demonstrates a sensitivity of 96% and a positive predictive value of 83% (12–24 months). The app was launched in 2016 and has been downloaded approximately 190,000 times worldwide. It is currently available in multiple languages, including Mandarin, Spanish, Slovak, and Polish, with the Polish version released in July 2025.

In Poland, autism screening is currently not part of a unified national population-based programme nor a mandatory component of the public health system. In this context, ASDetect may enhance early identification, support clinical services, reduce regional inequalities, and improve diagnostic pathways.

2 AIM OF THE STUDY

This study aimed to compare the developmental, diagnostic, cultural and engagement profiles of ASDetect-English and ASDetect-Polish users, in the initial period after ASDetect's release in Poland.

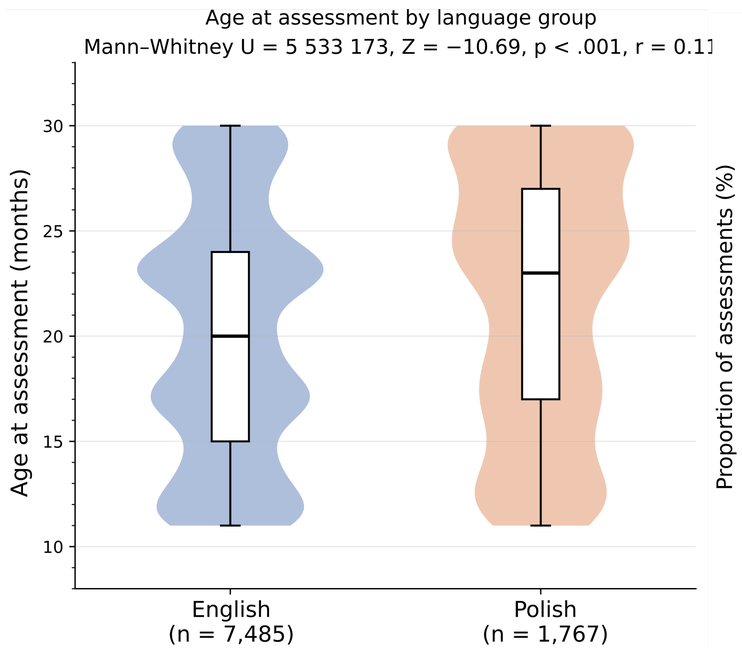
3 METHOD

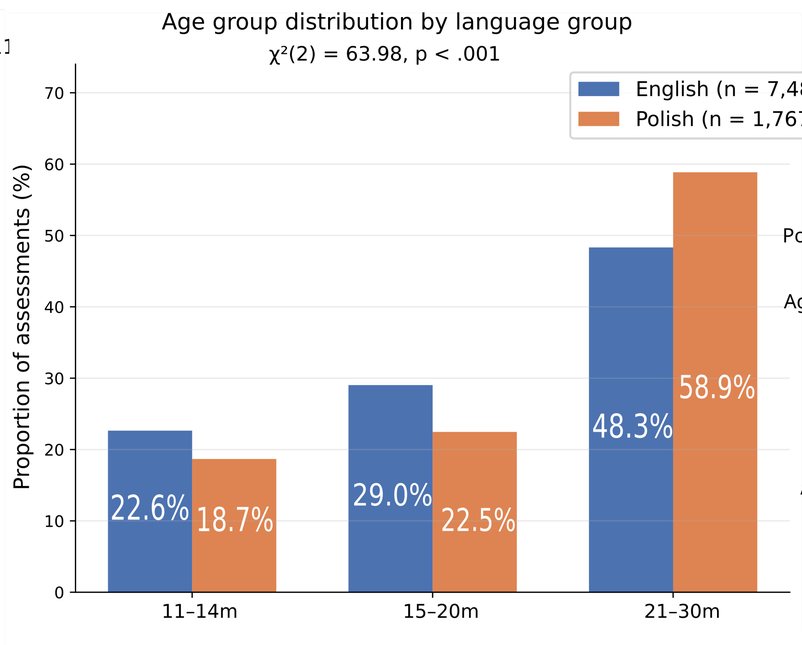
We analyzed 9,252 records, including 8,476 unique ones.
The records came from a survey completed over a 9-month period starting in July 2025, i.e., from the launch of the Polish-language version of the ASDetect application. Among the participants, 80% were English-language users and 20% were Polish-language users. The surveys mostly concerned boys (64.7%), and 5.8% of the children had a sibling on the autism spectrum. The analyses were conducted using in-house Python scripts and the spaCy library, with AI assistance in generating Python code for the analyses and figures (Claude Sonnet 4.6 by Anthropic).

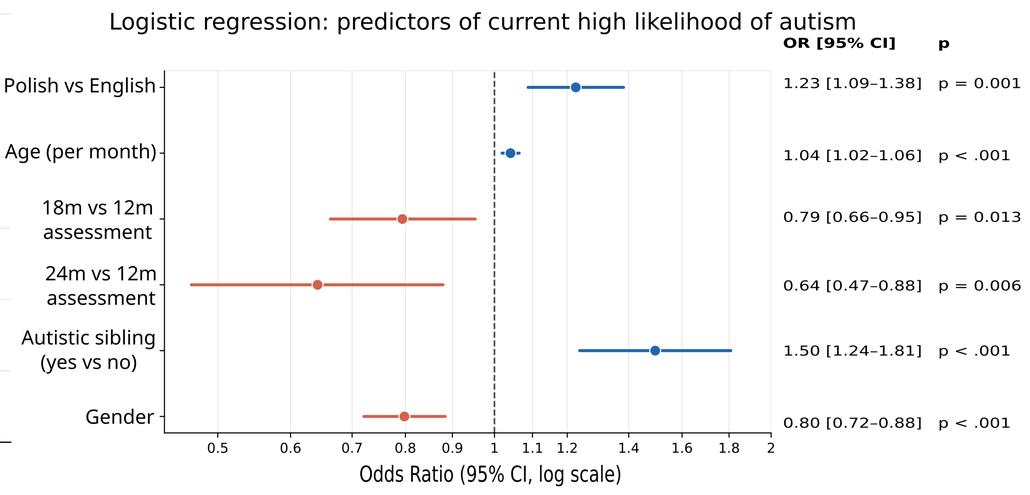
4 RESULTS

Parents of Polish-speaking children completed the survey significantly later (age at the assessment: M = 21.73 months, SD = 6.17) than parents of English-speaking children (M = 20.11, SD = 5.84, $p < .001$, $r = 0.11$).
In the Polish-speaking group, the proportion of children with an autistic sibling was nearly twice as high (9.5% vs. 4.9% in the English-speaking group), and this difference was highly statistically significant, $\chi^2(1) = 52.55$, $p < .001$.
The gender distribution also differed significantly between the language groups, $\chi^2(2) = 17.94$, $p < .001$. **In the Polish-speaking group, a higher proportion were girls** (39.5% vs. 34.1% in the English-speaking group).

The proportion of ratings indicating a **current high likelihood of autism** (current HL) was significantly **higher in the Polish-speaking group** than in the English-speaking group (27.6% vs. 23.0%), $\chi^2(1) = 17.03$, $p < .001$. The logistic regression model showed that all included predictors were significantly associated with the outcome current HL ($p < .05$): Polish-speaking children have approximately 23% higher odds of being classified as current HL compared to English-speaking children, controlling for other variables. Each additional month of age slightly increases the odds of current HL. Having an autistic sibling increases the odds of current HL by approximately 50%. Girls have approximately 20% lower odds of current HL.







5 CONCLUSIONS

Records from the two language groups are **comparable in overall autism likelihood** (ever HL).

Records **differ in user profile and usage pattern** in ways that are **best explained by the Polish version's novelty**.

Polish children were assessed at an older age - as the Polish version of the ASDetect matures, the **age profile may shift younger.**

The Polish group has nearly twice the rate of autistic siblings (9.5% vs 4.9%). This suggests that, in the early months after launch, the Polish application was **more frequently adopted by families already familiar with autism.**

A repeat comparison in 18–24 months, once the Polish version has matured, may provide a more informative cross-cultural picture.

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