



De La Salle University - Dasmariñas  
GRADUATE PROGRAM

**Factors that Affect the Academic Achievement in College Algebra  
of Students from Selected Institutions  
of Higher Learning**

A Master's Thesis  
Presented to the Faculty  
of the Graduate School of Education, Arts and Sciences  
De La Salle University-Dasmariñas  
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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts in Mathematics

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ABSTRACT

**NAME OF INSTITUTION** : De La Salle University – Dasmariñas

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**TITLE** : Factors that Affect the Academic  
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from Selected Institutions of Higher  
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**OBJECTIVES OF THE STUDY:**

**A. GENERAL:**

This study aimed to determine the factors that affect the academic achievement in College Algebra of students from selected institutions of higher learning.

**B. SPECIFIC:**

1. To determine the frequency distribution of the freshman computer science student respondents in terms of the following
  - 1.1 academic achievement



- 1.2 study habits
- 1.3 family background
  - 1.3.1 mathematics courses taken by parents
  - 1.3.2 type of family
2. To determine how the students assess the school-related variables in terms of the following
  - 2.1 teaching performance
  - 2.2 school facilities
3. To determine if there is no significant difference in the respondent's academic achievement in College Algebra when they are grouped according to:
  - 3.1 study habits
  - 3.2 mathematics courses taken by parents
  - 3.3 type of family
  - 3.4 teaching performance
  - 3.5 school facilities
4. To determine if there is no significant relationship between the respondent's achievement in College Algebra and
  - 4.1 their study habits
  - 4.2 the type of family they had
  - 4.3 the teaching performance of their College Algebra teacher



4.4 the facilities in the school where they studied.

**SCOPE AND COVERAGE:**

The study was conducted at Dasmariñas using the first year computer science students of AMA Computer College – Cavite, De La Salle University – Dasmariñas, and Philippine Christian University – Dasmariñas who took their College Algebra during the first semester of school year 1998-1999.

**METHODOLOGY:**

The study made use of a descriptive method of research. It made use of the teacher-made questionnaire. The statistical methods applied were percentage, weighted mean, standard deviation, one-way ANOVA, and Pearson Product Moment Correlation. Validation of the instrument was done through content validation and by Spearman's rank correlation.

**FINDINGS:**

1. The academic achievement of the student respondents was satisfactory with mean grade of 81.62. The respondents observed their study habits often. Most of the parents had taken Algebra when they were studying. The student respondents manifested close family ties.



2. The student respondents assessed the teaching performance of their College Algebra teacher as very satisfactory and their school facilities as satisfactory.
3. When the respondents were grouped according to study habits observed, mathematics courses taken by fathers and mothers, teaching performance of their College Algebra teacher, and school facilities, it was found out that the difference is not significant at 0.05 level.
4. The study habits observed by the students, the mathematics course taken by parents, the type of family, the teaching performance and the school facilities were found to be not significantly related with the respondents' academic achievement in College Algebra at 0.05 level.

**CONCLUSIONS:**

The student respondents performed academically at the same level regardless of study habits observed, mathematics course taken by parents, teaching performance employed by their College Algebra teacher and availability of school facilities.

The study habits observed, the mathematics course taken by parents, the type of family, the teaching performance and school facilities did not influence academic achievement of students.



**RECOMMENDATIONS:**

1. Since performance in College Algebra is just satisfactory and Computer Science is extensively mathematically based, parents should motivate more their children to improve their academic achievement in College Algebra.
2. The school guidance counselors may use the result of this study to study the negative factors that affect the study habits and give remedial measures to the weak points.
3. The result of the study may be used by the Head of the Department and teachers to look into the way the students are evaluated.
4. Replication of the same study may be conducted using other samples, and during same semester when the students are taking the subject.



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