Brain, Cognition and Language: Current Issues in Child Language

This special issue of *Folia Phoniatria et Logopaedica* was developed by the Child Language Committee of the International Association of Logopedics and Phoniatrics to address two of its responsibilities: to stimulate evidence-based practice and research related to language acquisition and its impairments exhibited by a range of populations across various contexts, and to collaborate with the editor of the International Association of Logopedics and Phoniatrics in the expansion of language topics published in the journal.

The articles in this issue examine relationships among the brain, cognition and language. Scholars from various parts of the world – Brazil, Canada, Cyprus, Greece, Israel, New Zealand and the USA – contributed articles that address the neurodevelopmental and cognitive underpinnings of language for typically developing children and adolescents, late talkers, and those who have language impairments resulting from diverse etiologies, such as autism and Down syndrome. Each article addresses the implications that these underlying skills have for providing assessment and intervention services to children and adolescents with language impairments.

In the article ‘Social neuroscience and theory of mind’, Westby [1] discusses how deficits in theory of mind (ToM) are not limited to those with autism. Persons with a variety of communication, behavioral and psychiatric

disorders exhibiting social communication disorders as defined by the DSM-5 [2] also experience deficits in ToM. Westby reviews cognitive, affective, interpersonal and intrapersonal aspects of ToM and recommends that ToM profiles be constructed for a variety of clients in order to develop and implement effective intervention strategies.

In ‘Reading the Mind in the Eyes Test (children’s version): a comparison between children with typical development, children with high-functioning autism and typically developed adults’, Vogindroukas et al. [3] translated the Reading the Mind in the Eyes Test (by Baron-Cohen et al. [4]), adapted it for the Greek population and then conducted an assessment of 3 groups of participants. The authors examined the qualitative and quantitative performance differences among participating populations in this study.

Segal et al. [5] contributed the article ‘Judging emotions in lexical-prosodic congruent and incongruent speech stimuli in adolescents on the autism spectrum’. In this study, the authors assessed the ability of adolescents in Israel who were diagnosed with autism to determine the emotional state of a speaker when prosody was congruent with the lexical condition compared to when prosody was incongruent with the lexical content.

In the article ‘Executive dysfunctions, reading disabilities and speech-language pathology evaluation’, Hus [6]

argues that the principal difference between struggling and effective readers in Canada is their ability to engage executive functions. A clinical sample is used to illustrate the relationship between language and reading difficulties and executive function impairments.

van Bysterveldt and Gillon [7] describe in 'A descriptive study examining phonological awareness and literacy development in children with Down syndrome' the language and literacy profiles of over 70 school-age children in New Zealand with Down syndrome. A unique aspect of this study is the data on the children's home and school learning contexts. The results of this study are consistent, however, with the existing literature showing that children with Down syndrome have a reading profile with weaknesses in reading comprehension compared to word reading and accuracy.

Scliar-Cabral [8] discusses a phonics-based approach of teaching and learning literacy in the article 'Neuron recycling for learning the alphabetic principles'. Specifically, Scliar-Cabral argues that to recognize subtle differences in the features of letters, visual neurons are recycled (that is, visual neurons were initially involved in processing facial cues but become involved in word recognition). Scliar-Cabral tests her theory on early literacy development and suggests that speech-language pathologists expand thinking about how early literacy development occurs.

In the article 'Early language delay phenotypes and correlation with later linguistic abilities', Petinou and Spanoudis [9] examine the language skills of late talkers among toddlers speaking Cypriot-Greek and their typically developing age-matched peers. In this study the authors show that a poor phonetic repertoire of children at 28 months may be a predictive factor for later language development at the age of 36 months.

Ferman and Karni [10] focus on instructional methods for grammar with child learners in 'Explicit versus implicit instruction: which is preferable for learning an artificial morphological rule in children?' In this article, Ferman and Karni study whether explicit instruction in the form of explanations is beneficial for children to learn grammar. Their findings suggest that explicit instruction is 'very effective' for learning grammar.

Each article in this special child language issue of *Folia Phoniatria et Logopaedica* represents some of the most current topics in the field for persons working with children and adolescents with language impairments. It is our hope that the articles here will be instrumental in expanding or confirming the knowledge of speech-language pathologists across the globe.

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