

### **Abstract**

This thesis investigated the predictive power of orthographic awareness, phonological awareness, and gender on reading gains in Chinese of 74 dyslexic children in Hong Kong, who were in grade 2 and 3 when they participated in the study. Reading gains were measured by differences in word reading accuracy and fluency of two tests (with a mean interval of 102.9 days) taken by the participants, after regressing out training specific effects. The dataset was from another longitudinal study of dyslexia interventions in Hong Kong. In the data analysis, working memory capacity and vocabulary knowledge were included as control variables. Statistical analysis indicated no correlation between orthographic awareness, phonological awareness, gender, and reading gains. Orthographic awareness, phonological awareness, and gender were not statistically significant predictors of reading gains. Another round of statistical analysis was performed with duration between the two tests as either the independent variable or control variable. Duration was found to be a statistically significant predictor of Chinese reading gains related to both word reading fluency and accuracy, with weak and moderate predictive power respectively.