

Lexical Access in Cypriot Greek SLI

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Lahey & Edwards (1996, 1999) show that children with specific language impairment (SLI) and/or word-finding difficulties (WFDs) are less accurate at naming pictures of nouns than age-matched peers with typical language development (TLD). It is suggested that these lexical difficulties are related to a breakdown at the level of the phonological word form: children with SLI/WFD are unable to process this information successfully to retrieve the target word (Bishop 1997, Edwards & Lahey 1998). However, no picture-naming study involving children with SLI has investigated the category of verbs.

Nouns and verbs are highly variable in meaning, referring to objects and denoting states/ events, respectively. Since verb processing requires an understanding of relational concepts (nouns are often non-relational requiring single-object reference), they appear semantically more complex. Furthermore, a verb's central meaning is linked to two kinds of information, thematic role assignment and argument structure. The same verb often has multiple meanings when accompanied by different nouns, making its underlying meaning less transparent. Beyond reporting whether Cypriot Greek-speaking children with SLI/WFDs are less accurate than age-matched peers on naming, the aims of this study are to:

1. look for any grammatical word class effects in SLI and WFD naming performances;
2. examine naming errors considering psycholinguistic models of word processing;
3. determine whether error types differentiate children with SLI and WFDs from peers;
4. determine effects of lexical/psycholinguistic variables on naming accuracies;
5. compare quantitative/qualitative differences between bilingual and monolingual SLI.

Four groups participated: (i) 10 monolingual children diagnosed with SLI, (ii) 13 monolingual children with WFD, (iii) 30 six-year-old monolingual children with TLD, and (iv) 5 bilingual children with SLI. Inclusion criteria included no history of neurological, emotional or behavioural problems, hearing and vision adequate for test purposes, normal performance on screening measures of non-verbal intelligence or as reported by school psychologist, normal articulation, and no gross motor difficulties.

The Greek Object and Action Test (Kambanaros 2003) designed to assess noun- and verb-access/retrieval was used. The subtests contained 42 items each, stimuli were concrete inanimate object nouns and action verbs depicted by coloured photographs, such as (1) and (2). On the comprehension task, children were asked to point to the correct photograph from a set comprising the target object/action and two semantic distractors for each. For production, children were asked to name the object/action in one word. The results of the four subtests revealed no significant differences in comprehension between the 4 groups. Action names were significantly more difficult to retrieve than object names for TD and WFD children but not for children with SLI, who found both word types equally difficult. The results of simultaneous multiple regression analyses for the errors in naming compared to the psycholinguistic variables showed that age-of-acquisition, word imageability, and picture complexity (but not frequency or syllable length) affected picture naming performances for all groups. The error analysis further indicated that object and actions elicited different error types in all four groups of children and will be discussed in relation to (adult) models of lexical processing.