## How effective are English standardised assessments to differentiate between sequential bilingual children with and without Specific Language Impairment when tested in their second language

A wealth of studies have demonstrated that at an early stage of development, sequential bilingual (L2) children are often less accurate than their monolingual (L1) age-peers in their second language and they make similar errors to children with Specific Language Impairment (SLI) (e.g., Paradis, 2010). This makes it very difficult to distinguish between L2 children who have difficulties in one of the languages they speak because they have not been exposed to it from birth and those with SLI. Early identification is crucial; children who do not receive early intervention face risks of lower educational attainment, emotional difficulties, mental health problems, and poorer employment prospects (Bercow, 2008).

Practitioners in multilingual settings have long identified the difficulty in discriminating between typically developing (TD) L2 children and L2 children with SLI, leading to non-impaired L2 children being inappropriately diagnosed as language impaired and L2 children with SLI going undiagnosed and not receiving appropriate services (e.g., Crutchley, Conti-Ramsden, & Botting, 1997; Bedore & Pena, 2008; Pena et al., 2011). The Royal College for Speech & Language Therapists suggests that L2 children are assessed in all languages they speak including their dominant language, which in primary school may be English because English is the language of instruction in schools and many L2 children do not develop literacy skills in the L1. However, in the UK there are very few language assessments for community languages and none of them are normed for L2 children. In terms of English, only one assessment, the British Picture Vocabulary Scales II (BPVSII) (Dunn, Dunn, Whetton, & Burley, 1997), has L2 norms, but vocabulary is a relative strength for children with SLI and a relative weakness for L2 children.

Against this background, the present study addresses the effectiveness of English language assessments and tasks tapping domains that have been claimed to be clinical markers of SLI (tense and non-word-repetition) in differentiating between L2 children with and without SLI. Moreover, it compares monolingual with L2 children with and without SLI to address how bilingualism affects typical and atypical language development.

139 children took part in this study (38 L2-TD, 12 L2-SLI, 63 L1-TD, 26 L1-SLI). The four groups had an age range of 6-to-9 years and a mean age of 7;2 to 8;0. The L2 children had Turkish as L1 and were growing up with Turkish spoken in the home. Their first systematic exposure to English took place in the nursery between the ages of 2;6 and 3;6 years (age of onset: 3;4; SD in months: 8.5). Their mean length of exposure was 4 years (SD in months: 15). All children completed the Test for Reception of Grammar-2 (TROG-2) (Bishop, 2003), the BPVSII, the screening test of the Rice/Wexler Test of Early Grammatical Impairment (TEGI) (Rice & Wexler, 2001), and the Children's Test of Non-Word Repetition (CNRep) (Gathercole & Baddeley, 1996). Sensitivity and specificity were calculated to establish the effectiveness of the tasks in identifying children with SLI as having language impairment and TD children as not having language impairment.

The results showed that L2-SLI children were significantly less accurate than L2-TD children on the TROG2, on the CNRep, and on the regular past tense of the TEGI, but not on 3<sup>rd</sup> sg –s, irregular past tense and on the BPVSII (both L1 and L2 norms) (see Figures 1-6). Omission of past tense morphemes and difficulties to repeat 4-syllable non-words were the predominant errors in L2-SLI children. TROG2 and CNRep showed the highest sensitivity (100%), but only 59% (TROG2) and 31% (CNRep) specificity for L2 children. The results indicate that despite the limitations in using English language assessments with L2 children, assessment of past tense using the TEGI and phonological memory using the CNRep may aid the differentiation between L2 children with and without SLI.

Figure 1: TROG2

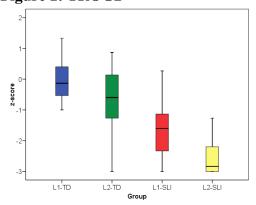


Figure 3: BPVSII L2 norms

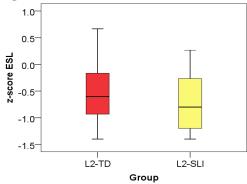


Figure 5: TEGI regular past tense

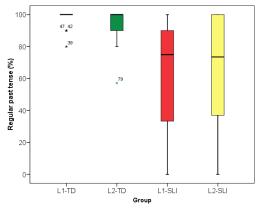


Figure 7: TEGI error analysis

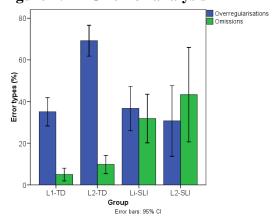


Figure 2: BPVSII L1 norms

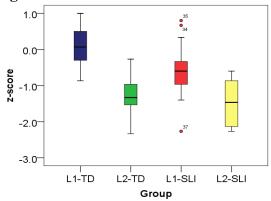


Figure 4: TEGI 3<sup>rd</sup> sg –s vs. past tense

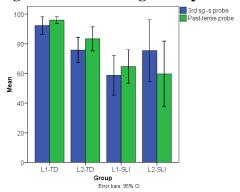


Figure 6: TEGI irregular past tense

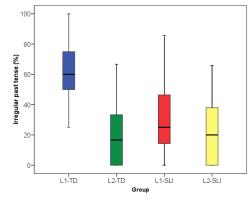


Figure 8: CNRep by syllable length

