BILINGUAL EXPOSURE DOES NOT IMPEDE CANTONESE-ENGLISH BILINGUAL AUTISTIC CHILDREN'S RECEPTIVE VOCABULARY IN L1 CANTONESE

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While bilingualism has been convincingly demonstrated in language development with typically developing (TD) children, its impact on autistic children has not been systematically studied in autistic children (Howlin, 2004). Autism professionals and parents believe two languages would increase the burden on autistic children (Yu, 2013). Empirical support or rejection is lacking for this belief. Due to the increasing number of bilingual children and the prevalence of autism spectrum disorder (ASD), it is crucial to understand the relationship between bilingualism and ASD. This study examined the effects of bilingual exposure on Cantonese-English bilingual autistic children's receptive vocabulary in their L1 Cantonese. Using the Cantonese Receptive Vocabulary Test (CRVT; Cheung et al., 1997), we tested receptive Cantonese vocabulary knowledge in 5 to 6-year-old bilingual autistic children (N=20) and bilingual TD peers (N=41) matched in age, working memory, and parents' education level. Both groups of children were dominant in Cantonese and had acquired Cantonese as L1 and English as L2. The nonverbal IQ of autistic children was significantly lower than that of TD children. We measured the children's total number of Cantonese and English exposure hours in the home, school, and community. Correlation and hierarchical regression analyses were conducted in R separately for the two groups to examine the relationship between children's receptive vocabulary scores and bilingual exposure. The results showed that autistic children scored significantly lower than their TD peers in CRVT (t = -3.1493, p = 0.003), and received significantly less English exposure at home and community than TD children. Autistic children's performance in CRVT did not significantly correlate with Cantonese exposure (r = 0.052, p = 0.827) or English exposure (r = 0.153, p = 0.519). Although Cantonese exposure did not significantly correlate with TD children's receptive vocabulary scores, English exposure negatively correlated with those scores. The hierarchical regression analyses showed that only age resulted in a significant increase in variance accounted for (ΔR^2 = 0.715, p < 0.001) in autistic children, whereas working memory (ΔR^2 = 0.124, p = 0.033), parental education level (ΔR^2 = 0.090, p = 0.046) and English exposure (ΔR^2 = 0.106, p = 0.023) yielded a significant increase in variance accounted for among TD children. While autistic children's receptive vocabulary lagged behind those of age-matched TD children, autistic children were not affected by the same factors influencing TD children's receptive vocabulary performance. More importantly, the findings indicate that bilingual exposure does not impede autistic children's performance in L1 receptive vocabulary. The findings of this study will help to inform evidence-based practice and provide essential guidance to parents and professionals regarding autistic children in bilingual communities.

Keywords: bilingual children, Autism Spectrum Disorder, vocabulary, bilingual exposure

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