

ABSTRACT

Thesis Title : A Study on the Factors Relating to Students' Learning Achievement in Statistics at Assumption University

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This study was designed mainly with the aim of studying the factors relating to students' learning achievement in Statistics II at Assumption University. The independent variable used were: (1) students' computational background; (2) students' attitudes toward Statistics II; (3) students' strategic practices used in learning Statistics II; (4) tutorial classes attended; (5) students' perceptions on teaching Statistics II. The dependent variable was students' learning achievement measured by mid-term score, final score and total score in Statistics II examinations.

For students' computational background in Mathematics for Business and Statistics I, the population was explored by using students' results in both subjects. For students' attitudes towards Statistics II, students' strategic practices used in learning Statistics II, tutorial classes attended and students' perceptions on teaching Statistics II, four hundred twenty nine students were randomly selected and completed the questionnaires. Correlation analysis, independent sample t-test and chi-square were used to evaluate the data. Interviews were also conducted to eighteen students to have more discussions of the data.

Students' computational background in Mathematics for Business and Statistics I and students' attitudes toward Statistics II had significant positive relationship with students' learning achievement in Statistics II.

Students' perceptions on teaching Statistics II did not have significant relationship with students' learning achievement. Students' strategic practices used in learning Statistics II had significant relationship only on the part of the students who got high marks. Students attitudes toward Statistics II have a significant relationship with students' strategic practices used in learning Statistics II. Students' perceptions on teaching Statistics II have a significant relationship with students' strategic practices used in learning Statistics II.

There was a difference in learning achievement in Statistics II between students who attended tutorial classes and those who did not attend such a class. There were

differences in students' attitudes toward Statistics II, students' perceptions on teaching Statistics II, students' strategic practices used in learning Statistics II between students who attended tutorial classes and those who did not attend such a class.

According to the findings, two experimental researches are recommended:

1. Comparative study on students' strategic practices used for studying Statistics
2. Comparative study on teaching techniques in Statistics.

The results from the comparative studies would be used in designing the following training programs:

1. Students' training program on learning strategy.
2. Instructors' training program on teaching techniques.

The outcome from the researches and training programs will certainly benefit not only students and instructors but also administrators in making and developing plan and policy, both short term and long term.