

## The Analysis of Differential Item and Test Functioning between Sexes by Studying on the Scholastic Aptitude Test 2013

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**Abstract :** The purposes of this research 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 2013 (SWUSAT). 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 analyzed 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 DIF and DTF analysis for all 10 tests in year 2013. Gender was the characteristic that found DIF all 10 tests. The percentage of item number that found DIF is between 6.67% - 60%. There are 5 tests that most of items favors female group and 2 tests that most of items favors male group. 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 level.

**Keywords :** aptitude test, differential item functioning, differential test functioning, educational measurement

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