

Language-universal and language-specific properties of referential use: evidence from bilingual children with and without ASD

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The current study was devised to assess separate and combined effects of Autism Spectrum Disorder (hereafter ASD) and Bilingualism on the use of referential expressions using a four-group design. We compared monolingual Hebrew-speaking and bilingual Russian-Hebrew speaking children with ASD and Typical Language Development (hereafter TLD). The production of referential expressions is a ubiquitous part of communication, and it requires pragmatic judgments about what is appropriate in a given context (Ariel, 2001; Davies & Arnold, 2018; Serratrice & Allen, 2015). Some properties of referential choices are suggested to be more language-universal (e.g., the use of more informative noun phrases for less accessible referents), while some properties are language-specific (e.g., the presence of definiteness versus indefiniteness marking; the use of full pronouns versus null pronouns) (Guerriero, Oshima-Takane, & Kuriyama, 2006; Hickmann & Hendriks, 1999; Mishina-Mori, 2012; Serratrice, Hervé, & Allen, 2015).

Thirty-five children with ASD (21 monolingual and 14 bilingual) and fifty-eight children with TLD (28 monolingual and 30 bilingual) aged 4-9, as well as eighteen monolingual adult controls were tested on an elicitation task prompting referential expressions in subject and object positions. The informativeness of referential expressions in the subject and object conditions were evaluated in contrastive conditions: in the subject condition by manipulating two referents which differed only in one property (e.g., *a white dog* and *a black dog*) and in the object condition by manipulating two different objects and two different locations. In order to ensure the use of definiteness, the referents in the subject and object conditions were introduced into a discourse, thus in both syntactic conditions (subject and object) anaphoric definiteness was mandatory.

The findings showed an effect of ASD: children with ASD were more likely to produce under-informative referential expressions and omit definiteness as compared to their peers with TLD. A bilingual advantage was observed for contrastive referential use, yet Russian-Hebrew bilingual children were more likely to omit the Hebrew definite marker under the influence of Russian, which does not have a morphological marker of definiteness. Notably, the bilingual advantage on informativeness was observed despite lower Hebrew proficiency among bilinguals as compared to monolinguals. Furthermore, no interaction between ASD and bilingualism was observed. This findings suggest that bilingualism is not detrimental for children with ASD. The study reveals language-universal and language-specific properties of referential use in both typical and atypical language acquisition.

References

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