

## **BILINGUAL NUMBER ACQUISITION IN YOUNG CHILDREN**

Pierina Cheung (National Institute of Education), Rebecca Merkley (Carleton University),  
Daphne Ang (National Institute of Education), & Taeko Bourque (Carleton University)

Contact email address: [pierina.cheung@nie.edu.sg](mailto:pierina.cheung@nie.edu.sg)

The count sequence (e.g., one-two-three-four) is initially a meaningless string for young children. Over the course of 1 to 3 years, children learn the meanings of individual number words, before acquiring the meaning of counting. The developmental trajectory in number word learning has been shown in numerous culture and language groups. Although many children are raised in a multilingual environment, little is known about the development of early number word learning in bilingual children. In this study, we ask whether number word learning transfers between languages in children learning English but also Chinese or Malay. We tested 145 bilingual children between the ages of 2 and 5 in Singapore, a multilingual and multicultural society. The Give-N Task (Wynn, 1990, 1992) was used to assess children's number word knowledge. We found that children's number knowledge is significantly correlated between languages ( $\tau = .76$ ,  $p < .001$ ), and that once children learn the counting principles, they demonstrate counting knowledge in both languages. However, among children who have acquired small number word meanings, only approximately half of them showed the same number word knowledge in both languages. We also found that a small group of children were unable to recite the count sequence in one language and nevertheless demonstrated small number knowledge in that language. Yet, children who lack counting fluency in one language sometimes failed to use counting to give large numbers in that language. These findings suggest that counting fluency may affect small and large number acquisition differently. Finally, we found that the instruction language may play a larger role in early number word acquisition than the home language environment. Together, these findings extend previous studies to a new sample of bilingual children and point to a possibility that early number words are learned as translation equivalents in bilingual children.