Abstrak:

The aim of this research study was to evaluate and compared psychometrics characteristics of achievement based on classical test theory (CTT) and item response theory (IRT) especially based on one (1PL), two (2PL), and three (3PL) parameters models. The data for the research consist of Senior High School students’ responses to the Mathematics National Exit Examination Academic Year 2003/2004 in Yogyakarta. The subjects were 7000 (3500 male and 3500 female students). The test has 40 multiple choice test items and is criterion referenced. By comparing the indices from CTT and IRT, the overall conclusion from this evaluation is that 2PL model is preferable to use when evaluating the test.

Keyword:

classical test theory, item response theory, multiple choice tes