Educational Issues

How do test methods affect reading comprehension test performance?

AGNES LOCH (Institute of Foreign Languages and Communication, Budapest Business School, Hungary, lochagnes@yahoo.com)

The research explores the effect of two test method variables of foreign language reading comprehension tests - task type and language use - on test takers' reading comprehension performance. The aim of the investigation is either to support or to reject the hypothesis that neither task type nor native or target language use influences reading performance significantly if the tasks target the same construct. The study compared the participants' performance on two reading comprehension tests including either short-answer questions or multiple choice items: one in English (the target language), and one in Hungarian (the native language). Data were also collected from questionnaires and interviews. Statistical procedures were applied at three stages of the research: in the validation of the main research instruments, i.e. the reading tests (1), in grouping the participants into four comparable groups (2), and in analyzing the participants' test performances (3). The validity of the tests was ensured in several ways. Besides qualitative methods, the statistical analysis of test results in a pilot study (Cronbach alpha, Spearman-Brown split half estimates, item difficulty, etc.) helped in ensuring the validity and the reliability of the research instruments. Two-hundred and sixty-seven students participated in the Main Study from Budapest Business School. On the basis of their TOEFL tests results, they were arranged into four groups of comparable language proficiency. The analysis of variance of the test scores ($F_{3,234}$ = .168, p = .918) and of the participants ability logits computed in a Rasch analysis ($F_{3.234}$ = 422, p = .737) both showed that the groups were highly comparable. Each group completed two tests: one in English, and one in Hungarian. Following the traditional line of Classical Test Theory, the scores were regarded as interval data and were processed accordingly. For the analyses the Statistical Package for Social Sciences software was used. As the procedures of Item Response Theory are recommended for much larger sample sizes, their application was limited and complementary in the present study. The test takers' performance on the eight test versions was compared by using both parametric and non-parametric statistical computations because distribution on one of the eight tests was slightly skewed. Three sets of statistics were completed. First, test difficulty was computed to see if there was any statistically significant difference between the test versions. Next, the English and Hungarian versions of the same tests were compared to investigate the effect of native language use. Then, the effect of task type was examined. Statistics show that the research hypotheses gained partial verification only. In most cases no significant difference was found. However, there were exceptions, both in the task type and the language use comparisons. One of the main findings of the research is that although native language use had an enhancing effect on test scores in each test in absolute terms, it resulted in statistically significant differences in the case of the multiple choice tests only. This indicates that test method variables may interact with each other and exert a joint effect on performance.

Keywords: language testing, test method variables, test method effect, research methodology