The Effect of Word Characteristics and Orthography on Vocabulary Learning

NCT # Not yet assigned

Version of document completed 1

Statistical Analysis Plan

Statistical Analyses

The most recent Statistical Packages for the Social Sciences (SPSS) version 28 will be used to perform separate repeated-measures analyses of covariance (ANCOVA) to explore the main effects and interactions between phonotactic probability (PP; high/low) and orthography (present/absent) on vocabulary comprehension, recognition, production, spelling recognition, and spelling production. Mother's years of education served as the covariate when included.

Levels and Factors

Levels refer to the different categories or conditions within a factor. Each factor can have two or more levels. This study involves two key factors: PP and orthography. Each factor is characterized by two distinct levels. For PP, the levels are defined as high versus low, reflecting the probability of a particular phonotactic pattern occurring within words. For orthography, the levels are defined as the presence or absence of orthography.

Dependent Variables

Research Question 1 - *Is there a significant difference in total correct scores at post-test for different word types with or without orthography with pre-test scores and mother's education level covaried as measured by comprehension, recognition, production, spelling recognition, and spelling production?*

A repeated measures ANOVA was conducted. The between-subjects factor is PP and Orthography. the word type (1 = high with orth; 2 = highwithout; 3 =lowwith; 4= lowwithout). The within subjects variable is the word type (1 = high with orth; 2 = highwithout; 3 =lowwith; 4= lowwithout). The dependent variable is total correct scores in the pretest and post test. The covariate is mothers educational level.