

Individual Paper Session 21
Child SLA
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The development of L2 phonological awareness in relationship to L1 and intelligence

Mitsue Allen-Tamai
Bunkyo Gakuin University
allentamai@mm.em-net.ne.jp

In the past three decades, L1 researchers have actively investigated the relationship between children's awareness of spoken words and subsequent reading development and found the powerful relationship between these two factors. However, in the literature of this field, there seems to be no clear consensus among researchers regarding the precise meaning of phonological awareness and thus a variety of tasks have been used in each study to measure it. The present paper focuses on exploring the nature of L2 phonological awareness in relation to L1 phonological awareness.

A total of 115 five-year-olds and 22 six-year-olds, comprised of 59 boys and 78 girls, participated in the study. All the participants brought home permission slips and letters explaining the study and asking for the participation. All who returned the permission slips were tested. They took three tests to measure their English phonological awareness, four tests to measure Japanese phonological awareness and four subtests of Wechsler Preschool and Primary Scale of Intelligence.

Instruments measuring intelligence showed low correlation coefficients with those measuring English phonological awareness, but showed higher and moderate coefficients with those measuring Japanese phonological awareness. The measurement of blending phonemes showed the strongest correlation with verbal intelligence (Vocabulary and Similarities), while alliteration measurement had the highest correlation coefficients with non-verbal intelligence (Picture Completion and Block Design). The hypothesis that English (L2) phonological awareness is affected by Japanese (L1) phonological awareness and intelligence including memory was tested with structural equation modeling. The model had a chi-square value of 65.68, with 51 degrees of freedom ($p = .081$). Root-Mean-Square Residual (RMR) was .046 and also indicated good model fit. This index represents an acceptable to good fit of the model to the data. Forty percent of the variance in English phonological awareness was explained by this model.