

A Profile of Receptive and Expressive Verb Morphology in Arabic-Speaking Children with Developmental Language Disorder

Deya Alharbi^{a,b}, Judy Clegg^a, and Ozge Ozturk^a

^a School of Allied Health Professions, Nursing & Midwifery, The University of Sheffield, Sheffield, UK.

^b Health Communication Sciences Department, College of Health and Rehabilitation Sciences, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia

Background: Developmental language disorder (DLD) manifests differently across languages and the grammatical deficits exhibited by children with DLD may vary between languages. Very little is known about the impact of DLD on the acquisition of morphology in languages spoken in the global south, such as Arabic. This study systematically investigated the comprehension and production of verb morphology difficulties in Arabic-speaking children with DLD in comparison to their typically developing (TD) peers.

Method: Sixty-nine Saudi Arabic-speaking children were recruited including 35 children with DLD ($M = 62.12$ months, $SD = 11.25$), and 34 age-matched TD children ($M = 63.38$ months, $SD = 8.85$). Two novel tasks were developed: a picture naming task and a picture selection task to assess the production and comprehension of verb inflections. Both tests included verbs marked for tense (past, present and future) and subject-verb agreement for gender (feminine and masculine) and number (singular and plural). Children's responses were assessed for accuracy and error patterns.

Results: In the expressive verb morphology task, the DLD group scored significantly lower ($M = 28.54$, $SD = 21.96$) than their TD peers ($M = 78.76$, $SD = 16.25$; $p < .001$). Similarly, on the receptive verb morphology task, the DLD group scored significantly below ($M = 61.86$, $SD = 10.84$) their TD peers ($M = 79.42$, $SD = 14.81$; $p < .001$). Error analyses indicated that children with DLD struggled most with future tense verbs. Findings highlighted differences in subject-verb agreement, with feminine verbs posing the greatest challenge in production, and masculine verbs in comprehension. Plural verbs were most difficult in production, while singular verbs were the most challenging in comprehension.

Conclusions: This study is the first to examine receptive and expressive verb morphology in Arabic-speaking children with and without DLD. The results indicate that the production and comprehension of verb morphology is an area of weakness for Arabic-speaking children with DLD. Subject-verb agreement errors varied across expressive and receptive domains, indicating different underlying processes. The findings provide valuable insight to speech therapists when assessing verb morphology in Arabic-speaking children with DLD. Future studies are needed for assessing the diagnostic accuracy of the developed tasks.

References

Leonard, L. B. (2014). *Children with specific language impairment*. MIT press.