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HOW ASSESSMENT SCORES FOR STATISTIC COURSE RELATE TO TOTAL GPA AMONG THE UNDERGRADUATE NURSING STUDENTS

Abstract:

Statistic course would be difficult for undergraduate students in college because a lot of statistic concepts would be new to the students. Except the "mean", most of the concepts such as null hypothesis, p value, type I and II errors could not be found in student's living experiences. Assessment is an important part in the college education. It is not only assessing what the students learned but also how a teacher taught. This report will based on personal experience to demonstrate the assessments in my applied statistic course among the nursing students and how these assessments relate to the final GPA of students when they graduated with the bachelor degree.

Study Aims:

1. Demonstrating the assessments for the class; home works (included individual and group works), computer statistical analysis test and final exam.

2. Explore the relationship between statistic course assessments and final GPA.

Research Method:

Statistic scores and final GPA of 143 nursing students who have graduated from 2015, 2016 and 2017 were collected. Statistic assessment scores from home works (mainly focused on basic concepts and data analysis), computer statistical analysis test (data management and analysis), final exam (covered all aspects of the course) and total score of the course (combined three scores above by ratio of 40%, 10% and 50%) were compared with final GPA. Correlation and multiple regressions were conducted for this report and BMI-SPSS version 20 was used for data analysis.

Results:

Mean scores were 75.2 ± 13.9 for home works, 69.8 ± 21.1 for computer analysis test, 64.2 ± 15.1 for final exam, 68.5 ± 12.5 for combined total score and 2.79 ± 0.27 for GPA. Median to high positive relationship between statistical assessment scores and final GPA were found. The correlation coefficients were 0.459, 0.554, 0.633 and 0.736 for GPA vs. home works, computer analysis, final exam and combined total score separately. In a multiple regression model with GPA as dependent variable, home works, computer analysis, and final exam scores as independent variables, they are all positive predictors for GPA. One unit increase in these independent variables, the GPA score will increase 0.004, 0.006 and 0.008 separately.

Conclusion:

Statistic course assessment scores, no matter for the home works, computer analysis test or final exam were useful predictor for final GPA of the nursing students. A combined total score for statistical course assessments has achieved the highest correlation coefficient (0.736) with the GPA.

Keywords:

Statistic course, Assessment, GPA