



SCHOOL of  
GRADUATE STUDIES  
EAST TENNESSEE STATE UNIVERSITY

East Tennessee State University  
Digital Commons @ East  
Tennessee State University

---

Electronic Theses and Dissertations

Student Works

---

December 1985

# A Study Comparing the Self-concept Scores Between Anglo and Chicano Children in the Canutillo, Texas School District

Glen M. Kraig

*East Tennessee State University*

Follow this and additional works at: <https://dc.etsu.edu/etd>



Part of the [Bilingual, Multilingual, and Multicultural Education Commons](#)

---

## Recommended Citation

Kraig, Glen M., "A Study Comparing the Self-concept Scores Between Anglo and Chicano Children in the Canutillo, Texas School District" (1985). *Electronic Theses and Dissertations*. Paper 2713. <https://dc.etsu.edu/etd/2713>

This Dissertation - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact [digilib@etsu.edu](mailto:digilib@etsu.edu).

## INFORMATION TO USERS

This reproduction was made from a copy of a manuscript sent to us for publication and microfilming. While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. Pages in any manuscript may have indistinct print. In all cases the best available copy has been filmed.

The following explanation of techniques is provided to help clarify notations which may appear on this reproduction.

1. Manuscripts may not always be complete. When it is not possible to obtain missing pages, a note appears to indicate this.
2. When copyrighted materials are removed from the manuscript, a note appears to indicate this.
3. Oversize materials (maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or in black and white paper format.\*
4. Most photographs reproduce acceptably on positive microfilm or microfiche but lack clarity on xerographic copies made from the microfilm. For an additional charge, all photographs are available in black and white standard 35mm slide format.\*

\*For more information about black and white slides or enlarged paper reproductions, please contact the Dissertations Customer Services Department.

**UMI** University  
Microfilms  
International

8604759

**Kraig, Glen Michael**

**A STUDY COMPARING THE SELF-CONCEPT SCORES BETWEEN ANGLO  
AND CHICANO CHILDREN IN THE CANUTILLO, TEXAS SCHOOL DISTRICT**

*East Tennessee State University*

**Ed.D. 1985**

**University  
Microfilms  
International** 300 N. Zeeb Road, Ann Arbor, MI 48106

A STUDY COMPARING THE SELF-CONCEPT SCORES BETWEEN ANGLO AND CHICANO  
CHILDREN IN THE CANUTILLO, TEXAS SCHOOL DISTRICT

---

A Dissertation  
Presented to  
the Faculty of the Department of Supervision and Administration  
East Tennessee State University

---

In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

---

by  
Glen M. Kraig  
December, 1985

APPROVAL

This is to certify that the Graduate Committee of

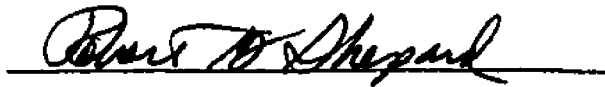
GLEN M. KRAIG

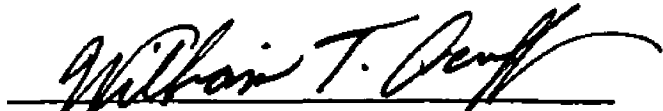
met on the

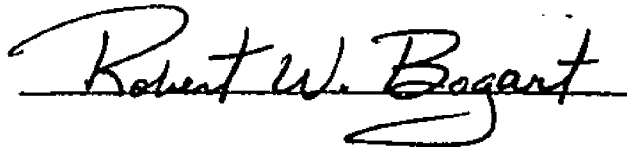
8th day of August, 1985.

The committee read and examined his dissertation, supervised his defense of it in an oral examination, and decided to recommend that his study be submitted to the Graduate Council and the Associate Vice-President for Research and Graduate Studies in partial fulfillment of the requirements for the degree Doctor of Education.

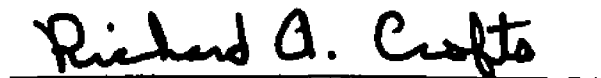
  
Chairman, Graduate Committee







Signed on behalf of  
the Graduate Council

  
Associate Vice-President for Research  
and Graduate Studies

## ABSTRACT

### A STUDY COMPARING THE SELF-CONCEPT SCORES BETWEEN ANGLO AND CHICANO CHILDREN IN THE CANUTILLO, TEXAS SCHOOL DISTRICT

by

Glen M. Kraig

The problem of this study was to determine if differences exist in the self-concept scores between Anglo children and Chicano children. A secondary problem was to determine the level of correlation between self concept scores and academic averages. The Martinek-Zaichkowsky Self Concept Scale for Children was used to determine self concept scores and grade point averages reported by the students' classroom teachers were used for the academic averages.

The findings of the study warranted the following conclusions:

1. Anglo, first grade children have a significantly higher total self concept than do Chicano, first grade children.
2. Chicano, third grade children have a significantly higher total self concept than do Anglo, third grade children.
3. No significant differences exist between total self concept scores of Anglo, sixth grade children as compared to those of Chicano, sixth grade children.
4. No significant differences exist between total self concept scores of Anglo, first grade children as compared to those of Anglo, sixth grade children.
5. No significant differences exist between total self concept scores of Chicano, first grade children as compared to those of Chicano, sixth grade children.
6. Significant, positive correlations between total self concept and total academic average were found only at the first and sixth grade levels for Chicano children.

**DEDICATION**

**To  
Benito Juarez,  
Pancho Villa  
and  
Emiliano Zapata**

## ACKNOWLEDGMENTS

The writer wishes to express sincere appreciation to Dr. Charles Burkett, committee chairperson, for his encouragement, guidance and often, his sympathetic ear.

Appreciation is also extended to all the members of the Department of Supervision and Administration and especially the members of the Doctoral Committee: Dr. William T. Acuff, Dr. Gem Kate Greninger, Dr. Robert G. Shepard and Dr. Robert Bogart.

The writer also wishes to thank his parents for their emotional and, at times, financial support. Their timely words of encouragement and praise made the task somehow more possible.

A final note of appreciation goes to Harry - just for being.



## CONTENTS

	Page
APPROVAL . . . . .	ii
ABSTRACT . . . . .	iii
DEDICATION . . . . .	iv
ACKNOWLEDGMENTS . . . . .	v
LIST OF TABLES . . . . .	ix
Chapter	
1. INTRODUCTION . . . . .	1
The Problem . . . . .	2
Statement of the Problem , . . . . .	2
Subproblems. . . . .	2
Significance of the Study . . . . .	2
Limitations . . . . .	5
Assumptions . . . . .	6
Definitions of Terms , . . . . .	6
Hypotheses . . . . .	7
Organization of the Study . . . . .	8
2. REVIEW OF RELATED LITERATURE . . . . .	9
Measures of Equality . . . . .	9
The Importance of Self Concept . . . . .	10
Comparison of Self Concept Factors in Anglo and Chicano Children . . . . .	13
The School's Role in the Differences in Self Concept Levels , . . . . .	15
3. METHODOLOGY AND PROCEDURES . . . . .	18
Description of the Study . . . . .	18

Chapter	Page
Procedures . . . . .	19
Population and Sample . . . . .	19
Methodology . . . . .	20
The Instrument . . . . .	20
Reliability and Validity . . . . .	21
Hypotheses of the Study . . . . .	23
Analysis of the Data . . . . .	24
4. DATA ANALYSIS AND INTERPRETATION . . . . .	26
Introduction . . . . .	26
Presentation of Data . . . . .	26
Comparisons of Self Concept Scores of Anglo Students with Those of Chicano Students . . . . .	27
Correlations Between Self Concept Scores and Academic Averages . . . . .	35
First Grade - Anglo . . . . .	36
First Grade - Chicano . . . . .	40
Third Grade - Anglo . . . . .	45
Third Grade - Chicano . . . . .	49
Sixth Grade - Anglo . . . . .	54
Sixth Grade - Chicano . . . . .	58
Comparisons of Self Concept Scores of First Grade Chicano Children with Those of Sixth Grade Chicano Children . . . . .	62
Comparison of Self Concept Scores of First Grade Anglo Children with Those of Sixth Grade Anglo Children . . . . .	64
5. SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS . . . . .	68
Summary . . . . .	68

<b>Chapter</b>	<b>Page</b>
Conclusions . . . . .	70
Implications . . . . .	72
Recommendations . . . . .	73
<b>BIBLIOGRAPHY . . . . .</b>	<b>75</b>
<b>VITA . . . . .</b>	<b>79</b>

LIST OF TABLES

Table	Page
1. WISC-R FULL SCALE, VERBAL AND PERFORMANCE IQ SCORES OF ANGLO AND CHICANO CHILDREN . . . . .	9
2. RELIABILITY DATA ON FACTOR ITEMS . . . . .	22
3. CONCURRENT VALIDITIES AND RATING CORRESPONDENCE OF THE MZSCS WITH THE PIERS-HARRIS COOPERSMITH SCALES AND TEACHER RATINGS . . . . .	23
4. GROUPING OF STUDENTS . . . . .	27
5. MEAN SCORES, <u>t</u> SCORES, AND PROBABILITY SCORES ON THE MZSCS FOR ANGLO AND CHICANO FIRST GRADE CHILDREN . . . .	28
6. MEAN SCORES, <u>t</u> SCORES, AND PROBABILITY SCORES ON THE MZSCS FOR ANGLO AND CHICANO THIRD GRADE CHILDREN . . . .	31
7. MEAN SCORES, <u>t</u> SCORES, AND PROBABILITY SCORES ON THE MZSCS FOR ANGLO AND CHICANO SIXTH GRADE CHILDREN . . . .	34
8. CORRELATION BETWEEN SELF CONCEPT (TOTAL SCORE) AND TOTAL ACADEMIC AVERAGE OF ANGLO, FIRST GRADE CHILDREN . . . .	36
9. REGRESSION ANALYSIS FOR TOTAL ACADEMIC AVERAGE: FIRST GRADE-ANGLO . . . . .	37
10. REGRESSION ANALYSIS FOR ARITHMETIC: FIRST GRADE-ANGLO . . . . .	38
11. REGRESSION ANALYSIS FOR LANGUAGE ARTS: FIRST GRADE-ANGLO . . . . .	39
12. REGRESSION ANALYSIS FOR SOCIAL STUDIES: FIRST GRADE-ANGLO . . . . .	40
13. REGRESSION ANALYSIS FOR PHYSICAL EDUCATION: FIRST GRADE-ANGLO . . . . .	41
14. CORRELATION BETWEEN SELF CONCEPT (TOTAL SCORE) AND TOTAL ACADEMIC AVERAGE OF CHICANO, FIRST GRADE CHILDREN . . . .	41
15. REGRESSION ANALYSIS FOR TOTAL ACADEMIC AVERAGE: FIRST GRADE-CHICANO . . . . .	42
16. REGRESSION ANALYSIS FOR ARITHMETIC: FIRST GRADE-CHICANO . . . . .	43

Table	Page
17. REGRESSION ANALYSIS FOR LANGUAGE ARTS: FIRST GRADE-CHICANO . . . . .	43
18. REGRESSION ANALYSIS FOR SOCIAL STUDIES: FIRST GRADE-CHICANO . . . . .	44
19. REGRESSION ANALYSIS FOR PHYSICAL EDUCATION: FIRST GRADE-CHICANO . . . . .	45
20. CORRELATION BETWEEN SELF CONCEPT (TOTAL SCORE) AND TOTAL ACADEMIC AVERAGE OF ANGLO, THIRD GRADE CHILDREN	
21. REGRESSION ANALYSIS FOR TOTAL ACADEMIC AVERAGE: THIRD GRADE-ANGLO . . . . .	46
22. REGRESSION ANALYSIS FOR ARITHMETIC: THIRD GRADE-ANGLO . . . . .	47
23. REGRESSION ANALYSIS FOR LANGUAGE ARTS: THIRD GRADE-ANGLO . . . . .	48
24. REGRESSION ANALYSIS FOR SOCIAL STUDIES: THIRD GRADE-ANGLO . . . . .	48
25. REGRESSION ANALYSIS FOR PHYSICAL EDUCATION: THIRD GRADE-ANGLO . . . . .	49
26. CORRELATION BETWEEN SELF CONCEPT (TOTAL SCORE) AND TOTAL ACADEMIC AVERAGE OF CHICANO, THIRD GRADE CHILDREN . . .	50
27. REGRESSION ANALYSIS FOR TOTAL ACADEMIC AVERAGE: THIRD GRADE-CHICANO . . . . .	50
28. REGRESSION ANALYSIS FOR ARITHMETIC: THIRD GRADE-CHICANO . . . . .	51
29. REGRESSION ANALYSIS FOR LANGUAGE ARTS: THIRD GRADE-CHICANO . . . . .	52
30. REGRESSION ANALYSIS FOR SOCIAL STUDIES: THIRD GRADE-CHICANO . . . . .	53
31. REGRESSION ANALYSIS FOR PHYSICAL EDUCATION: THIRD GRADE-CHICANO . . . . .	53
32. CORRELATION BETWEEN SELF CONCEPT (TOTAL SCORE) AND TOTAL ACADEMIC AVERAGE OF ANGLO, SIXTH GRADE CHILDREN . . . .	54

Table	Page
33. REGRESSION ANALYSIS FOR TOTAL ACADEMIC AVERAGE: SIXTH GRADE-ANGLO . . . . .	55
34. REGRESSION ANALYSIS FOR ARITHMETIC: SIXTH GRADE-ANGLO . . . . .	55
35. REGRESSION ANALYSIS FOR LANGUAGE ARTS: SIXTH GRADE-ANGLO . . . . .	56
36. REGRESSION ANALYSIS FOR SOCIAL STUDIES: SIXTH GRADE-ANGLO . . . . .	57
37. REGRESSION ANALYSIS FOR PHYSICAL EDUCATION: SIXTH GRADE-ANGLO . . . . .	57
38. CORRELATION BETWEEN SELF CONCEPT (TOTAL SCORE) AND TOTAL ACADEMIC AVERAGE OF CHICANO, SIXTH GRADE CHILDREN . . .	58
39. REGRESSION ANALYSIS FOR TOTAL ACADEMIC AVERAGE: SIXTH GRADE-CHICANO . . . . .	58
40. REGRESSION ANALYSIS FOR ARITHMETIC: SIXTH GRADE-CHICANO . . . . .	59
41. REGRESSION ANALYSIS FOR LANGUAGE ARTS: SIXTH GRADE-CHICANO . . . . .	60
42. REGRESSION ANALYSIS FOR SOCIAL STUDIES: SIXTH GRADE-CHICANO . . . . .	61
43. REGRESSION ANALYSIS FOR PHYSICAL EDUCATION: SIXTH GRADE-CHICANO . . . . .	62
44. MEANS, STANDARD DEVIATIONS, $t$ -SCORES, AND LEVELS OF SIGNIFICANCE FOR FIRST AND SIXTH GRADE CHICANO CHILDREN . . . . .	63
45. MEANS, STANDARD DEVIATIONS, $t$ -SCORES, AND LEVELS OF SIGNIFICANCE FOR FIRST AND SIXTH GRADE ANGLO CHILDREN . . . . .	65

## CHAPTER 1

### Introduction

It has long been boasted in the United States that all students have an equal opportunity for a quality education. While most Americans accept this as true, some disagree. Lupe Martinez stated that Chicano students have not had an equal opportunity to an education. She stated that it is evidenced by the fact that:

. . . there is a disproportionate number of young members of the Chicano population dropping out of school. Perhaps it is more a matter of our (Chicano) youth being pushed out of school by a social system that has historically discriminated against Third World People than 'dropping out.'<sup>1</sup>

Alicia Pausada noted that "Language minority students (in general) have a history of higher dropout rates, over agedness and academic lag . . . for which monolingual education has not proven successful."<sup>2</sup> The Population Reference Bureau pointed out that in 1981, 25 percent of the Hispanics between the ages of 14-20 were at least two years behind their grade level while only 9 percent of non-Hispanic whites were in that category.<sup>3</sup> In that same year, it was pointed out that of adults twenty-five and above, only 45.5 percent

---

<sup>1</sup> Lupe M. Martinez, Chicanos Counseling Chicanos, Is It Necessary? U.S. Resources in Education, ERIC Document ED 191 610, 1980, p. 14.

<sup>2</sup> Alicia Pausada, "Bilingual Education in the U.S.," The Journal of Communication, Spring 1979, p. 84.

<sup>3</sup> Cary Davis, Carl Haub, and JoAnne Willette, "U.S. Hispanics: Changing the Face of America," Population Bulletin 38, no. 3 (1983): 3.

of the Hispanics completed high school while 71.6 percent of non-Hispanic whites had done so.<sup>4</sup>

Cary Davis suggested that the language barrier is not the sole problem insofar that Cubans, who are more likely to speak Spanish at home, outpaced other Hispanic groups, including Chicanos, in high school achievement tests and college entrance levels.<sup>5</sup> This tends to give evidence that other factors besides language are involved.

### The Problem

#### Statement of the Problem

The problem of this study was to determine if differences exist in the self-concept scores between Anglo children and Chicano children.

#### Subproblems

A secondary problem was to determine the level of correlation between self concept scores and academic averages.

#### Significance of the Study

Martinez attributed the lack of success of Chicanos in school to the schools themselves:

When our (Chicano) youth enter school they are told indirectly and subtly, but in a powerful manner that Anglos, not Chicanos succeed. We are told this by the presence of mostly Anglo teachers, principals, heroes in textbooks, Anglo explorers, families, Anglos in the educational films and so forth.<sup>6</sup>

---

<sup>4</sup> Davis, p. 32.

<sup>5</sup> Davis, p. 33.

<sup>6</sup> Martinez, p. 8.



According to Martinez, these messages tell the Chicano student that effort in school is not worth the bother since only Anglos succeed.<sup>7</sup>

Joel Vela continued this line of reasoning with his examination of the "Melting Pot" theory, in which the Chicano must forget his past and assimilate himself into the dominant American culture.<sup>8</sup> Vela stated that the segment of American society that subscribes to the Melting Pot Theory;

has interpreted the ways of the Chicano as a handicap - as a deficiency that must be eradicated. . . . (It is as if the Chicano) is a carrier of a deficient culture that inhibits achievement.<sup>9</sup>

Henry Pascual indicated that culture is a part of a child and can neither be put aside nor removed. He stated:

Culture dictates the moral education of children even before children are brought under the influence of school. The societal precepts inculcated in them in childhood determine the kind and quality of their actions in later life. Hispanics in the United States cannot escape the influence of their centuries old culture nor reject the vitality and aggressiveness of this new one. . . .<sup>10</sup>

Leon Hymovitz explained how the broad acceptance of the Melting Pot Theory affects Chicano children. Because of the inability of many Americans to understand the cultural duality, or because

---

<sup>7</sup> Martinez, p. 8.

<sup>8</sup> Joel E. Vela, "Assimilation and the Chicano," Life Long Learning: The Adult Years, June 1980, p. 11.

<sup>9</sup> Vela, p. 11.

<sup>10</sup> Pascual, Henry W. Clients and Teachers in Bilingual Education Programs, U.S. Resources in Education, ERIC Document ED 212 455, 1978, p. 12.

of their lack of acceptance of the idea of cultural pluralism, the "Chicano is denied what is good in his own culture," and therefore "must attempt to imitate the cultural symbols of the dominant groups."<sup>11</sup>

This lack of acceptance, according to Hymovitz, has considerable effect on a child, and can greatly influence the child's life as an adult. If a child "does not grow up in an accepting setting that honors his feelings and pride," as an adult he "may not be able to handle the responsibilities of adulthood."<sup>12</sup> Hymovitz stated:

Trying to live a life of creative coexistence in a dual civilization at the same time poses insurmountable hurdles. The child senses early that his imported life style was deficient, deviating, as it did, from all that was taught. Can a child grow properly if his notions of self are obsessively distorted?<sup>13</sup>

If one were to assume that Hymovitz' assumptions were true, that the cultural duality of Hispanic students causes a lowering of self esteem, the Coleman study and Ricardo Garcia's report must be considered. Garcia reported that "academic success is in direct proportion to the concept that (a student) has of himself."<sup>14</sup> James Coleman reported that the correlation between self concept and academic success has been as high as +.5.<sup>15</sup>

---

<sup>11</sup> Leon Hymovitz, "Multicultural Education in America" Melting Pot Atonelement or At-One-Ment? English Journal, March 1977, p. 26.

<sup>12</sup> Hymovitz, p. 26.

<sup>13</sup> Hymovitz, p. 26.

<sup>14</sup> Ricardo L. Garcia, Ensenanza Bilingue, U.S. Resources in Education, ERIC Document ED 207 221, 1976, p. 7.

<sup>15</sup> James Coleman, et al., Equality of Educational Opportunity, Washington, D.C.: U.S. Government Printing Office, OE-38001, 1966. p. 319.

If the school experience has a cumulative and negative effect on self concept there will exist between Chicano and Anglo students in the same school system a widening gap in self concept scores that correspond to the widening gap in academic achievement. For this reason this type of study was deemed a worthwhile venture.

#### Limitation

The following limitations were placed on the study:

1. The study was limited to one school system in Texas where the student population was primarily Chicano and Anglo, and therefore, the findings may not be applicable to other geographic locales where the ethnic mix may be different.

2. The study was limited in scope to only five factors of self concept (1) Satisfaction and Happiness; (2) Home and Family Relationships and Circumstances; (3) Ability in Games, Recreation and Sports; (4) Personality Traits and Emotional Tendencies; and (5) Behavioral and Social Characteristics in School which were measured by the Martinek-Zaichkowsky Self Concept Scale for Children.

3. The study was limited by the requirement that the parents of the children in the study were required to sign a consent form which altered the random selection procedure, thereby decreasing the effectiveness of the randomization procedure.

4. The study was limited by the fact that self concept scores were developed from what the students recorded as their attitude, which may or may not have been their true attitude.

5. The study was limited to the 1984-1985 academic year.

6. The study was limited by the fact that not all children were tested at the same time of day.

#### Assumptions

The following assumptions were considered relevant to the study.

1. Being a member of a minority culture negatively affects self concept scores.
2. Linguistic minority students would have no difficulty interpreting the questions on the measuring instruments.
3. All students would answer the questions on the measuring instrument honestly.
4. The Martinek-Zaichkowsky Self Concept Scale for Children was appropriate and valid to test the problem statement.

#### Definitions of Terms

Throughout the study, the following terms have been interpreted according to the following definitions.

#### Ethnic Categories

Anglo. For the purpose of this study, an Anglo was any person of non-Hispanic, white origin.

Chicano. For the purpose of this study, a Chicano was any person of Spanish language background, regardless of race.

### Martinek-Zaichkowsky Self Concept Scale for Children (MZSCS)

A non-verbal, culture free instrument which is designed to measure global self concept of children in first through eighth grades. Since the scale is non-verbal, other than the oral directions, it can be administered to non-English speaking groups.

#### Hypotheses

The following hypotheses, stated in the declarative format, were formulated and tested at the .05 level of significance, using a two-tailed test.

1. There will be a significant difference between Martinek-Zaichkowsky Self Concept Scale for Children (MZSCS) Scores of Chicano children on each of the five factors plus the total score at the first grade level as compared to those of Anglo children.
2. There will be a significant difference between MZSCS scores of Chicano children on each of the five factors plus the total score at the third grade level as compared to those of Anglo children.
3. There will be a significant difference between MZSCS scores of Chicano children on each of the five factors plus the total score at the sixth grade level as compared to those of Anglo children.
4. There will be a significant positive correlation between MZSCS scores and academic averages for both Anglo and Chicano groups at the first, third, and sixth grade levels.
5. There will be a significant difference between MZSCS scores of Chicano children on each of the five factors plus the total score at the first grade level as compared to those at the sixth grade level.

6. There will be a significant difference between MZSCS scores of Anglo children on each of the five factors plus the total score at the first grade level as compared to those at the sixth grade level.

#### Organization of the Study

The study was organized into five chapters. Chapter 1 contains an introduction to the study, the statement and significance of the problem, the assumptions of the study, the definitions of terms, the research hypotheses, and the organization of the study.

Chapter 2 contains a review of related literature.

Chapter 3 contains the description of the methods and procedures employed in the development of the study.

Chapter 4 contains an analysis of the study's findings.

Included in Chapter 5 are the summary, conclusions, implications, and recommendations of the study.

## CHAPTER 2

### Review of Related Literature

#### Measures of Equality

A review of the literature showed little concrete evidence of any innate differences between Anglo and Chicano children. Terry Gutkin and Cecil Reynolds through the use of the Wechsler Intelligence Scale for Children (WISC-R) Full Scale, Verbal and Performance IQ tests, noted that there were no significant differences between the scores reported for Anglo students and Chicano students on any of the tested areas.<sup>1</sup> Their data are reproduced in Table 1.

Table 1

WISC-R Full Scale, Verbal and Performance  
IQ Scores of Anglo and Chicano Children<sup>2</sup>

Test	Anglo		Chicano	
	Mean	Standard Deviation	Mean	Standard Deviation
Full Scale	79	15	80.3	13.4
Verbal	78.5	14	80.2	12.9
Performance	84.5	15.2	82.9	15

<sup>1</sup> Terry B. Gutkin and Cecil R. Reynolds, "Factorial Similarity of the WISC-R for Anglos and Chicanos Referred for Psychological Services," Journal of School Psychology, Spring 1980, pp. 34-39.

<sup>2</sup> Gutkin and Reynolds, p. 35.

This evidence was supported by Richard Figueroa and Elmer Gallegos, who noted that differences on non-verbal, general intelligence tests "are either non-existent or validly accounted for by socioeconomic factors."<sup>3</sup>

Research conducted by Carlos Velasco-Barroza and Douglas Muller also indicated a lack of support for the contention of the existence of innate differences due to ethnicity.<sup>4</sup> In their study Mexican students in Mexico and Anglo students in the United States were tested for self esteem, self concept, and self ideal. The students were of the same age and grade level, and were tested in the same manner. It was noted that "only minor developmental differences appeared across national groups and (there was) a distinct tendency for differences between national groups to disappear by grade eight."<sup>5</sup>

#### The Importance of Self Concept

Considerable evidence was found in the literature indicating a relationship between self concept and academic achievement. The Coleman study<sup>6</sup> indicated that self concept positively correlated with academic

---

<sup>3</sup> Richard A. Figueroa and Elmer A. Gallegos, "Ethnic Differences in in School Behavior," Sociology of Education, October 1978, p. 296.

<sup>4</sup> Carlos R. Velasco-Barroza and Douglas Muller, "Development of Self Concept in Chilian, Mexicans, and United States School Children," The Journal of Psychology, January 1982, pp. 21-30.

<sup>5</sup> Velasco-Barroza and Muller, pp. 21-30.

<sup>6</sup> James Coleman, et al., Equality of Educational Opportunity, Washington, D.C.: U.S. Government Printing Office, OE-38001, 1966, p. 319.



achievement in a range between .4 and .5. Coleman continued to state that self concept with respect to learning and sense of control of the environment are related more strongly to achievement than any other family, attitudinal, teacher, or school variable studied.<sup>7</sup>

Academic achievement must not, however, be confused with intellectual ability. Paul Leo<sup>8</sup> and William Brookover<sup>9</sup> in separate studies found no relationships between self concept and intellectual ability and both concluded that differences existed between intellectual ability and academic performance.

John McDavid<sup>10</sup> described the relationship between self concept and academic achievement as being spiraled. He noted that when a child encountered academic success there would be a resultant rise in self concept. This rise in self concept, he reported, would yield another rise in academic achievement. Success, therefore, breeds success, or as Leo stated, people behave "like the sort of person they conceive themselves to be."<sup>11</sup> If a person conceives him/herself as being

---

<sup>7</sup> Coleman, et al., p. 319.

<sup>8</sup> Paul F. Leo, The Effects of Two Types of Group Counseling Upon the Academic Achievement and Self-Concept of Mexican-American Pupils in the Elementary School, U.S. Resources in Education, ERIC Document ED 059 002, 1972, p. 7.

<sup>9</sup> William Brookover, et al., "Self Concept of Ability and School Adjustment," U. S. Office of Education Research Project Number 1636 (East Lansing: Michigan State University, 1965).

<sup>10</sup> John McDavid, "Some Relationships Between Social Reinforcement and Scholastic Achievement," Journal of Consulting Psychology, 1959, pp. 23, 151-54.

<sup>11</sup> Leo, p. 39.

successful there will be a tendency for that person to be successful. Paralleling these findings, Hymovitz stated that negative self concepts and identity conflicts are inimicable to academic achievement and, therefore, are major obstacles to successful academic performance.<sup>12</sup>

Stanly Coopersmith<sup>13</sup> explained this phenomenon through his observation that children with a high self concept level set higher standards for themselves and come closer to meeting these standards than do children with lower self concept levels.

Floyd Ruch related self concept to a child's environment. He stated that a child's ideas about him/herself will reflect the appraisal of those guiding his development.<sup>14</sup>

On a psychological level . . . the individual strives to order his behavior and control his environment in such a way as to protect his picture of himself. If we have come to think of ourselves as intelligent, honest, fair, and good-natured, virtuous, and witty, for example, we strive by every possible means to maintain and enhance this picture. The same principle holds true, unfortunately . . . (for) the child who is sure that he has no aptitude for school. . . . (He) will make little effort to do well and will even tend to explain away any occasional success as an 'accident.'<sup>15</sup>

Ruch's observation appeared to be supported by Joseph Diaz' research with ninth grade Hispanic children, which indicated that if the students'

---

<sup>12</sup> Hymovitz, p. 27.

<sup>13</sup> Stanly Coopersmith, "Studies in Self Esteem," Scientific American, February 1963, pp. 96-107.

<sup>14</sup> Floyd L. Ruch, Psychology and Life (Chicago: Scott, Foresman and Company, 1963), p. 62.

<sup>15</sup> Ruch, p. 63.

attitudes toward the teacher, the language to be learned, and the environment of which they are a part are positive, then achievement may increase.<sup>16</sup>

Ethel Hepner noted similar findings in her research. She noted that:

Mexican-American boys do not feel they are as bright as their Anglo peers, and seem to have internalized and accepted the schools' view of them with regard to intelligence--even when they are in reality as bright as the other boys.<sup>17</sup>

#### Comparison of Self Concept Factors in Anglo and Chicano Children

Douglas Samuels reported in 1979 that he found no significant differences between the self concept scores of Chicano and Anglo children at the pre-school level.<sup>18</sup> Samuels utilized the Purdue Self Concept Scale for Pre-school Children (PSCS).

In a similar study, except with school aged children, Richard Figueroa found that significant differences did exist between the self

---

<sup>16</sup> Joseph O. Prewitt Diaz. An Analysis of the Effects of a Bilingual Curriculum on a Selected Group of Ninth Graders with Regards to Attitude toward School and Self Concept. U.S. Resources in Education, ERIC Document ED 189 894, 1979, p. 9.

<sup>17</sup> Ethel M. Hepner, Self-Concepts, Values and Needs of Mexican American Underachievers or (Must the Mexican-American Child Adopt a Self-Concept that Fits the American School?) U.S. Resources in Education, ERIC Document ED 048 954, 1970, p. 6.

<sup>18</sup> Douglas D. Samuels and Robert J. Griffore, "Ethnic and Sex Differences in Self Esteem of Preschool Children," The Journal of Genetic Psychology, September 1979, pp. 33-36.

concept factors of Anglo and Chicano children.<sup>19</sup> He found Chicano children to be "more shy, less sociable, less communicative, less bright, less sure, and less pressured to achieve" than their Anglo counterparts.<sup>20</sup>

Similar findings were noted by Ethel Hepner who in 1970 found that significant differences in self concepts, values, and role conceptions existed between Anglo and Chicano school aged boys. Hepner noted that these differences had an influence on the students' educational behaviors and achievements.<sup>21</sup>

The conclusions drawn by Hepner were later supported by Robert Leonetti. Leonetti continued to relate the importance of the relationship between self concept and academic achievement. He stated:

The effects of the low self concept on academic achievement for the Mexican-American child are likely to be especially pronounced since his self perception, due to cultural factors in many cases, tends to be more negative than it is for the 'Anglo' child from the mainstream culture.<sup>22</sup>

These "pronounced" differences would be considered crucial by Dorothy Rogers who found self concept of ability to be the most important predictor of academic success for both males and females.<sup>23</sup>

---

<sup>19</sup> Figueroa and Gallegos, pp. 289-98.

<sup>20</sup> Figueroa and Gallegos, p. 289.      <sup>21</sup> Hepner, p. 3.

<sup>22</sup> Robert Leonetti. A Primary Self Concept Scale for Spanish-Surnamed Children, Grades K-4, U.S. Resources in Education, ERIC Document ED 071 813, 1973, p. v.

<sup>23</sup> Dorothy Rogers. Personality Traits and Academic Achievement Among Mexican American Students. U.S. Resources in Education, ERIC Document ED 052 884, 1971, p. 82.

Not all researchers agreed with the aforementioned findings. The findings of Thomas Linton repudiated most of the previously cited studies. Linton reported that academic achievement was not significantly related to either academic or global self concept among Mexican-American students in the higher socioeconomic levels. He also reported finding that there was only a weak relationship between achievement and global self concept among lower socioeconomic Mexican-Americans and no significant relationships between academic self concept and achievement.<sup>24</sup>

The Schools' Role in the Differences  
in Self Concept Levels

Research conducted by David Baral indicated that U. S. born Chicano students did significantly better in three quarters of the academic areas than did foreign born Chicanos, and also had significantly higher measured self concept levels.<sup>25</sup> Baral suggested that this could be caused by "acculturative stress" which he defined as being caused by the "conflicting demands and expectations of two cultural systems."<sup>26</sup>

According to Maria Viramontes de Marin "culture is taught and lived within the context of the family and learned within the

---

<sup>24</sup> Thomas H. Linton, A Study of the Relationship of Global Self Concept, Academic Self Concept and Academic Achievement among Anglo- and Mexican-American Sixth Grade Students, U.S. Resources in Education, ERIC Document ED 063 053, 1972, p. 10.

<sup>25</sup> David Baral, Achievement Levels Among Foreign Born and Native Born Mexican American Students, U.S. Resources in Education, ERIC Document 167 310, 1977, p. 77.

<sup>26</sup> Baral, p. 23.

daily give and take of social relationships."<sup>27</sup> This concept was supported by Isabel Schon who stated that "cultural and ethnic attitudes are developed through experiences and one's environment over a period of years."<sup>28</sup>

Research by Gerald Engstrom appeared to synthesize these viewpoints when he concluded that:

The failure of minority students in school is seen as the result of the incompatibility between the minority students' cultural background and a school system reflecting only the middle class, Anglo-Saxon culture.<sup>29</sup>

Luis Laosa suggested that the "abrupt discontinuity between the home environment and the school environment . . . (is a) plausible explanation of the extremely high school dropout rate and academic underachievement among Chicanos."<sup>30</sup> Hymovitz agreed with Laosa when he stated that "if the child's culture and the dominant practice are out of joint, the learner will confront conflict with his past, . . . and feel the shame and stigma of being different."<sup>31</sup>

---

<sup>27</sup> Maria Viramontes de Marin, Understanding Chicano People, Language, and Culture. U.S. Resources in Education, ERIC Document ED 202 627, 1979, p. 16.

<sup>28</sup> Isabel Schon, Kenneth Hopkins and Carol Vojir, "The Effects of Special Curricular Study of Mexican American Culture on Anglo and Mexican-American Students' Perceptions of Mexican-Americans." Journal of Experimental Education, Summer 1982, p. 218.

<sup>29</sup> Gerald A. Engstrom, Mexican-American and Anglo-American Student Perceptions of the Learning Environment of the Classroom. U.S. Resources in Education, ERIC Document ED 214 890, 1981, p. 8.

<sup>30</sup> Luis M. Laosa, "School Occupation, Culture, and Family: The Impact of Parental Schooling on the Parent-Child Relationship." Journal of Educational Psychology, December 1982, pp. 823-24.

<sup>31</sup> Hymovitz, p. 27.

Manuel Ramirez placed much of the blame for this "cultural shock" on the school systems. He observed that many Chicano children have shown "feelings of alienation" because the "curriculum and/or the attitudes and behavior of school personnel challenge the values of the child."<sup>32</sup>

Hymovitz was stronger in his criticism than was Ramirez. He accused American education of attempting "cultural genocide" by trying to "change the beliefs, values, myths, and illusions of his (the Chicano's) culture. Viramontez indicated that one avenue of this "cultural genocide" has been the exclusion and/or misrepresentation of Chicanos in American history. The portrayal of such Mexican heroes as Pancho Villa and Emilio Zapata as "banditos" has depreciated the Chicanos' feeling of cultural self worth.<sup>34</sup> The Chicano student, according to Joseph Prewitt Diaz, must be "able to see himself (and his culture) as being accepted, loved, and respected . . . (if he is to) develop a positive self concept."<sup>35</sup>

---

<sup>32</sup> Manuel Ramirez, III, Clark Taylor, Jr., and Barbara Peterson, "Mexican-American Cultural Membership and Adjustment to School," Developmental Psychology, March 1971, p. 142.

<sup>33</sup> Hymovitz, p. 26.

<sup>34</sup> Viramontes, p. 14.

<sup>35</sup> Diaz, p. 3.

## CHAPTER 3

### Methodology and Procedures

A description of the study, a description of the population and the sample, the method and procedure utilized to collect the data, the instrument used, the hypotheses tested and the methods for analyzing the data collected are presented in this chapter.

#### Description of the Study

This was a descriptive study, the purpose of which was to determine if significant differences existed between the self concept scores of Anglo and Chicano elementary school children at selected grade levels, and what correlations might exist between the students' self concept scores and their grade point averages in such academic areas as arithmetic, language arts, science, and social studies. The academic areas studied varied with grade level due to differences in course offerings at the different levels.

The self concept scores were measured by the Martinek-Zaichkowsky Self Concept Scale for Children, a self descriptive self concept inventory scale. Scores were obtained for six randomly selected samples of children, Anglo and Chicano, in the first, third, and sixth grades.

After these scores were collected, they were tested to determine if significant differences existed in self concept scores along ethnic lines in any of the grade levels. These scores were also compared



to the students' grade point averages, to determine if there existed significant correlations between the self concept scores and the grade point averages.

### Procedures

#### Population and Sample

The population from which the sample was collected consisted of all Anglo and Hispanic children enrolled in first grade, third grade, and sixth grade in either elementary or intermediate school in the Canutillo, Texas School District. Any child who could not be positively identified as either Hispanic or Anglo was eliminated from the study.

By means of a stratified random sample six groups, consisting of Anglo and Chicano children in first, third, and sixth grades, were selected, each group having forty students. The groups were formed by obtaining class lists of all students in the first, third, and sixth grades. From the lists all students who could not be positively identified as Anglo or Hispanic were eliminated. Each of these three class lists, representing the three grade levels involved in the study, was then subdivided into two lists, one of Anglo students and the other of Hispanic students. Each student on each of the six class lists was assigned a number, beginning with 001, and continuing until every student had an assigned number. Using a table of random numbers forty students were selected for each of the six groups. Each group was stratified so as to insure equal male and female representation, although some fluctuation occurred due to absenteeism. The total sample, therefore consisted of 234 students, with 40 males and 40 females in the

first grade group, 39 males and 39 females in the third grade group, and 39 males and 37 females in the sixth grade group.

### Methodology

Permission to collect data for the research project was obtained from East Tennessee State University's Institutional Review Board. After permission was granted, the superintendent of the Canutillo, Texas School District was contacted and permission was obtained to contact the individual school principals. The principals of the selected schools were then contacted and permission was obtained to begin the random selection of students, to administer the testing instrument to the selected students, and to obtain the necessary grade point averages.

After permission was obtained at the various levels, the collection of data began. The grade point averages of the selected students were obtained and recorded by grade level and assigned student number. The students were then brought to a central location in each school and the instrument was administered as per the instruction manual. This procedure was repeated in each of the selected schools. After the data were collected, a letter of appreciation was sent to each of the building principals and to the superintendent.

### The Instrument

The Martinek-Zaichkowsky Self Concept Scale for Children (MZSCS) was the instrument used to collect the data concerning the self concept scores of all the children studied. The MZSCS was developed because:

A review of the self concept literature indicated a need for a well validated scale which would measure the

self concept of young children, yet would not require reading ability or an understanding of the English Language.<sup>1</sup>

The MZSCS consisted of twenty-six items, the first of which was an unscored, warm-up item. Each item consisted of two drawings, in each of which there was one child in shaded clothing. In one picture the child in the shaded clothing was depicted in a negative role, in the other, a positive role. The children were instructed to identify with a mark in the corresponding area the picture in which the child in the shaded clothing demonstrated behavior which most closely paralleled their own mode of behavior. The items on the test were designed to provide data on five major domains of self concept: Satisfaction and Happiness; Home and Family Relationships and Circumstances; Ability in Games, Recreation, and Sports; Behavioral, Personal, and Social Characteristics in School; and Personality Traits and Emotional Tendencies.<sup>2</sup>

#### Reliability and Validity

The reliability of the instrument was obtained through the use of the Hoyt reliability index. Further insight into the reliability was obtained by the use of the standard error of measurement. The Hoyt coefficients ranged from .70 to .80 while the standard error of measurement ranged from .61 to .85.<sup>3</sup> (See Table 2)

---

<sup>1</sup> Thomas J. Martinek and Leonard D. Zaichkowsky, Manual for the Martinek-Zaichkowsky Self Concept Scale for Children (Jacksonville, IL: Psychologists and Educators, Inc., 1977), p. 1.

<sup>2</sup> Martinek and Zaichkowsky, p. 9.

<sup>3</sup> Martinek and Zaichkowsky, p. 13.

Table 2  
Reliability Data on Factor Items<sup>4</sup>

Factor	Standard Error of Measurements	S.D.	Hoyt Coefficient
1.	.61	1.25	.71
2.	.70	1.39	.70
3.	.85	1.82	.75
4.	.57	1.20	.72
5.	.78	1.89	.80

Concurrent validity was determined by comparing MZSCS scores with scores from the Piers-Harris Children's Self Concept Scale, teacher ratings, and Coopersmith's Self Esteem Inventory. Comparison with the Piers-Harris scale indicated a correlation of .49, comparison with teacher ratings indicated a correlation of .60, and a comparison with the Coopersmith inventory indicated a correlation of .56.<sup>5</sup> (See Table 3)

<sup>4</sup> Martinek and Zaichkowsky, p. 9.

<sup>5</sup> Martinek and Zaichkowsky, p. 9.

Table 3

Concurrent Validities and Rating Correspondence  
of the MZSCS With the Piers-Harris Coopersmith  
Scales and Teacher Ratings<sup>6</sup>

Age of Samples	N	Measure	Pearson r with MZSCS Total Scores
6-10 yrs.	120	Piers-Harris Self- Concept Scale	.49
7-10 yrs.	86	Coopersmith Self- Esteem Inventory	.56
6-10 yrs.	120	Teacher Ratings	.60

Hypotheses of the Study

The following hypotheses, stated in the null format, were tested at the .05 level of significance.

Hypothesis 1. There will be no significant difference between MZSCS scores of Chicano children on any of the five factors or the total score at the first grade level as compared to those of Anglo children.

Hypothesis 2. There will be no significant difference between MZSCS scores of Chicano children on any of the five factors or the total score at the third grade level as compared to those of Anglo children.

Hypothesis 3. There will be no significant difference between MZSCS scores of Chicano children on any of the five factors or the total score at the sixth grade level as compared to those of Anglo children.

---

<sup>6</sup> Martinek and Zaichkowsky, p. 9.

Hypothesis 4. There will be no significant correlation between MZSCS scores and academic averages for both Anglo and Chicano groups at the first, third, and sixth grade levels.

Hypothesis 5. There will be no significant difference between MZSCS scores of Chicano children on any of the five factors or the total score at the first grade level as compared to those at the sixth grade level.

Hypothesis 6. There will be no significant difference between MZSCS scores of Anglo children on any of the five factors or the total score at the first grade level as compared to those at the sixth grade level.

#### Analysis of the Data

Insofar that the MZSCS measured self concept in five domains: satisfaction and happiness; home and family relationships and circumstances; ability in games, recreation, and sports; personality and emotional tendencies; and behavioral and social characteristics in school, each child had five scores. In each of the six groups the arithmetic means were completed for each of the five domains. The t-test for pooled variance, as illustrated below, was utilized to determine if significant differences existed between the mean scores of the corresponding domains of the Anglo and the Chicano groups at each of the three grade levels. The statistical test for differences in means was utilized and tested at the .05 level of significance using a two-tailed test. This procedure was followed to test Hypotheses 1, 2, 3, 5 and 6.

t-Test for Pooled Variance<sup>7</sup>

$$\underline{t} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{(N-1)S_1^2 + (N-1)S_2^2 \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}}$$

In order to test Hypothesis 4, a multiple regression was employed. It was used to determine the correlation between the criterion variable, the student's academic average, and the predictor variables; the scores on each of the five domains. No order was specified to the computer as to which variables were to be entered into the multiple regression analysis. This was done in order to allow the computer to select the best predictor variable and then to select the subsequent predictors on the basis of how well they improved upon the prediction of the earlier variables. The R value obtained from the multiple regression analysis was tested at the .05 level to determine if it was significantly different than 0. This procedure was replicated at each of the three grade levels indicated in Hypothesis 4, using the formula below.

Multiple R<sup>8</sup>

$$R_{1.2.3} = \sqrt{\frac{r_{1.2}^2 + r_{1.3}^2 - 2r_{1.2}r_{1.3}r_{2.3}}{1 - r_{2.3}^2}}$$

---

<sup>7</sup> John W. Best, Research in Education (Englewood Cliffs, N.J.: Prentice-Hall, 1981), p. 279.

<sup>8</sup> Dennis Hinkle, William Wiersoma and Stephen G. Jurs, Applied Statistics for the Behavioral Sciences (Boston, Mass.: Houghton-Mifflin Company), p. 400.

## CHAPTER 4

### Data Analysis and Interpretation

#### Introduction

Findings of the results obtained from the data of this study are reported in this chapter. Data were gathered and treated to test the hypotheses set forth in Chapter 1. These hypotheses were tested in the null format at the .05 level of significance to determine if significant differences in self concept existed along ethnic lines, if students' self concept scores correlated positively with their academic averages, and if trends existed in self concept scores at different grade levels.

The general outline for the statistical treatment of the data was given in Chapter 3, but further elaboration on the procedure will be necessary in this chapter to clarify the output produced.

The t-test for pooled variance was employed to test for significant differences, and both a Pearson r and a multiple regression R analysis were used to test for significant correlations.

#### Presentation of Data

For the study 240 students were selected. Six students were absent on the testing dates; therefore, 234 students completed the study. Eighty of the students selected were enrolled in first grade; seventy-eight were enrolled in third grade; and seventy-six were enrolled in sixth grade. At each of the grade levels selected the group was divided so as to form two groups, one of Anglo and one of



Chicano children. Placement of the students in the various groups is shown in Table 4.

Table 4  
Grouping of Students

Ethnicity	Grade 1	Grade 3	Grade 6
Anglo	40	39	38
Chicano	30	39	38

Note: N = 234

Comparisons of Self Concept Scores of Anglo Students with Those of Chicano Students

The first three hypotheses were formulated and tested to determine if significant differences existed between the self concept scores of Anglo children as compared with those of Chicano children.

Null hypothesis one ( $H_{01}$ ) states that there will be no significant difference between NZSCS scores of Chicano children at the first grade level as compared to those of Anglo children.

To test the first hypothesis the mean scores of each of the five domains of self concept and a total combined score for Chicano children were compared to the corresponding scores for Anglo children. These scores are reproduced in Table 5.

For the first factor of self concept, Satisfaction and Happiness, there was an obtained difference in the means of .800. The obtained value of  $t$  with an N of 30 was 2.449, which was significant at the .05 level. Therefore, for the factor of Satisfaction and Happiness, the null hypothesis was rejected.

Table 5  
 Mean Scores, t Scores, and Probability Scores  
 on the MZSCS for Anglo and Chicano  
 First Grade Children

Factor	Ethnicity	Mean	<u>t</u>	p
Satisfaction and Happiness	Anglo	7.300	2.449	.016*
	Chicano	6.500		
Home and Family Relationships	Anglo	6.400	1.751	.080
	Chicano	5.900		
Ability in Games	Anglo	5.850	1.275	.203
	Chicano	5.375		
Personality Traits and Emotional Tendencies	Anglo	4.500	1.567	.172
	Chicano	4.100		
Behavior and Social Characteristics in School	Anglo	7.100	2.110	.016*
	Chicano	6.250		
Total Combined Score	Anglo	22.150	2.007	.04*
	Chicano	20.075		

N = 80

df = 78

\* Significant at .05 level

For the second factor of self concept, Home and Family Relationships, there was an obtained difference in the means of .500. The obtained value of  $\underline{t}$  with an N of 80 was 1.751, which was not significant at the .05 level. Therefore, for the factor of Home and Family Relationships, the null hypothesis was not rejected.

For the third factor of self concept, ability in Games, there was an obtained difference in the means of .475. The obtained value of  $\underline{t}$  with an N of 80 was 1.275, which was not significant at the .05 level. Therefore, for the factor of Ability in Games, the null hypothesis was not rejected.

For the fourth factor of self concept, Personality Traits and Emotional Tendencies, there was an obtained difference in the means of .400. The obtained value of  $\underline{t}$  with an N of 80 was 1.567, which was not significant at the .05 level. Therefore, for the factor of Personality Traits and Emotional Tendencies, the null hypothesis was not rejected.

For the fifth factor of self concept, Behavioral and Social Characteristics in School, there was an obtained difference in the means of .850. The obtained value of  $\underline{t}$  with an N of 80 was 2.110, which was significant at the .05 level. Therefore, for the factor of Behavioral and Social characteristics in School, the null hypothesis was rejected.

For the total combined score of self concept there was an obtained difference in the means of 2.075. The obtained value of  $\underline{t}$  with an N of 80 was 2.007, which was significant at the .05 level. Therefore, for the total area of self concept the null hypothesis was rejected.

In summary, First Grade, Anglo children scored higher in each of the five factors of self concept and in the total self concept

score than Chicano, First Grade children scored. These differences were only significant, however, for two of the factors: Satisfaction and Happiness and Behavioral and Social Characteristics in School, and for the total combined score.

Null hypothesis two ( $H_0^2$ ) states that there will be no significant difference between NZSCS scores of Chicano children at the third grade level as compared to those of Anglo children.

To test the second hypothesis the mean scores of each of the five domains of self concept and a total combined score for Chicano children were compared to the corresponding scores for Anglo children. These scores are reproduced in Table 6.

For the first factor of self concept, Satisfaction and Happiness, there was an obtained difference in the means of .565. The obtained value of  $t$  with an  $N$  of 78 was  $-2.439$ , which was significant at the .05 level. Therefore, for the factor of Satisfaction and Happiness, the null hypothesis was rejected.

For the second factor of self concept, Home and Family Relationships, there was an obtained difference in the means of .692. The obtained value of  $t$  with an  $N$  of 78 was  $-2.893$ , which was significant at the .05 level. Therefore, for the factor of Home and Family Relationships, the null hypothesis was rejected.

For the third factor of self concept, Ability in Games, there was an obtained difference in the means of 1.026. The obtained value of  $t$  with an  $N$  of 78 was  $-2.862$ , which was significant at the .05 level. Therefore, for the factor of Ability in Games, the null hypothesis was rejected.

Table 6  
 Mean Scores, t Scores, and Probability Scores  
 on the MZSCS for Anglo and Chicano  
 Third Grade Children

Factor	Ethnicity	Mean	<u>t</u>	p
Satisfaction and Happiness	Anglo	6.397	-2.439	.016*
	Chicano	7.462		
Home and Family Relationships	Anglo	5.949	-2.892	.005*
	Chicano	6.641		
Ability in Games	Anglo	4.897	-2.862	.005*
	Chicano	5.923		
Personality Traits and Emotional Tendencies	Anglo	4.308	-1.264	.207
	Chicano	4.590		
Behavioral and Social Characteristics in School	Anglo	6.513	-2.374	.019*
	Chicano	7.282		
Total Combined Score	Anglo	20.231	-3.279	.001*
	Chicano	22.718		

N = 78

df = 76

\* significant at .05 level

For the fourth factor of self concept, Personality Traits and Emotional Tendencies, there was an obtained difference in the means of .282. The obtained value of  $\underline{t}$  with an N of 78 was -1.264, which was not significant at the .05 level. Therefore, for the factor of Personality Traits and Emotional Tendencies, the null hypotheses was not rejected.

For the fifth factor of self concept, Behavioral and Social Characteristics in School, there was an obtained difference in the means of .769. The obtained value of  $\underline{t}$  with an N of 78 was -2.374, which was significant at the .05 level. Therefore, for the factor of Behavioral and Social Characteristics in School, the null hypothesis was rejected.

For the total combined score of self concept there was an obtained difference in the means of -2.487. The obtained value of  $\underline{t}$  with an N of 78 was -3.279 which was significant at the .05 level. Therefore, for the total area of self concept the null hypothesis was rejected.

In summary, Third Grade, Chicano children scored higher in all five areas of self concept as well as in the total combined score. All of these differences were significant except for the factor of Personality Traits and Emotional Tendencies.

Null hypothesis three ( $H_{o3}$ ) states that there will be no significant difference between MZSCS scores of Chicano children at the sixth grade level as compared to those of Anglo children.

To test the third hypothesis the mean scores to each of the five domains of self concept and a total combined score for Chicano children

were compared to the corresponding scores for Anglo children. These scores are reproduced in Table 7.

For the first factor of self concept, Satisfaction and Happiness, there was an obtained difference in the means of .105. The obtained value of  $\underline{t}$  with an N of 76 was .339, which was not significant at the .05 level. Therefore, for the factor of Satisfaction and Happiness, the null hypothesis was not rejected.

For the second factor of self concept, Home and Family Relationships, there was an obtained difference in the means of -.342. The obtained value of  $\underline{t}$  with an N of 76 was -1.279, which was not significant at the .05 level. Therefore, for the factor of Satisfaction and Happiness, the null hypothesis was not rejected.

For the third factor of self concept, Ability in Games, there was an obtained difference in the means of .105. The obtained value of  $\underline{t}$  with an N of 76 was .272, which was not significant at the .05 level. Therefore, for the factor of ability in Games, the null hypothesis was not rejected.

For the fourth factor of self concept, Personality Traits and Emotional Tendencies, there was an obtained difference in the means of -.053. The obtained value of  $\underline{t}$  with an N of 76 was -.217, which was not significant at the .05 level. Therefore, for the factor of Personality Traits and Emotional Tendencies, the null hypothesis was not rejected.

For the fifth factor of self concept, Behavioral and Social Characteristics in School, there was an obtained difference in the means of

Table 7  
 Mean Scores, t Scores, and Probability Scores  
 on the MZSCS for Anglo and Chicano  
 Sixth Grade Children

Factor	Ethnicity	Mean	<u>t</u>	p
Satisfaction and Happiness	Anglo	6.974	.339	.683
	Chicano	6.868		
Home and Family Relationships	Anglo	6.000	-1.279	.202
	Chicano	6.342		
Ability in Games	Anglo	5.237	.272	.688
	Chicano	5.132		
Personality Traits and Emotional Tendencies	Anglo	4.184	-.217	.675
	Chicano	4.237		
Behavioral and Social Characteristics in School	Anglo	6.500	.897	.376
	Chicano	6.128		
Total Combined Score	Anglo	20.579	.171	.648
	Chicano	20.421		

N = 76  
 df = 74



.372. The obtained value of  $t$  with an  $N$  of 76 was .897, which was not significant at the .05 level. Therefore, for the factor of Behavioral and Social Characteristics in School, the null hypothesis was not rejected.

For the total combined score of self concept there was an obtained difference in the means of .158. The obtained value of  $t$  with an  $N$  of 76 was .171 which was not significant at the .05 level. Therefore, for the total area of self concept the null hypothesis was not rejected.

In summary, Sixth Grade, Chicano children scored higher in two factors of self concept; Home and Family Relationships and Personality Traits and Emotional Tendencies, and Sixth Grade, Anglo children scored higher in the remaining three factors as well as in the total combined score. None of these differences, however, were significant and none of the null hypotheses were rejected.

#### Correlations Between Self Concept Scores and Academic Averages

Null hypothesis four ( $H_0 4$ ) states that there will be no significant correlations between MZSCS scores and academic averages for both Anglo and Chicano groups at the first, third, and sixth grade levels.

To test the third hypothesis a Pearson Product Moment Correlation was employed comparing the total academic average of the student with his/her total self concept score.

Further insight into the correlations between self concept and academic averages was obtained by means of regression analyses. At each grade level in both ethnic groups five separate regression analyses

were completed; one for total academic average and one for each of the academic areas studied: arithmetic, language arts, social studies, and physical education.

To perform the regression analyses, the self concept factor that had the strongest positive correlation with the particular academic area, the criterion variable, was selected to be the first predictor variable. The subsequent predictor variables were selected by their ability to increase the stepwise multiple correlation; additional predictor variables were added until either the addition of variables no longer increased the level of correlation or until the level of significance was pushed beyond acceptable limits.

#### First Grade - Anglo

To test the fourth null hypothesis ( $H_{04}$ ) for first grade, Anglo children, a Pearson Product Moment Correlation indicated a correlation of .114. This correlation, however, was not significant at the .05 level; therefore, the null hypothesis was not rejected. The data are shown below in Table 8.

Table 8

Correlation Between Self Concept (Total Score) and Total Academic Average of Anglo, First Grade Children

N	r	P
40	.114	.490

The regression analysis for total academic average gave similar findings. Factor 4, Personality Traits and Emotional Tendencies,

provided the strongest positive correlation, .3043. The addition of Factor 3, Ability in Games, increased this correlation to .4267. The addition of Factor 5, Behavioral and Social Characteristics at School, increased the correlation to .4572. This correlation, however, was not significant at the .05 level, however, it was close at .060. A summary of these findings is reproduced below in Table 9.

Table 9

Regression Analysis for Total Academic Average:  
First Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.304	.3043	.0926	
Ability in Games	-.149	.4267	.1820	.0894
Behavioral and Social Characteristics in School	.149	.4572	.2091	.0271

F (3, 36) = 2.389  
P = .068

The regression analysis for Arithmetic showed that Factor 1, Satisfaction and Happiness, provided the strongest positive correlation, .2195. The addition of Factor 3, Ability in Games, increased this correlation to .3237. The addition of Factor 4, Personality Traits and Emotional Tendencies, increased the correlation to .3484. While the addition of Factor 2, Home and Family Relationships, did increase the

correlation to .3833, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 10.

Table 10  
Regression Analysis for Arithmetic:  
First Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Satisfaction and Happiness	.219	.2195	.0482	
Ability in Games	-.114	.3237	.1048	.0566
Personality Traits and Emotional Tendencies	.192	.3484	.1214	.0166
Home and Family Relationships	.072	.3833	.1469	.0255

F (4, 35) = 1.507  
P = .342

The regression analysis for language arts showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .1803. The addition of Factor 3, Ability in Games, increased this correlation to .3231. The addition of Factor 2, Home and Family Relationships, increased the correlation to .3590. While the addition of Factor 1, Satisfaction and Happiness, did increase the correlation to .4080, the condition was still not significant at the .05 level. A summary of the findings is reproduced below in Table 11.

Table 11

Regression Analysis for Language Arts:  
First Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.180	.1803	.0325	
Ability in Games	-.171	.3231	.1044	.0719
Home and Family Relationships	.009	.3590	.1289	.0245
Satisfaction and Happiness	.143	.4080	.1665	.0376

$F(4, 35) = 1.748$   
 $P = .160$

The regression analysis for Social Studies showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2856. The addition of Factor 3, Ability in Games, increased this correlation to .4546. The addition of Factor 2, Home and Family Relationship, increased the correlation to .4860. The addition of Factor 1, Satisfaction and Happiness, increased the correlation to .4907, which was significant at the .75 level. A summary of the findings is reproduced below in Table 12.

The regression analysis for Physical Education showed that Factor 4, Personality Trait and Emotional Tendencies, provided the strongest positive correlation, .4873. The addition of Factor 3, ability in Games, increased this correlation to .5404. The addition of Factor 5,

Table 12  
Regression Analysis for Social Studies:  
First Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.285	.2856	.0816	
Ability in Games	-.206	.4546	.2067	.1251
Home and Family Relationships	.071	.4860	.2362	.0295
Satisfaction and Happiness	.125	.4907	.2498	.0136
F (4, 35) = 2.914				
P = .034				

Behavior and Social Characteristics at School, increased the correlation to .5582. Factor 2, Home and Family Relationships, increased this correlation to .5632. The addition of Factor 1, Satisfaction and Happiness, increased the correlation to .5677, which was significant at the .05 level. A summary of the findings is reproduced below in Table 13.

#### First Grade - Chicano

To test the fourth null hypothesis ( $H_{04}$ ) for first grade, Chicano children, a Pearson Product Moment Correlation indicated a correlation of .434. This correlation was significant at the .05 level; therefore, the null hypothesis was rejected. The data are shown below in Table 14.

Table 13

Regression Analysis for Physical Education:  
First Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.487	.4873	.2375	
Ability in Games	-.014	.5404	.2921	.0546
Behavioral and Social Characteristics at School	.275	.5582	.3116	.0195
Home and Family Relationships	.371	.5632	.3172	.0056
Satisfaction and Happiness	.272	.5677	.3223	.0051
F (5, 34) = 3.233				
P = .017				

Table 14

Correlation Between Self Concept (Total Score) and Total Academic  
Average of Chicano, First Grade Children

N	r	P
40	.434	.0050

The regression analysis for Total Academic Average showed that Factor 4, Personality Traits and Emotion Tendencies, provided the strongest correlation, .4794. The addition of Factor 2, Home and

Family Relationships, increased this correlation to .4922. The addition of Factor 3, Ability in Games, increased the correlation to .4940. The addition of Factor 1, Satisfaction and Happiness, increased the correlation to .4956, which was significant at the .05 level. A summary of the findings is reproduced below in Table 15.

Table 15  
Regression Analysis for Total Academic Average:  
First Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotions	.479	.4794	.2298	
Home and Family Relationships	.447	.4922	.2423	.0125
Ability in Games	.309	.4945	.2445	.0022
Satisfaction and Happiness	.375	.4956	.2456	.0011

F(4, 35) = 2.848  
P = .037

The regression analysis for Arithmetic showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2581. While the addition of Factor 5, Behavioral and Social Characteristics in School did increase the correlation to .2621, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 16.



Table 16  
Regression Analysis for Arithmetic:  
First Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.258	.2581	.0666	
Behavioral and Social Characteristics	.239	.2621	.0687	.0021

F(2, 37) = 1.366  
P = .266

The regression analysis for Language Arts showed that Factor 4. Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2107. While the addition of Factor 3, ability in Games, did increase the correlation to .2317, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 17,

Table 17  
Regression Analysis for Language Arts:  
First Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.210	.2107	.0444	
Ability in Games	.067	.2317	.0537	.0093

F(2,37) = 1.050  
P = .361

The regression analysis for Social Studies showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2494. The addition of Factor 2, Home and Family Relationships, increased this correlation to .2907. While the addition of Factor 1, Satisfaction and Happiness, did increase the correlation to .3021 the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 18.

Table 18

Regression Analysis for Social Studies:  
First Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.249	.2494	.0622	
Home and Family Relationships	.105	.2907	.0845	.0223
Satisfaction and Happiness	.136	.3021	.0913	.0068
F(3, 36) = 1.206				
P = .321				

The regression analysis for Physical Education showed that Factor 1, Satisfaction and Happiness, provided the strongest positive correlation, .3245. The addition of Factor 4, Personality and Emotional Tendencies, increased this correlation to .3363. While the addition of Factor 2, Home and Family Relationships did increase the correlation to .3571, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 19.

Table 19

Regression Analysis for Physical Education:  
First Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Satisfaction and Happiness	.324	.3245	.1053	
Personality Traits and Emotional Tendencies	.275	.3363	.1131	.0058
Home and Family Relationships	.235	.3571	.1275	.0144
F (3, 36) = 1.754				
P = .172				

Third Grade-Anglo

To test the fourth null hypothesis ( $H_0$ ) for third grade Anglo children, a Pearson Product Moment Correlation indicated a correlation of .073. This correlation, however, was not significant at the .05 level, therefore the null hypothesis was not rejected. The data are shown below in Table 20.

Table 20

Correlation Between Self Concept (Total Score) and Total Academic  
Average of Anglo, Third Grade Children

N	r	P
39	.073	.6458

The regression analysis for Total Academic Average showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .1600. The addition of Factor 2, Home and Family Relationships, increased this correlation to .2261. While the addition of Factor 1, Satisfaction and Happiness," did increase the correlation to .3012, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 21.

Table 21

Regression Analysis for Total Academic Average:  
Third Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.160	.1600	.0256	
Home and Family Relationships	.007	.2261	.0511	.0255
Satisfaction and Happiness	.159	.3012	.0962	.0451
F(3,35) = 1.242				
P = .308				

The regression analysis for Arithmetic showed that Factor 3, Ability in Games, provided the strongest positive correlation, .1868. The addition of Factor 2, Home and Family Relationships, increased this correlation to .2263. While the addition of Factor 5, Behavioral and Social Characteristics in School, did increase the correlation to .3396,

the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 22.

Table 22  
Regression Analysis for Arithmetic:  
Third Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Ability in Games	.187	.1868	.0349	
Home and Family Relationship	-.035	.2263	.0512	.0163
Behavioral and Social Characteristics	.150	.3396	.1153	.0641

F (3, 35) = 1.521

P = .225

The regression analysis for Language Arts showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2054. The addition of Factor 2, Home and Family Relationships, increased this correlation to .2159. While the addition of Factor 1, Satisfaction and Happiness did increase the correlation to .2341), the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 23.

The regression analysis for Social Studies showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .1249. The addition of Factor 2, Home and Family Relationships, increased this correlation to .2256. While the addition

Table 23  
Regression Analysis for Language Arts:  
Third Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.205	.2054	.0422	
Home and Family Relationships	.104	.2159	.0466	.0044
Satisfaction and Happiness	.125	.2341	.0548	.0082
F(3, 35) = .677				
P = .000				

of Factor 3, ability in Games, did increase the correlation to .2354, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 24.

Table 24  
Regression Analysis for Social Studies:  
Third Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotions	.125	.1249	.0156	
Home and Family Relationships	-.036	.2256	.0509	.0353
Ability in Games	-.011	.2354	.0554	.0045
F(3, 35) = .648				
P = .000				

The regression analysis for Physical Education showed that Factor 1, Satisfaction and Happiness, provided the strongest positive correlation .2951. The addition of Factor 5, Behavioral and Social Characteristics in School, increased this correlation to .3621. The addition of Factor 4, Personality Traits and Emotional Tendencies, increased the correlation to .4087. While the addition of Factor 2, Home and Family Relationship, did increase the correlation to .4660, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 25.

Table 25  
Regression Analysis for Physical Education:  
Third Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>e</sup>	R <sup>2</sup> Increment
Satisfaction and Happiness	.295	.2951	.0871	
Behavioral and Social Characteristics at School	-.009	.3621	.1311	.0440
Personality Traits and Emotional Tendencies	.118	.4087	.1670	.0359
Home and Family Characteristics	.018	.4660	.2172	.0502
F(4, 34) = 2.314				
P = .075				

#### Third Grade - Chicano

To test the fourth null hypothesis ( $H_{04}$ ) for third grade. Chicano children, a Pearson Product Moment Correlation indicated a correlation

of .088. This correlation, however, was not significant at the .05 level and the null hypothesis was not rejected. The data are shown below in Table 26.

Table 26

Correlation Between Self Concept (Total Score) and Total Academic Average of Chicano, Third Grade Children

N	r	P
39	.088	.5936

The regression analysis for Total Academic Average showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2211. The addition of Factor 5, Behavioral and Social Characteristics in School, increased this

Table 27

Regression Analysis for Total Academic Average:  
Third Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.221	.2211	.0489	
Behavioral and Social Characteristics in School	.010	.2855	.0815	.0326
Home and Family Relationships	.176	.2973	.0884	.0069

F(3, 35) = 1.130  
P = .349



correlation to .2855. While the addition of Factor 2, Home and Family Relationships, did increase the correlation to .2973, the correlation was still not significant at the .05 level. A summary of the findings is reproduced in Table 27.

The regression analysis for Arithmetic showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2437. The addition of Factor 5, Behavioral and Social Characteristics in School, increased this correlation to .2929. While the addition of Factor 2, How and Family Relationships, did increase the correlation to .3214, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 28.

Table 28  
Regression Analysis for Arithmetic;  
Third Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.243	.2437	.0594	
Behavioral and Social Characteristics in School	.038	.2929	.0858	.0264
Home and Family Relationships	.230	.3214	.1033	.0175

F(3, 35) = 1.344  
P = .275

The regression analysis for Language Arts showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2267. The addition of Factor 3, Ability in Games, increased this correlation to .2522. While the addition of Factor 5, Behavioral and Social Characteristics in School, did increase the correlation to .2640, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 29.

Table 29  
Regression Analysis for Language Arts;  
Third Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.226	.2267	.0514	
Ability in Games	-.054	.2522	.0636	.0122
Behavioral and Social Characteristics in School	.161	.2640	.0697	.0061

F(3,35) = .874  
P = .000

The regression analysis for Social Studies showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .2307. The addition of Factor 5, Behavioral and Social Characteristics in School, increased this correlation to .2919. While the addition of Factor 2, Home and Family Relationships, did increase the correlation to .3280, the correlation was still not

significant at the .05 level. A summary of the findings is reproduced below in Table 30.

Table 30  
Regression Analysis for Social Studies:  
Third Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	.230	.2307	.0532	
Behavioral and Social Characteristics	.018	.2919	.0852	.0320
Home and Family Relationships	.230	.3280	.1076	.0224

F(3,35) = 3.104  
P = .256

The regression analysis for Physical Education showed that Factor 5, Behavioral and Social Characteristics in School, provided the strongest

Table 31  
Regression Analysis for Physical Education:  
Third Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Behavioral and Social Characteristics in School	-.308	.3031	.0949	
Home and Family Relationships	.070	.4263	.1817	.0868
Personality Traits and Emotional Tendencies	.011	.4584	.2101	.0204

F(3,35) = 3.104  
P = .038

positive correlation, .3081. The addition of Factor 2, Home and Family Relationships, increased this correlation to .4263. The addition of Factor 4, Personality Traits and Emotional Tendencies, increased the correlation to .4584, which was significant at the .05 level. A summary of the findings is reproduced in Table 31.

#### Sixth Grade-Anglo

To test the fourth null hypothesis ( $H_0 4$ ) for sixth grade Anglo children, a Pearson Product Moment Correlation indicated a correlation of .103. This correlation, however, was not significant at the .05 level; therefore, the null hypothesis was not rejected. The data are shown below in Table 32.

Table 32

Correlation Between Self Concept (Total Score) and Total Academic Average of Anglo, Sixth Grade Children

N	r	P
38	.103	.5436

The regression analysis for Total Academic Average showed that Factor 5, Behavioral and Social Characteristics in School, provided the strongest positive correlation, .1694. While the addition of Factor 4, Personality Traits and Emotional Tendencies, did increase the correlation to .2655, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 33.

Table 33  
Regression Analysis for Total Academic Average:  
Sixth Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Behavioral and Social Characteristics in School	.169	.1694	.0287	
Personality Traits and Emotional Tendencies	-.033	.2655	.0705	.0418

F(2,35) = 1.328  
P = .227

The regression analysis for Arithmetic showed that Factor 3, Ability in Games, provided the strongest positive correlation, .0949. While the addition of Factor 2, Home and Family Relationships, did increase the correlation to .1715, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 34.

Table 34  
Regression Analysis for Arithmetic:  
Sixth Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Ability in Games	.095	.0949	.0090	
Home and Family Relationships	-.071	.1715	.0294	.0204

F(2, 35) = .531  
P = .000

The regression analysis for Language Arts showed that Factor 5, Behavioral and Social Characteristics in School, provided the strongest positive correlation, .2620. While the addition of Factor 4, Personality Traits and Emotional Tendencies did increase the correlation to .3084, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 35.

Table 35  
Regression Analysis for Language Arts:  
Sixth Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Behavioral and Social Characteristics in School	.261	.2620	.0686	
Personality Traits and Emotional Tendencies	.059	.3084	.0951	.0205

F(2, 35) = 1.840  
P = .172

The regression analysis for Social Studies showed that Factor 5, Behavioral and Social Characteristics in School, provided the strongest positive correlation, .2963. The addition of Factor 4, Personality Traits and Emotional Tendencies, increased the correlation to .4297, which was significant at the .05 level. A summary of the findings is reproduced below in Table 36.

The regression analysis for Physical Education showed that Factor 4, Personality Traits and Emotional Tendencies, provided the strongest positive correlation, .1507. The addition of Factor 2, Home and Family

Table 36

Regression Analysis for Social Studies:  
Sixth Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Behavioral and Social Characteristics in School	.296	.2963	.0878	
Personality Traits and Emotional Tendencies	-.025	.4297	.1846	.0968

F(2, 35) = 3.964

P = .027

Relationships, increased this correlation to .2642. While the addition of Factor 1, Satisfaction and Happiness, did increase the correlation to .2713, the correlation was still not significant at the .05 level.

A summary of the findings is reproduced below in Table 37.

Table 37

Regression Analysis for Physical Education:  
Sixth Grade-Anglo

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Personality Traits and Emotional Tendencies	-.150	.1507	.0227	
Home and Family Relationships	-.004	.2642	.0700	.0473
Satisfaction and Happiness	-.051	.2713	.0736	.0036

F(3, 34) = .858

P = .000

Sixth Grade-Chicano

To test the fourth null hypothesis ( $H_0$ ) for sixth grade, Chicano children, a Pearson Product Moment Correlation indicated a correlation of .363. This correlation was significant at the .05 level, therefore the null hypothesis was rejected. The data are shown below in Table 38.

Table 38

Correlation Between Self Concept (Total Score) and Total Academic Average of Chicano, Sixth Grade Children

N	r	P
38	.363	.0239

The regression analysis for Total Academic Average showed that Factor 3, Ability in Games, provided the strongest positive correlation, .3803. The addition of Factor 1, Satisfaction and Happiness, increased

Table 39

Regression Analysis for Total Academic Average:  
Sixth Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise $R^2$	$R^2$ Increment
Ability in Games	.380	.3803	.1446	
Satisfaction and Happiness	.295	.4181	.1748	.0302
Home and Family Relationship	.019	.4892	.2393	.0545
Behavioral and Social Characteristics in School	.174	.4935	.2435	.0142

$F(4, 33) = 2.655$ .

$P = .049$



this correlation to .4181. The addition of Factor 2, Home and Family Relationships, increased the correlation to .4892. The addition of Factor 5, Behavioral and Social Characteristics in School, increased the correlation to .4935, which was significant at the .05 level. A summary of the findings is reproduced in Table 39.

The regression analysis for Arithmetic showed that Factor 3, Ability in Games, provided the strongest positive correlation, .2441. The addition of Factor 5, Behavioral and Social Characteristics in School, increased this correlation to .3127. The addition of Factor 1, Satisfaction and Happiness, increased the correlation to .3451. While the addition of Factor 2, Home and Family Relationships, did increase the correlation to .4277, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 40.

Table 40

Regression Analysis for Arithmetic:  
Sixth Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Ability in Games	.244	.244	.0596	
Behavioral and Social Characteristics in School	.236	.3127	.0978	.0382
Satisfaction and Happiness	.212	.3451	.1191	.0213
Home and Family Relationships	.065	.4277	.1829	.0638
F(4, 33) = 1.847				
P = .142				

The regression analysis for Language Arts showed that Factor 1, Satisfaction and Happiness, provided the strongest positive correlation, .1836. The addition of Factor 2, Home and Family Relationship, increased this correlation to .3318. While the addition of Factor 3, Ability in Games, did increase the correlation to .3548, the correlation was still not significant at the .05 level. A summary of the findings is reproduced below in Table 41.

Table 41  
Regression Analysis for Language Arts:  
Sixth Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Satisfaction and Happiness	.183	.1836	.0337	
Home and Family Relationships	-.079	.3318	.1101	.0764
Ability in Games	.173	.3548	.1259	.0158

F(3, 34) = 1.633  
P = .198

The regression analysis for Social Studies showed that Factor 3, Ability in Games, provided the strongest positive correlation, .5405. The addition of Factor 1, Satisfaction and Happiness, increased this correlation to .5810. The addition of Factor 2, Home and Family Relationships increased this correlation to .6110. The addition of Factor 5, Behavioral and Social Characteristics in School, increased the correlation to .6173. The addition of Factor 4, Personality Traits and Emotional Tendencies, increased the correlation to .6246, which

was significant at the .05 level. A summary of the findings is reproduced below in Table 42.

Table 42  
Regression Analysis for Social Studies:  
Sixth Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Ability in Games	.540	.5405	.2921	
Satisfaction and Happiness	.388	.5810	.3376	.0455
Home and Family Relationships	.133	.6110	.3733	.0357
Behavioral and Social Characteristics in School	.211	.6173	.3810	.0077
Personality Traits and Emotional Tendencies	.221	.6246	.3901	.0091

F(5, 32) = 4.094  
P = .005

The regression analysis for Physical Education showed that Factor 5, Behavioral and Social Characteristics in School, provided the strongest correlation, .3635. The addition of Factor 3, Ability in Games, increased the correlation to .4126, which was significant at the .05 level. A summary of the findings is reproduced below in Table 43.

Table 43

Regression Analysis for Physical Education:  
Sixth Grade-Chicano

Variable	Correlation Coefficient (r)	Stepwise Multiple Correlation (R)	Stepwise R <sup>2</sup>	R <sup>2</sup> Increment
Behavioral and Social Characteristics in School	-.363	.3635	.1321	
Ability in Games	.125	.4126	.1702	.0381

F(2, 35) = 3.590  
P = .037

In summary, significant, positive, correlations were found only at the first and sixth grade levels for Chicano children. The fourth null hypothesis, therefore, was rejected only for first grade, Chicano children and sixth grade, Chicano children, and was not rejected in all other cases.

Comparisons of Self Concept Scores of  
First Grade Chicano Children with  
Those of Sixth Grade Chicano children

The fifth hypothesis was formulated and tested to determine if significant differences existed between the self concept scores of Chicano, first grade children as compared with those of Chicano sixth grade children.

Null hypothesis five ( $H_{05}$ ) states that there will be no significant difference between HZSCS scores of Chicano children at the first grade level as compared to those at the sixth grade level.

To test the fifth hypothesis, the mean scores of each of the five domains of self concept and the total combined score of first grade,

Chicano children were compared to the corresponding scores for sixth grade Chicano children. These scores are reproduced below in Table 44.

Table 44

Means, Standard Deviations,  $t$ -scores, and Levels of Significance for First and Sixth Grade Chicano Children

Factor	Grade 1		Grade 6		Dif. in Means	$t$	P
	Mean	SD	Mean	SD			
Satisfaction and Happiness	6.500	1.854	6.868	1.277	.368	1.017	.3132
Home and Family Relationship	5.900	1.411	6.342	.994	.442	1.592	.1116
Ability in Games	5.375	1.957	5.132	1.614	.243	.598	.5570
Personality Traits and Emotional Tendencies	4.100	1.297	4.237	.998	.137	.520	.6037
Behavioral and Social Characteristics in School	6.250	2.181	6.128	1.989	.122	.259	.6865
Total Score	20.075	5.713	20.421	3.881	.346	.311	.6873

For the first factor of self concept, Satisfaction and Happiness, there was an obtained difference in the means of .368. The obtained value of  $t$  with an N of 78 was 1.017, which was not significant at the .05 level. Therefore, for the factor of Satisfaction and Happiness, the null hypothesis was not rejected.

For the second factor of self concept, Home and Family Relationships, there was an obtained difference in the means of .442. The obtained value of  $t$  with an N of 78 was 1.592, which was not significant at the .05 level. Therefore, for the factor of Home and Family Relationships, the null hypothesis was not rejected.

For the third factor of self concept, Ability in Games, there was an obtained difference in the means of .243. The obtained value of  $\underline{t}$  with an N of 78 was .598, which was not significant at the .05 level. Therefore, for the factor of ability in Games, the null hypothesis was not rejected.

For the fourth factor of self concept, Personality Traits and Emotional Tendencies, there was an obtained difference in the means of .137. The obtained value of  $\underline{t}$  with an N of 78 was .520, which was not significant at the .05 level. Therefore, for the factor of Personality Traits and Emotional Tendencies, the null hypothesis was not rejected.

For the fifth factor of self concept, Behavioral and Social Characteristics in School, there was an obtained difference in the means of .122. The obtained value of  $\underline{t}$  with an N of 78 was .259, which was not significant at the .05 level. Therefore, for the factor of Behavioral and Social Characteristics in School, the null hypothesis was not rejected.

For the Total Score of Self Concept there was an obtained difference in the means of .346. The obtained value of  $\underline{t}$  with an N of 78 was .311, which was not significant at the .05 level. Therefore, for Total Score of Self Concept, the null hypothesis was not rejected.

In summary, for null hypothesis five ( $H_0 5$ ), no significant differences were found either in Total Score, or in any of the five factors; therefore, the fifth null hypothesis was not rejected.

#### Comparisons of Self Concept Scores of First Grade Anglo Children with Those of Sixth Grade Anglo Children

The sixth hypothesis was formulated and tested to determine if significant differences existed between the self concept scores of

Anglo, first grade children as compared with those of Anglo, sixth grade children.

Null hypothesis six ( $H_{06}$ ) states that there will be no significant difference between MZSCS scores of Anglo children at the first grade level as compared to those at the sixth grade level.

To test the sixth hypothesis the mean scores of each of the five domains of self concept and the total combined score of first grade, Anglo children were compared to the corresponding scores for sixth grade Anglo children. These scores are reproduced below in Table 45.

Table 45

Means, Standard Deviations,  $t$ -scores, and Levels of Significance for First and Sixth Grade Anglo Children

Factor	Grade 1		Grade 6		Dif. in Means	$t$	P
	Mean	SD	Mean	SD			
Satisfaction and Happiness	7.300	.911	6.974	1.424	.326	1.212	.2273
Home and Family Relationship	6.400	1.128	6.000	1.315	.400	1.444	.1492
Ability in Games	5.850	1.312	5.237	1.762	.613	1.749	.0807
Personality Traits and Emotional Tendencies	4.500	.961	4.184	1.111	.316	1.344	.1797
Behavioral and Social Characteristics in School	7.100	1.317	6.500	1.623	.600	1.797	.0728
Total Score	22.150	3.183	20.579	4.176	1.571	1.874	.0615

For the first factor of self concept, Satisfaction and Happiness, there was an obtained difference in the means of .326. The obtained value of  $t$  with an  $N$  of 78 was 1.212, which was not significant at the .05 level. Therefore, for the factor of Satisfaction and Happiness, the null hypothesis was not rejected.

For the second factor of self concept, Home and Family Relationships, there was an obtained difference in the means of .400. The obtained value of  $t$  with an  $N$  of 78 was 1.444, which was not significant at the .05 level. Therefore, for the factor of Home and Family Relationships, the null hypothesis was not rejected.

For the third factor of self concept, Ability in Games, there was an obtained difference in the means of .613. The obtained value of  $t$  with an  $N$  of 78 was 1.749, which was not significant at the .05 level. Therefore, for the factor of Ability in Games, the null hypothesis was not rejected.

For the fourth factor of self concept, Personality Traits and Emotional Tendencies, there was an obtained difference in the means of .316. The obtained value of  $t$  with an  $N$  of 78 was 1.344, which was not significant at the .05 level. Therefore, for the factor of Personality Traits and Emotional Tendencies, the null hypothesis was not rejected.

For the fifth factor of self concept, Behavioral and Social Characteristics in School, there was an obtained difference in the means of .600. The obtained value of  $t$  with an  $N$  of 78 was 1.797, which was not significant at the .05 level. Therefore, for the factor of Behavioral and Social Characteristics in School, the null hypothesis was not rejected.



For the Total Score of Self Concept, there was an obtained difference in the means of .600. The obtained value of  $t$  with an  $N$  of 78 was 1.874, which was not significant at the .05 level. Therefore, for the Total Score of Self Concept, the null hypothesis was not rejected.

In summary, for null hypothesis six ( $H_06$ ), no significant differences were found either in Total Score, or in any of the five factors, therefore the sixth null hypothesis was not rejected.

## CHAPTER 5

### Summary, Conclusions, Implications, and Recommendations

#### Summary

The problem of this study was to determine if differences exist in the self concept score between Anglo children and Chicano children. A secondary problem was to determine the level of correlation between self-concept scores and academic averages.

Five factors of self concept: Satisfaction and Happiness, Home and Family Relationships, Ability in Games, Personality Traits and Emotional Tendencies, and Behavioral and Social Characteristics in School, as well as a total score of self concept were measured using the Martinek-Zaichkowski Self-Concept Scale for Children (MZSCS).

The inventory was administered to Anglo and Chicano children in first, third, and sixth grade.

The data were collected in two schools within the Canutillo, Texas, Public Schools: Canutillo Elementary School and Canutillo Intermediate School. The students were selected by means of a stratified random sampling technique. A total of 240 students were selected, but due to absenteeism, data were collected for only 234 students.

#### Findings

From the results of the data analysis and interpretation, the following findings are presented. Findings are reported as they pertain to each of the hypotheses originally formulated.

For Hypothesis 1, Anglo, first grade students scored significantly higher than did Chicano, first grade children on the total self concept inventory. While the Anglo group scored higher on all five factors, these differences were only significant on two of the factors: Satisfaction and Happiness and Behavioral and Social Characteristics in School.

For Hypothesis 2, Chicano, third grade students scored significantly higher than did Anglo, third grade children on the total self concept inventory. While the Chicano group scored higher on all factors, these differences were only significant on four of the factors: Satisfaction and Happiness, Home and Family Relationships, Ability in Games, and Behavioral and Social Characteristics in School.

For Hypothesis 3, no significant difference was found between the total self concept score of Anglo children as compared to Chicano children. While Anglo children scored higher on three of the factors: Satisfaction and Happiness, Ability in Games, and Behavioral and Social Characteristics in School; and Chicano children scored high on Home and Family Relationships and Personality Traits and Emotional Tendencies, none of these differences were significant.

For Hypothesis 4, six separate tests were performed to determine if significant correlations exist between a student's grade point average and his/her total self concept score. Significant correlations were found only for the group consisting of first grade, Chicano children and sixth grade, Chicano children.

For Hypothesis 5, no significant difference was found between the total self concept scores of first grade, Chicano children and those of sixth grade, Chicano children.

For Hypothesis 6, no significant difference was found between the total self concept scores of first grade, Anglo children and those of sixth grade, Anglo children.

### Conclusions

The conclusions which follow were drawn from the results of this research project. The sample was limited to students randomly selected from the Canutillo, Texas Public Schools; therefore, the conclusions may not be applicable to any other school system.

1. Anglo, first grade children have a significantly higher total self concept than do Chicano, first grade children, as measured by the MZSCS.
2. Anglo, first grade children have a significantly higher self concept on the factor of Satisfaction and Happiness than do Chicano, first grade children, as measured by the MZSCS.
3. Anglo, first grade children have a significantly higher self concept on the factor of Behavioral and Social Characteristics in School than do Chicano, first grade children, as measured by the MZSCS.
4. Chicano, third grade children have a significantly higher total self concept than do Anglo, third grade children, as measured by the MZSCS.
5. Chicano, third grade children have a significantly higher self concept on the factor of Satisfaction and Happiness than do Anglo, third grade children, as measured by the MZSCS.
6. Chicano, third grade children have a significantly higher self-concept on the facts of Home and Family Relationships than do Anglo, third grade children, as measured by the MZSCS.

7. Chicano, third grade children have a significantly higher self concept on the factor of Ability in Games than do Anglo, third grade children, as measured by the MZSCS.
8. Chicano, third grade children have a significantly higher self concept on the factor of Behavioral and Social Characteristics in school than do Anglo, third grade children, as measured by MZSCS.
9. No significant differences exist either in total self concept score or in any of the five factors between Anglo, sixth grade children and Chicano, sixth grade children.
10. Self concept scores of Chicano, third grade children are significantly higher than both Chicano, first grade children and Chicano, sixth grade children.
11. Self concept scores of Anglo, first grade children are significantly higher than both Anglo, third grade children and Anglo, sixth grade children.
12. There is a significant positive correlation between the self concept scores and grade point averages in Social Studies for first grade Anglo children.
13. There is a significant, positive correlation between the self concept scores and grade point averages in Physical Education for first grade, Anglo children.
14. There is a significant, positive correlation between the self concept scores and the total grade point average for first grade Chicano children.

15. There is a significant, positive correlation between the self concept scores and grade point averages in Physical Education for third grade, Chicano children.

16. There is a significant, positive correlation between the self concept scores and grade point averages in Social Studies for sixth grade, Anglo children.

17. There is a significant, positive correlation between the self concept scores and the total grade point average for sixth grade, Chicano children.

18. There is a significant, positive correlation between the self concept scores and grade point averages for Social Studies for sixth grade, Chicano children.

19. There is a significant, positive correlation between the self concept scores and grade point averages for Physical Education for sixth grade, Chicano children.

20. No significant differences exist between self concept scores, as measured by the MZSCS, of first grade, Chicano children and sixth grade, Chicano children.

21. No significant differences exist between self concept scores, as measured by the MZSCS, of first grade, Anglo children and sixth grade, Anglo children.

#### Implications

The findings of this study provided several implications for school administrators and teachers. Foremost, an adequate and comprehensive bilingual and English as a Second Language program, as found in the

Canutillo, Texas, Public Schools, can reduce the differences in self concept along ethnic lines that have been found in many other school systems.

It is possible, however, that other events could have caused the higher than expected self concept scores of the Chicano children.

During the week of the study, considerable attention of the media was focused on the fact that for the first time in the history of the Miss Texas/USA Pageant, a Chicano was chosen as the winner, and was favored to win the Miss USA pageant as well. It must be noted that this woman was from the El Paso area, less than fifteen miles from Canutillo. It is quite possible that this served to inflate, somewhat, the self concept scores of the Chicano children.

Another factor could be that in Canutillo, Chicanos are not a minority population. Chicanos in the school system outnumber Anglos by approximately a factor of ten. The fact that the "minority group" actually formed the majority could cause the differences found in this study as compared to similar studies in the literature. This could be compounded even further by the fact that the principals in both the schools studied were of Chicano origin, as were the majority of the teachers.

#### Recommendations

One of the first recommendations is that this study should be replicated in other parts of the country where the ethnic mix is different. This could, perhaps, increase the generalizability of the results.

Longitudinal studies should be performed to determine if situational factors altered the findings. This could assist in ascertaining the reliability of the findings.

Similar studies should be performed using self concept inventories that measure areas of self concept other than those measured. This could assist in ascertaining the concurrent validity of the findings. This could also be beneficial in ascertaining if other areas of self concept have a better predictability of academic performance.

It is further recommended that a study be performed to determine why third grade, Chicano students had such an upsurge in self concept only to go down again before reaching sixth grade.

One final recommendation is that district administrators should consider the ethnic composition of the students when determining the staffing pattern of teachers and building administrators if replication indicates a wide divergence of self concept scores along ethnic lines.



**BIBLIOGRAPHY**

## BIBLIOGRAPHY

- Baral, David. Achievement Levels Among Foreign Born and Native Born Mexican American Students. U.S. Resources in Education, ERIC Document 167 310, 1977.
- Best, John W. Research in Education. Englewood Cliffs, N.J.: Prentice Hall, 1981.
- Brookover, William, et al., "Self Concept of Ability and School Adjustment," U.S. Office of Education Research Project Number 1636. East Lansing: Michigan State University, 1965.
- Coleman, James, et al., Equality of Educational Opportunity. Washington, D.C.: U.S. Government Printing Office, OE 38001, 1966.
- Coopersmith, Stanly. "Studies in Self Esteem." Scientific American, February 1868, pp. 96-107.
- Davis, Cary; Haub, Carl; and Willette, JoAnne. "U.S. Hispanics: Changing the Face of America." Population Bulletin 38, no. 3 (1983): 3.
- de Marin, Maria Viramontes. Understanding Chicano People, Language, and Culture. U.S. Resources in Education, ERIC Document ED 202 627, 1979.
- Diaz, Joseph O. Prewitt. An Analysis of the Effects of a Bilingual Curriculum on a Selected Group of Ninth Graders with Regards to Attitude toward School and Self Concept, U.S. Resources in Education, ERIC Document ED 189 894, 1979.
- Engstrom, Gerald A. Mexican-American and Anglo-American Student Perceptions of the Learning Environment of the Classroom. U.S. Resources in Education, ERIC Document ED 214 890, 1981.
- Figueroa, Richard A., and Gallegos, Elmer A. "Ethnic Differences in School Behavior." Sociology of Education, October 1978, p. 296.
- Garcia, Ricardo. Enseñanza Bilingüe. U.S. Resources in Education, ERIC Document ED 207 331, 1976.
- Gutkin, Terry B. and Reynolds, Cecil R. "Factorial Similarity of the WISC-R for Anglos and Chicanos Referred for Psychological Services." Journal of School Psychology, Spring 1980, pp. 34-39.
- Hopner, Ethel M. Self-Concepts, Values, and Needs of Mexican-American Underachievers or Other Low Mexican-American Child About a Self-Concept that Fits the American School. U.S. Resources in Education, ERIC Document ED 207 331, 1976.

- Hinkle, Dennis, Wiersma, and Jurs, Stephen G. Applied Statistics for the Behavioral Sciences. Boston, Mass.: Houghton Mifflin Company, 1979.
- Hymovitch, Leon. "Multicultural Education in America: Melting Pot Atonement or At-One-Ment?" English Journal, March 1977, p. 26.
- Laosa, Luis M. "School Occupation, Culture, and Family: The Impact of Parental Schooling on the Parent-Child Relationship." Journal of Educational Psychology, December 1982, pp. 823-24.
- Leo, Paul. The Effects of Two Types of Group Counselors Upon the Academic Achievement and Self-Concept of Mexican-American Pupils in the Elementary School. U.S. Resources in Education, ERIC Document ED 059 002, 1972.
- Leonetti, Robert. A Primary Self Concept Scale for Spanish-Surnamed Children, Grades K-4. U.S. Resources in Education, ERIC Document ED 071 813, 1973.
- Linton, Thomas H. A Study of the Relationship of Global Self Concept, Academic Self Concept, and Academic Achievement Among Anglo and Mexican-American Sixth Grade Students. U.S. Resources in Education, ERIC Document ED 063 054, 1972.
- Martinek, Thomas J. and Zaichkowsky, Leonard D. Manual for the Martinek-Zaichkowsky Self Concept Scale for Children, Jacksonville, Fl.: Psychologists and Educators, Inc., 1977.
- Martinez, Lupe M. Chicanos Counseling Chicanos, Is It Necessary? U.S. Resources in Education, ERIC Document ED 191 610, 1980.
- McDavid, John. "Some Relationships Between Social Reinforcement and Scholastic Achievement." Journal of Consulting Psychology, 1959, pp. 23, 151-54.
- Pascual, Henry W. Clients and Teachers in Bilingual Education Programs. U.S. Resources in Education, ERIC Document ED 212 455, 1978.
- Pausada, Alicia. "Bilingual Education in the U.S." The Journal of Communication, Spring 1979, p. 84.
- Ramirez, Manuel, III, Taylor, Clark, Jr., and Peterson, Barbara. "Mexican-American Cultural Membership and Adjustment to School," Developmental Psychology, March 1971, p. 142.
- Ruch, Floyd L. Psychology and Life. Chicago: Scott, Foresman and Company, 1963.

- Rogers, Dorothy. Personality Traits and Academic Achievement Among Mexican-American Students. U.S. Resources in Education, ERIC Document ED 052 884, 1971.
- Samuels, Douglas D. and Griffore, Robert J. "Ethnic and Sex Differences in Self Esteem of Preschool Children." The Journal of Genetic Psychology, September 1979, pp. 33-36.
- Schon, Isabel; Hopkins, Kenneth; and Vojir, Carol. "The Effects of Special Curricular Study of Mexican American Culture on Anglo and Mexican-American Students' Perceptions of Mexican-Americans." Journal of Experimental Education, Summer 1982, p. 318.
- Vela, Joel E. "Assimilation and the Chicano." Life Long Learning: The Adult Years, June 1980, p. 11.
- Velasco-Barroza, Carlos R. and Muller, Douglas. "Development of Self Concept in Chilian, Mexicans, and United States School Children." The Journal of Psychology, January, 1982, pp. 21-30.

VITA

GLEN MICHAEL KRAIG

**Personal Data:** Date of Birth: July 9, 1952  
Place of Birth: Queens, New York  
Marital Status: Single

**Education:** Public Schools, New Hyde Park, New York  
Wagner College, Staten Island, New York; Spanish,  
Physics and Education, B.A.,  
East Tennessee State University, Johnson City,  
Tennessee; supervision and administration,  
M. Ed., 1982.  
East Tennessee State University, Johnson City,  
Tennessee; administration, Ed.D., 1985.

**Professional Experience:** Substitute Teacher, Great Neck Public Schools,  
Great Neck, New York, 1975-1976.  
Learning Laboratory Specialist, Great Neck Public  
Schools, Great Neck, New York, 1976-1977.  
Spanish and English Teacher, Morristown City Schools,  
Morristown, Tennessee, 1977-present.  
Chairman, Department of Foreign Languages,  
Morristown City Schools, Morristown, Tennessee,  
1980-present