Application of Percentile Test Equating Method in Scoring of High School Mathematics Tests

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Abstract

The purpose of this study is to acknowledge the basis for application of percentile test equating method in scoring of high school Mathematics test, for understanding the construction of the different test forms in same content, for comprehending of equipercentile equating under equivalent groups design, for understanding the utilization of equipercentile equating under anchor item designs and for application of the methods of the raw scores' transformation into the scaled scores. To obtain the required data, the Grade 10 Mathematics achievement test forms; Form A and Form B were constructed to be closely parallel. Two test forms were administrated to 640 students from six high schools of Yangon City Development Area in this study. The results of these two test forms were used in transformation of raw-to-scaled scores by applying the equipercentile equating method and under the selected testing designs. Scale scores were intended to aid test users in changing from the use of Form A to Form B of Mathematics achievement tests in grading system and other appliances. As the strong points of equipercentile equating method, percent of student below a particular score was equated in equipercentile method because this used percentile rank. Equipercentile equating was more suitable for large sample size. As the assumptions of equating theories, parallel test forms needed to be carefully and systematically constructed in equating situations. Particularly, scaled scores were reflected according to the equating tests and equating methods. So selection of equating methods and construction of different test forms for test equating are the vital roles of all equating researches.

Key Words: Equating, Equipercentile Equating

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