

ESTIMATING RELIABILITY UNDER A GENERALIZABILITY THEORY MODEL
FOR WRITING SCORES IN C-BASE

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ABSTRACT

Reliability appraisal is important in test development and for test use. This paper appraises the reliability of the writing scores in *College Basic Academic Subjects Examination (College BASE)* by both the traditional and modern means of reliability estimation. Three types of analyses were conducted: correlational analysis, generalized analysis of variance and classical reliability analysis. Classical Test Theory (CTT) was compared and contrasted to Generalizability Theory (G-Theory). The G study design used in this study was $p \times (i : t)$, where p refers to the persons effect and is the object of measurement, i refers to the test items and is a random effect, and t represents the writing skills and is a fixed effect. The Generalizability coefficient from the G study was close to the Cronbach's alpha from the classical test theory. About 60% of the observed-score variance in the multiple-choice writing items in *College BASE* was due to the persons effect.