LLCd Symposium.
SPEAKERS AND PRESENTATIONS.

Name: Kavitha J.

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Brief Bio: Ms. Kavitha. J completed her M.Sc (SLP) at AIISH, University of Mysore, India. Her dissertation investigated 'Novel word learning in simultaneous and sequential bilinguals versus monolinguals'. Neuroanatomical organization of functional language processing- a fMRI study, (Oral presentation at 41st ISHACON, Pune 2009. Recipient of the 'Shaila Vora award ' for the same. Poster presentation at the Academy of Aphasia 47th Annual meeting, Boston 2009). Optic Aphasia or Wernicke's Aphasia with Diplopia: A Customized Approach for Assessment (Poster presentation at 41st ISHACON, Pune 2009, Poster presentation at the Academy of Aphasia 47th Annual meeting, Boston 2009) were the scientific papers done by her. She currently works as a research officer at AIISH for the project titled 'Computerized version of Manual for Adult Fluent and Non-Fluent Aphasia Therapy - in Kannada (MANFAT-CVK)'. Her area of interests are bilingualism and cognition, neuroimaging and neurobehavioural measures correlation in normal and clinical population, and patterns of recovery in persons with aphasia.

and

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Theme: Morphology, semantics and syntax

Title of Presentation: Classification of bilingual children:Role of novel word learning and conceptual priming

Abstract: It is important to gain an insight into the lexical-semantic development of simultaneous and sequential bilinguals who vary on the age of introduction of L2 (introduction of L2 before three years and after three years respectively). Whether this difference in age of introduction of L2 has a significant impact on the cognitive development of this target population remains an important issue to be addressed. Vishnu, Abraham, Bhat & Chengappa (2010) investigated fast mapping skills in bilinguals and multilinguals in the age range of 18-25 years and concluded that a) there was no difference between L1 and L2 in bilinguals and b)the performance of

multilinguals in L1, L2 and L3 varied from bilinguals which was jointly determined by language proficiency, exposure and spoken usage. Sowmya (2011) investigated the fast mapping performance using the same methodology, in monolinguals and bilinguals in the age range of 8-12 years and concluded that there was a bilingual advantage compared to monolinguals on this task. But none of the studies investigated the reason for this bilingual advantage observed and if this may be due to a possible heterogeneity in the bilinguals group based on age of introduction of L2. Also there have not been any Indian studies documenting the role of conceptual priming in the bilingual population. This study aimed at exploring the above stated issues using the experimental paradigm described below.

Six simultaneous and six sequential bilinguals (Kannada - English) and six predominantly monolinguals (Kannada) in the age range of seven to eight years served as the experimental groups for the study. 20 children who were matched for age and language proficiency served as the control group. An adapted version of the questionnaire developed by Prema & Shanbal (2007) was used to obtain the language history of the child. The International Second Language Proficiency Rating scale (ISLPR) was used to quantify the proficiency in Kannada and English respectively. The WHO Ten question disability screening checklist (Singhi, Kumar, Malhi & Kumar, 2007) was used to rule out any developmental disorders in the study population and the NIMH socioeconomic scale (Venkatesan,2009) was used to match the SES of the groups.

Method: Phase one consisted of fast mapping of novel words. The method was adapted from a study by Vishnu et al (2010). For the fast mapping phase of novel words, eight words each per language which obey the phonotactic rules of the target language were constructed and were paired with eight novel referents which the children had not been exposed to (eight for English and eight for Kannada respectively). The novel words were presented along with novel referents by means of live story narration first in Kannada followed by English in every session using DMDX software. The entire procedure consisted of four sessions, each session lasting ten minutes. These sessions were divided by a break period of ten minutes, followed by testing for the words trained using two tasks. The first task was referent identification in which the target picture was presented along with a semantically related and unrelated picture and the subject had to identify the target. The targets to be identified were presented using a carrier phrase such as “Show me …..” followed by which the child had to press the key ‘1‘/’2’/’3’ based on the item selected. The second task was picture naming. The target picture was presented and the child had to name the picture as fast as possible. Reaction time and error response rates were used for analyses.

The second phase of the study was conceptual priming which involved the use of a free association task, which is an implicit memory task. The children were presented with seven English words and seven Kannada words orthographically, which resulted in a total of 14 words programmed using DMDX. The children were asked to utter any word related to the target as soon as possible. These responses were analyzed for directionality using the database obtained from the control

set of 20 children This database was rated by five qualified SLP's for directionality on three domains, part to whole relationship of words were judged to be unidirectional words (U), whole to part words and associative words were judged to be bidirectional words (B) and the words which did not fit any of the above two criteria were taken as none (N) which included phonologically rhyming words, phonologically rhyming non words, cross translational associated words and cross translational non associated words . This database obtained helped to clarify that all the obtained responses could be classified under the domains made for analysis. Using this database as the basis, the responses obtained from the experimental groups were analyzed on terms of of reaction time and directionality.

The obtained results can be summarized as follows:

1. Influence of the age of introduction of L2 is observed in the word learning strategies employed for novel word acquisition. This variation in word learning strategies may be because of the unique way of lexical semantic organization in the three groups brought about by the age of introduction of L2.

2. There was significant difference in performance on novel word learning as well as conceptual priming between predominantly monolingual children and the bilingual children, with bilinguals performing better in Kannada (L1).

3. In the bilinguals group, simultaneous bilinguals performed consistently better than the sequential bilinguals though it did not reach statistical significance.

4. The conceptual priming task further strengthened the results of varying word learning patterns suggesting that the lexical semantic organization of L1 and L2 was different in all three groups (simultaneous, sequential and monolingual)

5. The directionality analysis reveals that the performance on phonological and cross translational tasks may serve as an indicator tool to differentiate simultaneous from sequential bilinguals.