ABSTRACT

Thesis Title : A Comparison of Item Bias Between Transformed Item Difficulty Method and Chi-Square Method of Entrance Examination of Rajabhat Chachoengsao Institute

Student's Name : Miss. Rattanaporn Wongchuy

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Advisory Committee :

1. Assoc. Prof. Dr. Somboon Suriyawongse Chairperson
2. Assoc. Prof. Dr. Surasak Amornrattanasak

The purposes of this study were to investigate the item bias of aptitude test of Rajabhat Chachoengsao Institute entrance examination and to compare between the item bias obtained from two different methods, namely, Chi-Square Method and Transformed Item Difficulty Method. The sample included 2,066 students' test scores randomly selected from a population of students who applied to study at Rajabhat Chachoengsao. Chi-Square Method and Transform Item Difficulty Method were used to analyse the item bias according to students' gender, school location, and school type. Pearson Product-Moment correlation and Chi-Square test were also employed.

The results of this study indicated that :

1. When using Chi-Square Method, there were 65, 29, and 65 biased items detected in accordance with gender, school location, and school type respectively.

2. The Transformed Item Difficulty Method yielded 41, 14, and 44 biased item in accordance with gender, school location, and school type respectively.

3. Item bias indices detected by using Chi-Square Method and Transformed Item Difficulty Method were significantly related at the .05 level with the correlation coefficients of 0.8037 on gender, 0.7750 on school location, and 0.6701 on school type.

4. The number of biased items between Chi-Square Method and Transform Item Difficulty Method were significantly different at the .05 level on gender, school Location, and school type.