

Individuals with autism spectrum disorder (ASD) have been recognized to have challenges with an aspect of spoken language, prosody, which can be thought of as the “melody” of speech and that gives crucial information during everyday communication. Although there is a growing body of research on prosody and autism, there is a gap in research on prosody and autism traits, with fewer studies including quantitative acoustic analysis. Current literature regarding quantitative masking abilities in autistic individuals is also limited. The purpose of this study is to examine linguistic prosody perception and imitation in autistic adults (ages 18 to 45) compared to a neurotypical group. Overall, the results showed that there were no group differences in the prosody perception task and that prosody perception scores were not correlated to scores on the Comprehensive Autistic Trait Inventory (CATI). Additionally, a significant difference was found between groups for the duration of the target word for the imitation task. These results suggest that autistic individuals perform similarly to non-autistic individuals in structured settings where they are attentive to prosody, but, aligning with some current research, may have differences in duration of speech when imitating.

*Keywords:* Autism Spectrum Disorder, linguistic prosody, perception, imitation, masking