

Development of Taiwanese Sign Language Receptive Skills Test for Deaf Children

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Abstract : It has multiple purposes to develop a sign language receptive skills test. For example, this test can be used to be an important tool for education and to understand the sign language ability of deaf children. There is no available test for these purposes in Taiwan. Through the discussion of experts and the references of standardized Taiwanese Sign Language Receptive Test for adults and adolescents, the frame of Taiwanese Sign Language Receptive Skills Test (TSL-RST) for deaf children was developed, and the items were further designed. After multiple times of pre-trials, discussions and corrections, TSL-RST is finally developed which can be conducted and scored online. There were 33 deaf children who agreed to be tested from all three deaf schools in Taiwan. Through item analysis, the items were picked out that have good discrimination index and fair difficulty index. Moreover, psychometric indexes of reliability and validity were established. Then, derived the regression formula was derived which can predict the sign language receptive skills of deaf children. The main results of this study are as follows. (1). TSL-RST includes three sub-test of vocabulary comprehension, syntax comprehension and paragraph comprehension. There are 21, 20, and 9 items in vocabulary comprehension, syntax comprehension, and paragraph comprehension, respectively. (2). TSL-RST can be conducted individually online. The sign language ability of deaf students can be calculated fast and objectively, so that they can get the feedback and results immediately. This can also contribute to both teaching and research. The most subjects can complete the test within 25 minutes. While the test procedure, they can answer the test questions without relying on their reading ability or memory capacity. (3). The sub-test of the vocabulary comprehension is the easiest one, syntax comprehension is harder than vocabulary comprehension and the paragraph comprehension is the hardest. Each of the three sub-test and the whole test are good in item discrimination index. (4). The psychometric indices are good, including the internal consistency reliability (Cronbach's α coefficient), test-retest reliability, split-half reliability, and content validity. The sign language ability are significantly related to non-verbal IQ, the teachers' rating to the students' sign language ability and students' self-rating to their own sign language ability. The results showed that the higher grade students have better performance than the lower grade students, and students with deaf parent perform better than those with hearing parent. These results made TLS-RST have great discriminant validity. (5). The predictors of sign language ability of primary deaf students are age and years of starting to learn sign language. The results of this study suggested that TSL-RST can effectively assess deaf student's sign language ability. This study also proposed a model to develop a sign language tests.

Keywords : comprehension test, elementary school, sign language, Taiwan sign language

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