

Abstract

It has long been the quest of developmental theorists to understand the mechanisms behind cognitive functioning and the acquisition of language. Studies have identified that there is an interdependent, dialectical relationship between cognitive development and language acquisition. The development of language, in typical populations, is therefore dependent on a baseline cognitive skill, which, once acquired, capacitates the further development of cognition. However, very little is known about this process within atypical populations, particularly those with speech and language impairment. This study examined the relationship between cognitive functioning and early predictive factors in an atypical population of pre-school children with speech and language impairment using three measures of cognitive functioning (as measured by the WPPSI (Wechsler Pre-School and Primary Intelligence Scale), the Griffiths and the JSAIS (Junior South African Individual Scale)) and a range of demographic, diagnostic and early developmental childhood factors. Results identify factors such as parental levels of education, family structure, gender and pregnancy and early childhood health as the main influences of cognitive performance. They also highlight the pervasive influence of speech and language impairment on non-verbal and processing speed abilities. The presence of genetic conditions as well as multiple diagnoses was frequently found to have significant associations with poor cognitive performance. The study also highlighted two things of unexpected interest. The first refers to the role of handedness (particularly undifferentiated handedness) in identifying cognitive difficulty which is related to hemispheric lateralisation, and its relationship to the various diagnostic groups represented within the sample. The second considers the high proportion of diagnostic co-morbidity and the common cognitive profiling patterns across diagnostic categories in abilities *outside* of the verbal range to highlight potential directions for future research. The implications of these overlaps are considered within existing research on brain laterality, hemispheric dominance and neurological immaturity.

Keywords: cognitive development; diagnosis; early development; speech and language impairment; pre-schooler; WPPSI, Griffiths, JSAIS.