

## **Language Development and Impairment in Arabic-speaking Children: Introduction to the Special Issue**

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This second special issue of the *Arab Journal of Applied Linguistics* is a continuation of our work on language and literacy in the Arab context. While the topic of the first issue was Second language and literacy learning, the present issue focuses on the development of Arabic as a first language in typically and atypically developing-children. First Language development is an essential skill that is involved in many aspects of a child's development including cognition, social interaction, literacy and academic and vocational success. Early language development indicators could be used to identify and predict language and literacy delays (as well as school readiness) and allow early necessary intervention (Center on the Developing Child, 2010; National Early Literacy Panel, 2008; National Reading Panel, 2000). Despite the dire need in the Arab world for language development data for assessment, intervention and curriculum development,

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our knowledge of the development of Arabic language in terms of vocabulary, syntactic structures, morphological structures, semantics and pragmatics is rather limited.

The need for extensive research on language development in Arabic is also motivated by the rather complex sociolinguistic situation in the Arab world. The Arab child is exposed to at least two rather different varieties, a spoken regional variety acquired at home as a native language and used for all informal communicative purposes (Spoken Arabic Variety) and a variety learned at school (Standard Arabic) that is used exclusively for all written communication, education and in formal spoken contexts. Although genetically related, Spoken Arabic varieties and Modern Standard Arabic are different in many aspects, including a large number of vocabulary items, phonology, morphology and syntax (Benmamoum, 2000; Brustad, 2000). This distance between the two varieties and the ensuing complex linguistic situation are obviously challenging for the child, but they are equally challenging for the teacher, the curriculum developer, and the speech and language clinician, to mention only a few of the stakeholders. In addition to its distinctive sociolinguistic characteristics, Arabic has unique morpho-syntactic characteristics. Language typology appears to influence morpho-syntactic development and disorder. The Arabic language, being a morphologically rich language, can contribute to a growing line of cross-linguistic language acquisition research (Brustad, 2000). In particular, such research will shed light on the nature of the grammatical development and deficit, explanatory theories as well as the relationship of language impairment to typical language acquisition.

The aim of this issue is, therefore, to extend our knowledge of Arabic language development in typical and atypical populations to inform practice, both assessment and intervention, and research and contribute to the cross-linguistic debates on language development and impairment. The topics covered in this issue reflect the main research agenda among researchers working in this area in Arabic, namely language development in typical populations; Specific Language Impairment (SLI); and the connection between

language development and literacy. This introduction tries to situate the contributions in the mentioned research areas within the general Arabic language context.

### **Arabic language development**

The first paper is by Qasem and Sircar on the language development of Yemeni Ibbi Arabic in two children (2;01-2;11) with a focus on verb inflections. The authors argue that like European languages, Arabic, a null-subject language, shows a stage equivalent to the Root Infinitive. They provide evidence that the non-finite form in early child Arabic is the imperative. A previous study on Kuwaiti Arabic (Aljenaie, 2010) made a similar claim but the non-finite construction was the imperfective verb bare stem. The third paper by Fahim (in this issue) provides examples from spontaneous language error data from preschoolers with Developmental Language Impairment to show a tendency to use the imperfective-stem and the imperative as default forms in lieu of correct verb inflections, which could provide further evidence for the results found in Child Yemeni Ibbi Arabic and Child Kuwaiti Arabic.

Other studies in Arabic examined verb morphology (Abdalla & Crago, 2008; Aljenaie, 2010), plural inflection (Abdalla, Aljenaie & Mahfoudhi, 2013; Ravid & Farah, 1999), binding principles (Mustafawi & Mahfoudhi, 2005), word order acquisition (Aljenaie & Farghal, 2009; Khamis-Dakwar, 2011); phonological development (Amyareh & Dyson, 1998). Although these have broadened our understanding of Arabic language development, the results are not sufficient due to a number of limitations. First, most of these studies adopted a cross-sectional methodology and did not cover a wide range of age groups. Second, in most of the studies, the adult target data are not available which makes it challenging to draw comparisons. Lastly, a further complication that makes the work of researchers and clinicians challenging is the lack of a reliable description of the grammar of many Arabic varieties.

## **Specific Language Impairment in Arabic**

Both the second and the third paper of this issue deal with SLI in child Arabic. The paper by Saleh Shaalan achieves two objectives: to validate a battery of much needed vocabulary and language tests in Qatari Arabic and to use them to identify children with SLI. The tests included a sentence comprehension test, an expressive language test, a sentence repetition test, and a picture vocabulary test. These tests were used to identify children with SLI and their performance was compared to a chronologically age-matched typically developing group (4;06-9;04). The results showed that the Qatari Arabic-speaking children with SLI consistently lagged behind their typically-developing peers across the four language tests. The group with SLI performed relatively better in the comprehension test than assessment tools that tapped into expressive language abilities. The results are in line with previous studies in other varieties of Arabic that have found typical language learners outperform children with SLI (e.g., Abdalla & Crago, 2008 for Urban Hijazi Arabic; Fahim (in this issue) for Egyptian Arabic; and Salameh, Håkansson, & Nettelbladt, 2004 for Swedish-Arabic bilingual children).

In the third paper, Fahim studied tense and agreement verb morphology in the spontaneous language productions of three preschool Egyptian Arabic- (EA) speaking children with language impairment aged four years and a typically developing control group (ages ranged between 2;03 and 4;06 with a mean age of 3;0 years). The children with language impairment showed restricted mean morphemes per utterance. The delay in morphological markers was particularly noticeable in subject-verb agreement for gender, number and person, but not for tense and aspect mainly in the perfective forms. This is very likely due to the fact that tense is intercalated within the stem in the perfective in Egyptian Arabic, according to the author' analysis, unlike gender and number which are detachable suffixes. In the imperfective, however, tense is a prefix and when stripped off could change the mood altogether to the imperative. The author touched on the issue of the parameters that might affect the types of production errors, but the topic still needs

more systematic study in future research. The group with language disorder also showed more errors that could be constituted as default forms resembling the imperative or the subjunctive.

The studies in this issue on typical and atypical language development have confirmed the presence of default forms that Arabic-speaking children use as a substitute for fully-inflected verb forms. This is true in typical acquisition of Yemeni Ibb Arabic (Qasem & Sircar, in this issue) and Egyptian Arabic-speaking children with language disorder (Fahim in this issue). These findings are in convergence with data from other Arabic dialects such as Kuwaiti Arabic (Aljenaie, 2010), Urban Hijazi Arabic (Abdalla & Crago, 2008) and Egyptian Arabic (Morsi, 2009). There is a debate as to whether the default form can best be characterized as the imperative or the imperfective verb stem. According to syntacticians (Benmamoun, 1999), the default is most likely the imperfective verb stem. Shahin (2010) also reiterates this point by noting that although the imperative is indistinguishable from the imperfect verb stem, the imperative actually originates from the imperfect verb stem. This clearly shows the importance of providing a reliable description of the grammar of more Arabic varieties, which will contribute to a more accurate characterization of child language. Expanding the database on how typically-developing children acquire various aspects of the Arabic language would also be beneficial. Although spontaneous samples are revealing, it would be helpful to also include other modes of gathering data such as elicitations. Longitudinal studies are also needed in future research, which are very essential when considering the connections between language and literacy development.

### **Language and literacy development**

The last two papers in this issue examined the contribution of language skills to literacy development, particularly at the word reading level. The first paper, by Al-Sulaim and Marinis, used a longitudinal design to study the contributions of phonological awareness

to letter knowledge and word reading in grade 1 students, measured at the beginning and the end of the year. Phonological awareness was measured using word segmentation into syllables, rhyme identification in words, first phoneme isolation, sound-matching in initial position, sound-matching in final position, and sound elision tasks. The results showed significant development in phonological awareness between Time 1 and Time 2 in the sound isolation and sound elision tasks as well as in letter knowledge and word reading. The phonemic isolation and elision tasks as well as rhyme awareness showed significant correlation with letter knowledge and word reading, which is in line with results of previous studies in Arabic (e.g. Abu-Rabia, 1995 for grades 3-6; Al-Mannai & Everatt, 2005 for grades 1-3; Boukadida, 2008 for grades 1 and 2; Everatt & Elbeheri, 2007 for grades 4 and 5; Ibrahim, Eviatar and Aharon-Peretz, 2002 for grade1; Taibah & Haynes, 2011 for K-3).

Farran, Bingham and Matthews examined the contribution of language skills, namely phonology, morphology and vocabulary in word reading: word reading accuracy and fluency and reading comprehension in bilingual English-Arabic children in grades 3, 4 and 5. The children learned Arabic as a second language and were not all Arabs. The children read both vowelized (with diacritics) and unvowelized words and were administered tests of phonological awareness, morphological awareness and vocabulary in Arabic. The results showed a connection between the language skills with word reading accuracy, which partially mediated the connection between language skills with word reading fluency. However, unlike vocabulary, neither reading accuracy nor reading fluency had a significant predictive relationship with reading comprehension.

Research on the connection between language and literacy has grown in the last few years on both typically developing children (e.g. Abdelhadi, Ibrahim & Eviatar, 2011; Abu-Rabia, 2007; Saiegh-Haddad, 2003; Taibah & Haynes, 2011) and children with reading difficulties (e.g. Abu Rabia, Share & Mansour, 2005; Boukadida, 2008;

Mahfoudhi, Elbeheri, Al-Rashidi, & Everatt, 2010), but it remains limited especially with regards to pre-school children. There is also an urgent need for more longitudinal studies to allow for causative interpretation of language and literacy relations. Further research should also examine the connection between language and literacy in different populations including children with language impairment, reading difficulties, numeracy difficulties, and cognitive and global developmental delays.

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