

PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI

ABSTRAK

Agata Niken Widyasari. 2011. Pengaruh Kemampuan Numerik Terhadap Kemampuan Mahasiswa Menyusun Model Matematika Dari Soal Cerita Pada Mata Kuliah Program Linear Di Program Studi Pendidikan Matematika Universitas Sanata Dharma Yogyakarta. Skripsi. Pendidikan Matematika. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Sanata Dharma.

Penelitian ini bertujuan untuk (1) mengetahui apakah ada hubungan antara kemampuan penalaran numerik dengan kemampuan menyusun model matematika dari soal cerita (2) mengetahui seberapa besar kemampuan penalaran numerik mempengaruhi kemampuan mahasiswa dalam menyusun model matematika dari soal cerita. Jenis penelitian merupakan penelitian korelasi dengan jenis data kuantitatif.

Penelitian ini dilaksanakan di Universitas Sanata Dharma Yogyakarta, pada tanggal 01 Oktober 2010 – 17 Desember 2010. Data berupa skor tes penalaran numerik dan skor tes menyusun model matematika. Dengan populasi mahasiswa Pendidikan Matematika angkatan 2009 yang mengambil mata kuliah Program Linear sebanyak 71 mahasiswa dan sampel sebanyak 56 mahasiswa. Penelitian ini menggunakan jenis data interval dan pengolahan data secara statistik inferensia parametris, dengan menggunakan Uji Normalitas Kolmogorov Smirnov, Korelasi Pearson Produk Momen, Regresi Linear, Uji Linearitas Sederhana, Uji Signifikansi.

Hasil penelitian ini dapat disimpulkan bahwa kemampuan penalaran numerik mempengaruhi mahasiswa dalam menyusun model matematika dari soal cerita pada mata kuliah program linear, besar pengaruh kemampuan penalaran numerik adalah kecil yaitu sebesar 19,803%. Besar pengaruh Inteligensi Matematis-Logis dapat dituliskan dalam persamaan regresi linear dengan selang kepercayaan 95% dapat dirumuskan $= 32,585 + 0,322 x$

Kata Kunci : kemampuan penalaran numerik, program linear, regresi linear

ABSTRACT

Agata Niken Widiasari. 2011. Influence of Numerical Reasoning Ability on Student's Ability in Formulating Mathematical Models from Word Problem in the Linear Programming in Mathematics Education Study Program of Sanata Dharma University. Research. Mathematics Education Study Program. Faculty of Teacher Training. Sanata Dharma University.

This research aims are (1) to know whether there is a relation between numerical reasoning ability and the student's ability in formulating mathematical models from word problem (2) to know how far the numerical reasoning ability influences the student's ability in formulating mathematical models from word problem. This study uses a correlation research with the quantitative data.

The research was conducted on October 1st up to December 17th, 2010 in Sanata Dharma University, Yogyakarta. The data are a score of a numerical reasoning ability and a test ability in formulating mathematical models from word problem. The population of the students of mathematic study program in grade 2009 who took Linear Program Credit was 71 students and the samples were 56 students. This study used an interval data, while the data analysis used parametric inferential statistic with the Kolmogorov Smirnov Normality Test, Pearson Product Moment Correlation, Linear Regression, Simple Linear Test, and Significant Test.

It is concluded that the result of the study is the numerical reasoning ability influences the student's ability in formulating mathematical models from word problem in the course of Linear Programming, and the percentage of the influence of the numerical reasoning ability intelligence is 19,803%. The influence of the numerical reasoning ability was written in an equivalence of the linear regression with the belief interval 95%, which can be formulated $= 32,585 + 0,322 x$.

Keywords : numerical reasoning ability, Linear Programming, Linear Regression