

AN ASSESSMENT OF THE ATTITUDES AND OUTCOMES OF
STUDENTS ENROLLED IN DEVELOPMENTAL BASIC MATHEMATICS
CLASSES AT PRINCE GEORGE'S COMMUNITY COLLEGE

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(ABSTRACT)

The purposes of this study were to assess the effect of the initial and exiting attitudes toward mathematics and academic outcomes of students placed in the Developmental Mathematics Basic Arithmetic course at a community college in Maryland. Major research questions included were: (1) What is the difference, if any, between the pretest and posttest attitudes toward mathematics of students placed in Basic Arithmetic as measured by the Aiken Mathematics Attitude Survey? (2) What is the effect, if any, of the placement test for students enrolled in Basic Arithmetic on the final exam score, attitude pretest scores, and attitude change scores? (3) What is the difference between the achievers and nonachievers in Basic Arithmetic as measured by the Aiken Attitude Towards Mathematics Survey? (4) What is the difference between the achievers and nonachievers in Basic Arithmetic based on the demographic variables of age, gender, and ethnicity?

The population consisted of 329 students placed in the developmental course DVM001 Basic Arithmetic. Data were collected by utilizing the Lewis R. Aiken Attitude Toward Mathematics Survey and the admissions and registration data. The analysis of variance and the Paired Samples Test were used to obtain the comparative and correlation analysis. Chi Square was utilized to determine the relationship between the final grade and the demographic variables. The results revealed: (a) No significant differences between the pretest and posttest attitudes toward mathematics; (b) The posttest shows a gain of 1.70 percent in the attitudes towards mathematics; (c) Attitude change based on gender showed a gain in the female score only; (d) Achievers and nonachievers have the same attitude towards mathematics; (e) There were statistically significant differences between the placement score and the final exam score, and (f) The demographic variables of age and gender were related to the final exam score.

DEDICATION

To my loving parents, Walter D. and Mary Elizabeth Pratt, the love, values, and continuous support of my endeavors has sustained me over the years and I dedicate this dissertation to you. The very special memories we shared continue to give me the strength and determination to forge ahead.

To my sister, Betty Brandon, my academic role model, your confidence and constant words of wisdom will always be cherished.

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