‘HOT’ AND ‘COLD’ EXECUTIVE FUNCTIONING IN BILINGUAL CHILDREN WITH SLI

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Despite the fact that Specific Language Impairment (SLI) is considered as an autonomous diagnostic category, it is well documented that children with SLI exhibit deficits in domains other than language, such as executive functioning. Indeed, it has been demonstrated that these children show deficiencies in planning goal-directed behaviour, inhibiting inappropriate behaviours as well as in working memory (Henry et al., 2012; Marton, 2008; Hoffman & Gillam, 2004; Marton & Schwartz, 2003). These processes are grouped under the term ‘cold’ executive functioning (Zelazo & Muller, 2002). ‘Cold’ executive functioning is more likely to be elicited by relatively abstract decontextualized problems and is distinguished from ‘hot’ executive functioning, which is required for problems that are characterised by high affective involvement or demand flexible appraisals of the affective significance of stimuli. Studies on ‘hot’ and ‘cold’ executive functioning in SLI may improve our understanding of language as a socio-cognitive function and this issue could be further elaborated by studying ‘hot’ and ‘cold’ executive functioning in bilingual children with SLI (Crutchley et al., 1997; Paradis et al., 2003; Stavrakaki et al., 2008, 2011). Taking into account the above considerations, the present study aims to examine ‘hot’ and ‘cold’ executive functioning in bilingual children with SLI.

Ten school aged bilingual children with SLI are compared with 10 children with SLI and 10 typically developing children. Children that are attending intervention programs for more than 3 months, are not included in the sample. Children’s language development was assessed with the Verbal IQ Test (Stavrakaki & Tsimpli, 2000) as well as with the Peabody Picture Vocabulary Test –Revised (Dunn & Dunn, 1981). The IQ was assessed with the WISC-III (1997), which also measures auditory short memory and working memory. ‘Cold’ executive functioning was further assessed with the Tower Test (Delis et al., 2001), the Verbal and Motor Inhibition Test (Henry et al., 2012), the Animal Stroop Test (Stroop, 1935), the Verbal and Design Fluency Test (Delis et al., 2001) and the Trail Making Test (Delis et al., 2001).

‘Hot’ executive functioning was assessed with the Children’s Gambling Task (Zelazo & Kerr, 2004), the Gift Wrap Task (Kochanska et al., 2000) and the Whisper Task (Kochanssa et al., 2000). Moreover, parents were asked to complete the Behavior Rating Inventory of Executive Functions (BRIEF)(Goia et al., 2000), which distinguishes ‘hot’ from ‘cold’ executive functioning, the Child Behavior Checklist (Achenbach, 1991) as well as a questionnaire on demographic information and the medical history of the child.

The data analysis is in progress. The results will be discussed in relation to the issue of non-linguistic deficits in SLI and its implications for the diagnosis of the disorder as well as in relation to their contribution in planning effective intervention programs for bilingual children with SLI.
REFERENCES


