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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by

Lorraine Pratt Bassette

(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.

To my faculty advisor and first chairman of my dissertation, Lloyd Andrew, you will be etched fondly in my memory and heart forever.

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I extend a special appreciation to my students who have been the recipient of my services over twenty-five years and reminded me that motivation and determination comes from within.

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### TABLE OF CONTENTS

**ABSTRACT**

**DEDICATION** ........................................................................................................ iii

**ACKNOWLEDGEMENTS** .................................................................................. iv

**LIST OF TABLES** ............................................................................................. vii

**CHAPTER I  INTRODUCTION** ......................................................................... 1
  - Background of the Study .............................................................................. 3
  - Statement of the Problem ........................................................................... 3
  - Purpose of the Study .................................................................................. 4
  - Research Questions ................................................................................... 5
  - Assumptions ................................................................................................. 5
  - Significance of the Study .......................................................................... 6
  - Limitations of the Study ........................................................................... 7
  - Definition of Terms .................................................................................... 7
  - Organization of the Study ......................................................................... 9

**CHAPTER II  REVIEW OF THE LITERATURE** ............................................... 10
  - Nature of Attitudes ................................................................................... 10
  - Aiken Attitude Towards Mathematics Survey ......................................... 13
  - Maryland Developmental Mathematics ................................................... 13
  - Placement in Developmental Mathematics in PGCC ....................... 15
  - Basic Arithmetic Course .......................................................................... 17
  - The Community College .......................................................................... 18
  - Student Demographics .......................................................................... 20
  - Student Outcomes ..................................................................................... 21
  - Intervention and Retention ..................................................................... 22
  - Summary of Literature Review ............................................................... 25
# Table of Contents

**CHAPTER III METHODOLOGY**
- Design of the Study .......................................................... 27
- Population ........................................................................... 27
- Demographic Characteristics .............................................. 28
- Instrumentation ..................................................................... 36
- Aiken Attitude Toward Mathematics Survey ...................... 37
- Dependent Variables .......................................................... 39
- Summary .............................................................................. 39
- Data Collection Procedures ............................................ 40
- Data Analysis ....................................................................... 41
- Summary .............................................................................. 43

**CHAPTER IV FINDINGS**
- Research Question One .................................................... 44
- Research Question Two ...................................................... 54
- Research Question Three .................................................. 56
- Research Question Four ..................................................... 60
- Summary .............................................................................. 62

**CHAPTER V SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**
- Summary .............................................................................. 64
- Conclusions .......................................................................... 66
- Recommendations ........................................................... 67

**REFERENCES** ........................................................................ 69

**APPENDIX A**
- Attitude Towards Mathematics Survey Directions .............. 76
- Attitude Towards Mathematics Survey ................................ 77
- Permission Request to Conduct Survey ................................ 78
- Permission to Conduct Survey ........................................... 79
- Faculty Thank You .............................................................. 80
- DVM001 Basic Arithmetic Syllabus .................................... 81

**APPENDIX B**
- Basic Mathematics Placement Test Form A ...................... 83
- Request To Use Aiken Dreger Attitude towards ................. 84
- Permission by Dr. Lewis R. Aiken ...................................... 84
- Permission of Director of Admissions and Records ............ 85
- Certification of Exemption of Projects Involving Human Subjects 86

**VITA** ...................................................................................... 87
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Number of Times Taking the Course</td>
<td>29</td>
</tr>
<tr>
<td>Table 2</td>
<td>Year of Birth</td>
<td>31</td>
</tr>
<tr>
<td>Table 3</td>
<td>Age Group</td>
<td>32</td>
</tr>
<tr>
<td>Table 4</td>
<td>Gender</td>
<td>32</td>
</tr>
<tr>
<td>Table 5</td>
<td>Placement Score, Test Score First Time at College</td>
<td>33</td>
</tr>
<tr>
<td>Table 6</td>
<td>Final Exam Score</td>
<td>34</td>
</tr>
<tr>
<td>Table 7</td>
<td>Grade in Class</td>
<td>35</td>
</tr>
<tr>
<td>Table 8</td>
<td>Ethnicity</td>
<td>35</td>
</tr>
<tr>
<td>Table 9</td>
<td>Attitude Pretest</td>
<td>46</td>
</tr>
<tr>
<td>Table 10</td>
<td>Attitude Posttest</td>
<td>47</td>
</tr>
<tr>
<td>Table 11</td>
<td>Paired Samples Statistics T Test of the Attitude Pretest and Posttest</td>
<td>49</td>
</tr>
<tr>
<td>Table 12</td>
<td>Crosstabulations of Attitude Difference by Age Group</td>
<td>50</td>
</tr>
<tr>
<td>Table 13</td>
<td>Analysis of Variance Associated with Attitude Difference by Age Group</td>
<td>51</td>
</tr>
<tr>
<td>Table 14</td>
<td>Placement Score, Final Exam Score, Attitude Pretest, Attitude Posttest, Attitude Difference, and Age In Years – Female</td>
<td>52</td>
</tr>
<tr>
<td>Table 15</td>
<td>Placement Score, Final Exam Score, Attitude Pretest, Attitude Posttest, Attitude Difference, and Age In Years – Male</td>
<td>52</td>
</tr>
<tr>
<td>Table 16</td>
<td>Group Statistics of Attitude Difference Based on Ethnicity</td>
<td>53</td>
</tr>
<tr>
<td>Table 17</td>
<td>Independent Samples Test of Attitude Difference Based on Ethnicity</td>
<td>53</td>
</tr>
<tr>
<td>Table 18</td>
<td>Correlations of Age in Years, Placement Score, Final Exam Score, Attitude Pretest, and Attitude Difference by Age</td>
<td>55</td>
</tr>
<tr>
<td>Table 19</td>
<td>Attitude Difference Based on Gender</td>
<td>57</td>
</tr>
<tr>
<td>Table 20</td>
<td>Analysis of Variance Associated With Attitude Difference by Gender</td>
<td>57</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Table 21</td>
<td>Attitude Difference Based on Gender and Age Groups</td>
<td>58</td>
</tr>
<tr>
<td>Table 22</td>
<td>Analysis of Variance Associated With Attitude Difference of Blacks Only by Gender and Age Group</td>
<td>58</td>
</tr>
<tr>
<td>Table 23</td>
<td>Final Grade by Gender and Age Group</td>
<td>59</td>
</tr>
<tr>
<td>Table 24</td>
<td>Analysis of Variance Associated With Final Grade, Gender, and Age Group</td>
<td>59</td>
</tr>
<tr>
<td>Table 25</td>
<td>Crosstabulation of Percent of Final Grade by Age Group</td>
<td>61</td>
</tr>
<tr>
<td>Table 26</td>
<td>Chi-Square Test by Final Grade and Age Group</td>
<td>61</td>
</tr>
<tr>
<td>Table 27</td>
<td>Crosstabulation of Percent of Final Grade by Gender</td>
<td>61</td>
</tr>
<tr>
<td>Table 28</td>
<td>Chi-Square Test by Final Grade and Gender</td>
<td>62</td>
</tr>
</tbody>
</table>