

An Investigation of Differential Item and Test Functioning of Scholastic Aptitude Test 2011 (SWUSAT 2011)

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Abstract : The purposes of this study were analyzed differential item functioning and differential test functioning of SWUSAT aptitude test classification by sex variable. The data used in this research is the secondary data from Srinakharinwirot University Scholastic Aptitude Test 2011 (SWUSAT 2011) SWUSAT test consists of four subjects. There are verbal ability test, number ability test, reasoning ability test and spatial ability test. The data analysis was carried out in 2 steps. The first step was analyzing descriptive statistics. In the second step were analyzed differential item functioning (DIF) and differential test functioning (DTF) by using the DIFAS program. The research results were as follows: The results of data analysis for all 10 tests in year 2011. Sex was the characteristic that found DIF all 10 tests. The percentage of item number that found DIF was between 10% - 46.67%. There are 4 tests that most of items favors female group. There are 3 tests that most of items favors male group and there are 3 tests that the number of items favors female group equal favors male group. For Differential test functioning (DTF), there are 8 tests that have small DIF effect variance.

Keywords : differential item functioning, differential test functioning, SWUSAT, aptitude test

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