

Old Dominion University

ODU Digital Commons

Theses and Dissertations in Urban Services -
Urban Education

College of Education & Professional Studies
(Darden)

Summer 1999

A Meta-Analysis of the Effects of Multicultural Education on the Racial Attitudes of Pre-K Through Grade 12 Students: A Comparison of Curricular Intervention and Reinforcement Dimensions in Suburban and Urban Educational Settings

Ogochukwu Nkeiruka N. Okoye-Johnson
Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/urbanservices_education_etds



Part of the [Bilingual, Multilingual, and Multicultural Education Commons](#), [Curriculum and Instruction Commons](#), [Educational Administration and Supervision Commons](#), and the [Race and Ethnicity Commons](#)

Recommended Citation

Okoye-Johnson, Ogochukwu N.. "A Meta-Analysis of the Effects of Multicultural Education on the Racial Attitudes of Pre-K Through Grade 12 Students: A Comparison of Curricular Intervention and Reinforcement Dimensions in Suburban and Urban Educational Settings" (1999). Doctor of Philosophy (PhD), Dissertation, , Old Dominion University, DOI: 10.25777/tbra-4027
https://digitalcommons.odu.edu/urbanservices_education_etds/141

This Dissertation is brought to you for free and open access by the College of Education & Professional Studies (Darden) at ODU Digital Commons. It has been accepted for inclusion in Theses and Dissertations in Urban Services - Urban Education by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

A META-ANALYSIS OF THE EFFECTS OF MULTICULTURAL EDUCATION ON
THE RACIAL ATTITUDES OF PRE-K THROUGH GRADE 12 STUDENTS:
A COMPARISON OF CURRICULAR INTERVENTION AND REINFORCEMENT
DIMENSIONS IN SUBURBAN AND URBAN EDUCATIONAL SETTINGS

By
Ogochukwu Nkeiruka N. Okoye-Johnson

B.A. Ed. July 1985, University of Nigeria, Nsukka
M. Ed. December 1988, University of Lagos, Nigeria

A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY

URBAN SERVICES

OLD DOMINION UNIVERSITY

August 1999

Approved By:

Jack E. Robinson, Ph.D.
Dissertation Director

Maurice R. Berube, Ph.D.
Member

Petra E. Snowden, Ph.D.
Director, Urban Education Concentration

Joseph Ford, D.Ed.
Member

Donna B. Evans, Ph.D.
Dean, Darden College of Education

ABSTRACT

A META-ANALYSIS OF THE EFFECTS OF MULTICULTURAL EDUCATION ON THE RACIAL ATTITUDES OF PRE-K THROUGH GRADE 12 STUDENTS: A COMPARISON OF CURRICULAR INTERVENTION AND REINFORCEMENT DIMENSIONS IN SUBURBAN AND URBAN EDUCATIONAL SETTINGS.

Ogochukwu Nkeiruka N. Okoye-Johnson
Old Dominion University, 1999
Chairperson: Dr. Jack E. Robinson

This meta-analysis examined the effects of multicultural education on the racial attitudes of students in prekindergarten through twelfth grade. Multicultural education, which evolved as a direct result of the push for ethnic studies in schools, was operationalized for this study as programs and curricula dealing with racial and cultural diversity.

The findings of thirty selected studies were synthesized in this meta-analysis to examine whether students exposed to multicultural education developed more positive racial attitudes than students who did not. This meta-analysis compared the effect sizes of two dimensions of multicultural education, curricular intervention and reinforcement, to see the relative effectiveness of multicultural education on students' attitudes. The relative effectiveness of multicultural education in suburban and urban settings were compared in this meta-analysis. The relative effectiveness of multicultural education among age groups 3-8, and age groups 9-16 were also compared.

A total of 60 effect sizes were calculated in this meta-analysis. The total sample size for all the thirty studies was 5,916 students. The sample size ranged from 41 to 1,504, with a mean sample size of 197 students. The age of the participants ranged from 3 to 16.

The mean effect size of the 30 studies which was 0.488 shows that exposure to multicultural education led to a reduction in students' racial attitudes. However, the mean effect size of the 21 curricular intervention studies which was 0.645, was higher than the mean effect size of the reinforcement studies which was 0.08, indicating that the curricular intervention dimension of multicultural education was more effective in reducing students' racial attitudes. Multicultural education was more effective in reducing racial attitudes in urban areas with a mean effect size of 0.72 for the 8 urban studies, than in suburban areas with a mean effect size of 0.587 for the 15 suburban studies. Multicultural education was also more effective in reducing racial attitudes among 9-16 age group with a mean effect size of 0.751 for 15 such studies, than among 3-8 age group with a mean effect size of 0.208 for 14 such studies.

It is hoped that policy makers and specialists in education would use the results of this meta-analysis to design multicultural education that will lead to a reduction in students' racial attitudes by addressing the relevant needs at specific locations, and among age groups.

DEDICATION

This dissertation is dedicated to my children: Paulina, Chinyelu, Chinonso,
and Chike.

ACKNOWLEDGEMENTS

My wholehearted thanks go to Dr. Jack Robinson for his unfathomed patience and understanding, his astute organizational skills, and his constant encouragement as he directed the course of this dissertation. Dr. Maurice Berube and Dr. Joseph Ford, members of my committee, have my heartfelt and profound gratitude for their gracious and consistent support through the gifts of their time and advice.

My father, Mr. Michael Okoye, taught me that with hard work and God's grace, one can "move mountains". To him I give my perpetual thanks.

To my siblings, especially my sister Mrs. Oge Onyekaba, I thank for believing in me and encouraging me to be my best. My parents-in-law, William and Patricia Johnson, have my special gratitude for ensuring a safe haven for my children while I was at school.

To all my friends, especially Dr. Oscar Scott Jr., and Mrs. Gwen Brown I thank for their encouragement and willingness to listen to me during the difficult times.

To my husband, Desing, I thank for his support and encouragement which helped to make this process easier.

To God with whom all things are possible, I give all honor and glory!

TABLE OF CONTENTS

	PAGE
LIST OF TABLES.....	v
LIST OF FIGURES.....	vi
Chapter	
1. INTRODUCTION.....	1
Historical Development of Multicultural Education...	3
Definitions of Multicultural Education.....	7
Goals of Multicultural Education.....	11
The Need for Multicultural Education.....	13
Need for the Study.....	17
Reasons for Studying Attitudes.....	20
Purpose of the Study.....	21
Relevance to Urban Studies.....	22
Statement of the Problem.....	23
Significance of the Study.....	24
Methodology.....	26
Characteristics of Meta-Analysis.....	27
Relevance of Meta-Analysis to Study.....	27
Limitations.....	29
Methodological Concerns.....	30
Research Questions.....	30

	Definition of Terms.....	31
2.	REVIEW OF LITERATURE.....	35
	Multicultural Curriculum and Programs.....	35
	The Afrocentric Approach to School Curriculum.....	41
	The Suburban School Experience.....	43
	The Urban School Experience.....	46
	Attitudes of Students.....	50
	Summary of the Review of Literature.....	56
	Research Questions.....	59
3.	METHODOLOGY.....	61
	Criteria for Inclusion of Studies.....	61
	Calculation of Effect Sizes.....	66
	Review of Studies.....	68
4.	ANALYSIS OF DATA.....	99
	Mean Effect Sizes.....	116
5.	CONCLUSIONS AND RECOMMENDATIONS.....	127
	Research Questions.....	128
	Discussion of Meta-Analysis Results.....	129
	Mean Effect Size.....	130
	A Comparison of Mean Effect Sizes by Type of Study..	131
	A Comparison of Mean Effect Sizes by Location.....	132

A Comparison of Mean Effect Sizes by Age of Sample..	134
Limitations.....	137
Implications for Research.....	138
Implications for Practice.....	140
BIBLIOGRAPHY.....	143
APPENDIX.....	161
Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and State: Fall 1995.....	161
Percentage of Students in Grades 1-12 Who are Black or Hispanic by Type of School and by Metropolitan Status: 1970-95.....	165
VITA.....	169

LIST OF TABLES

TABLE	PAGE
1. Percentage Distribution of Enrollment in Public Elementary and Secondary Schools by Race/Ethnicity: 1976-1995.....	16
2. Studies Included in the Meta-Analysis.....	63
3. Effect Size Formula Conversion.....	67
4. Mean Effect Sizes of the Studies Included in the Meta-Analysis...	114

LIST OF FIGURES

FIGURES	PAGE
1. Mean Effect Sizes of the Thirty Studies.....	117
2. Mean Effect Sizes of Curricular Intervention Studies.....	118
3. Mean Effect Sizes of Reinforcement Studies.....	119
4. A Comparison of Mean Effect Sizes by Type of Study.....	120
5. Mean Effect Sizes of Urban Studies.....	121
6. Mean Effect Sizes of Suburban Studies.....	122
7. A Comparison of Mean Effect Sizes by Location.....	123
8. Mean Effect Sizes of Studies Involving Ages 1-8.....	124
9. Mean Effect Sizes of Studies Involving Ages 9-16.....	125
10. A Comparison of Mean Effect Sizes by Age of Sample.....	126

CHAPTER 1

INTRODUCTION

Proponents of multicultural education (Grant, 1977; Gay, 1988; Sleeter and Grant, 1988; Bennett, 1990; Nieto, 1992; Banks, 1994; Coelho, 1994; and Davidman and Davidman, 1994) explicitly state that the inclusion of multicultural education (ME) in the curriculum of schools creates an atmosphere where racial attitudes and academic achievement are improved.

The 1998 Census Bureau demographic projections revealed that the demographics of the United States is changing due to the increase in the minority population. The changing demographics, and the existence of various cultures especially in the cities and suburbs highlight the need to ensure that the principles of democracy are attained whereby the racial attitudes of citizens are positive in order to facilitate peaceful communication and cooperation among various ethnic groups. According to Gabelko and Michaelis, (1981); and Lynch, (1987) the reduction of prejudice dimension of multicultural education is geared towards helping students acquire more democratic values, behaviors, and attitudes.

A number of studies (Fisher, 1965; Trubowitz, 1969; Williams and Edwards, 1969; Yawkey, 1973; and Yawkey and Blackwell, 1974) have been conducted to determine the effects of multicultural education on

students' racial attitudes. Banks (1991) in a narrative review stated that multicultural education, which he divided into curricular intervention studies, reinforcement studies, perceptual differentiation studies, and studies that involved cooperative learning activities, brought about change in racial attitudes. He also noted that reinforcement studies yielded richer and consistently positive results. Glock C. Y., Wuthnow, R., Piliavin, J. A., and Spencer, M. (1975) found that young children's attitudes were easier to change since these attitudes were still being formed.

This meta-analysis examined the variations in the effects of multicultural education on the attitudes of pre-k through grade 12 students, and the average differences of the effects of the curricular intervention and reinforcement dimensions of multicultural education, so that relative comparisons of these effects at suburban and urban locations and among age groups could be made. The results of this meta-analysis could be used by policy makers to determine which dimensions of ME yielded more effects for each location and for each age group and grade level.

The background to the effects of multicultural education on the racial attitudes of pre-k through 12th grade students in suburban and urban locations were examined by discussing the historical development, the definitions, and the theoretical framework of multicultural education. Also, the need for multicultural education, the demographics of US society

and schools, as well as reasons for studying attitudes were discussed. These discussions delineated the reason for the study.

Historical Development of Multicultural Education

An understanding of the various past movements carried out by ethnic groups in order to integrate school curricula is beneficial to the understanding of the current discussions on multicultural education. These movements helped to fashion or create what we know as multicultural education today.

The concept of multicultural education is not new. It has existed since the 1800s as could be seen from the work of George Washington Williams whose 1882 book History of the Negro Race in America created an opportunity for the study of the African American culture or Negro culture as it was called then. Other scholars whose research on multicultural education issues emphasized African American culture include Charles C. Wesley (1922), Carter G. Woodson (1922), and W. E. B. DuBois (1935, 1973). These scholars worked incessantly to include African American History into the curriculum of US schools and colleges. This period in ME history was known as the Early Ethnic Studies Movement (Banks, 1995). Other minority groups, Japanese Americans, Chinese Americans, Hispanic Americans and Native Americans also published books on their cultures. These books include Carey McWilliams's Brothers Under the Skin (1943), on Filipino Americans and North from

Mexico: The Spanish-Speaking People of the United States (1949) on Hispanic Americans.

The intergroup education movement (IEM) of the 1950s was influenced by the works of W.E.B. DuBois (1935, 1973), Carter G. Woodson (1922), and Charles C. Wesley (1922), of the early ethnic studies movement. It emerged as a direct result of the racial and ethnic tensions created by the competition for jobs among Whites, Hispanics, and African Americans. During World War II, war related jobs were created in the Northern and Western cities, but not in the South, thereby forcing Southerners to move to the North and West in search for jobs.

Proponents of IEM, (Allport, 1954, Cook, 1952, and Wirth, 1928) wanted to help students from different racial, religious and national backgrounds understand each other in order to reduce tensions. Practical activities and projects on how to reduce racial prejudice and tension were designed for students at all levels of education during this time by national associations such as the Progressive Education Association, American Council on Education, and the National Council for the Social Studies. The nation's social scientists such as Louis Wirth and Gordon W. Allport developed intergroup theories. Books on personality (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950), and on prejudice (Allport, 1954) were published during this time. Research into children's racial attitudes (Goodman, 1952) was also conducted. While the early ethnic studies

movement emphasized ethnic pride and accomplishments, IEM emphasized democratic living and cooperation among all races within the American mainstream society (Banks, 1995).

As IEM was dying, the Civil Rights Movement began with emphasis on racial desegregation. However, by the late 1960s frustrated by the slow pace of desegregation, African Americans started demanding for community control of their schools, the inclusion of African American history in school curricula and the hiring of African American teachers and administrators. As a result, other minority groups demanded for the community control of their schools, the inclusion of their history in school curricula and the hiring of teachers and administrators that share their cultural heritage (Banks, 1995). This led to the emergence of the "new" ethnic studies movement of the 1960s, and again in the 1980s. However, these were calls for separate classes and courses. The call for the inclusion of African American history into the main core curriculum came in the 1970s, 1980s and 1990s. During this time, the earlier ethnic books and research on various ethnic cultures were reprinted (W. E. B. DuBois, 1935, 1973; Carter G. Woodson, 1922; and Charles C. Wesley, 1922). New ethnic books such as Novak, M. (1971) The rise of the unmeltable ethnics, Hilliard, III, Payton- Stewart, & Williams (1990) Infusion of African and African American content in the school curriculum, and Nieto, S. (1992) Affirming diversity: The sociopolitical context of multicultural education

were also published during this time. These books created new insights into the history and culture of the United States.

Multicultural education, therefore, evolved as a direct result of ethnic studies, especially the early ones carried out by G.W. Williams (1882). According to Banks (1994), there are five distinct phases of ME. The first phase of ME, also called the monoethnic courses phase, occurred in the 1960s and early 1970s when ethnic studies became part of the curricula of schools and teacher preparation colleges. The second phase of ME, known as the multiethnic studies courses phase, also occurred in the early 1970s. This phase resulted from the ethnic studies educators' push to increase educational equality through structural and systemic changes in schools (Banks, 1995). The third phase of ME, known as the multiethnic education phase, occurred in the early 1970s and the 1980s when other groups considered as minorities, women and people with disabilities, demanded that their history and culture be included in school curricula. The fourth phase, from the mid 1980s into the 1990s, primarily deals with multicultural education research, practice, and theory formulation with a focus on race, disability, gender and class. Today, all four phases of multicultural education currently exist in schools even though the fourth phase is more prominent. Phase five of multicultural education encompasses the existence of the key concepts, and the institutionalizing of the significant elements of phases one to four. At this phase, which is still

evolving, ME gradually becomes entrenched in the curriculum and the entire educational experience (Banks, 1994).

Definitions of Multicultural Education

Multicultural education (ME) also known as multi-racial education, and multi-ethnic education has been defined in many ways. Thus, it means different things to different people. Multicultural education primarily deals with programs, curricula, and activities that are geared toward meeting the educational and cultural needs of students from diverse backgrounds in U.S. schools (Grant, 1977).

However, multicultural education also involves gender and disability issues. Although most people think that ME only addresses racial or cultural diversity, some others conceive gender, social class, and other diversity issues as ME. Concurrently, many people who discuss gender equity, share concerns similar to those of ME proponents, but virtually ignore race and culture. Still others conceive ME in relationship to issues of public policy such as immigration as exemplified in California's Protection Act and in bilingualism (Sleeter and Grant, 1994).

The numerous definitions of multicultural education reflect the different scholarly opinions of various disciplines such as psychology, anthropology, sociology and education (Hernandez, 1989). Despite the differences in disciplines, these definitions share some similarities in their assertions that ME is for all students and is designed to ensure that all

students receive equal educational opportunities.

Banks (1993a) described multicultural education as an idea, an educational reform movement, and a procedure with the primary purpose of restructuring educational institutions. As an idea, Gay (1995) also asserted that multicultural education is a set of beliefs and rationalizations which recognizes and appreciates the significance of ethnic and cultural diversity in molding the personal identities, lifestyles, social experiences, and educational opportunities of individuals, groups, and the nation. The American Association of Colleges for Teacher Education (AACTE) (1973), and the Association for Supervision and Curriculum Development (ASCD) (1977) supported the idea that multicultural education is a philosophy that emphasized that students should learn about cultural diversity.

According to Grant (1977), ASCD drew a relationship between its set of values and ME. It defined multicultural education as a humanistic concept based on the principles of social justice, equality, human rights and alternative life choices, which ensured that culturally pluralistic students received quality education.

Multicultural education as a reform movement, according to Gay (1988) also, stressed the importance of modifying the structure, procedure, substance, and values of education in order to reflect the cultural, ethnic, linguistic, social, and racial pluralism in the United States. The elements of multicultural reform movement identified by Bennett (1990) included the

following: (1) ME has comprehensive focus; (2) ME is controlled by principles of equity and equality, and (3) ME involves curriculum approaches that bring about the understanding of the contributions, histories and cultures of ethnic groups. It also involves procedures that help students' attitudes, behaviors, beliefs and values become multicultural; and tactics for fighting oppression and racism.

According to Davidman and Davidman (1994), multicultural education is a reform movement that upsets the status quo by visualizing an America that is culturally, ethnically, linguistically, and economically diverse. Banks (1993c), and Frazier (1977) widened the scope of multicultural education as a reform movement by including disability, gender and social class in addition to race and ethnicity as the referent group parameters. Sleeter and Grant (1988) included social reconstruction as a parameter, whereby youths taught political action skills such as effective negotiation techniques, work towards creating an equitable distribution of resources and opportunities for the oppressed groups which would in turn lead to the eradication of oppression.

Multicultural education as a process instead of a product, involves decision making styles, and enduring pervasive behaviors in an educational environment (Banks, 1993). Grant (1978) explored this concept by choosing to use the term *education that is multicultural instead of multicultural education* because he believed that ME should encompass

the entire educational venture instead of being limited to specific programs. Suzuki (1984) defined multicultural education as an interdisciplinary instructional program which satisfies the linguistic, academic and social needs of students by providing numerous learning environments. The policies on multicultural education enacted by the California State Department of Education (1979), and the policies by the Iowa State Department of Education (1989) asserted that ME is an interdisciplinary procedure instead of specific programs or activities. Sizemore (1981) saw multicultural education as a way of studying the artifacts of diverse groups in order to learn how they overcame adverse agencies and situations, and were able to control their destinies.

In a more encompassing definition Nieto (1992) stated:

Multicultural education is a process of comprehensive school reform and basic education for all students. It challenges and rejects racism and other forms of discrimination in schools and society and accepts and affirms pluralism (ethnic, racial, linguistic, religious, economic, and gender, among others) that students, their communities, and teachers represent.

Multicultural education permeates the curriculum and instructional strategies used in schools, the interactions among teachers, students and parents, and the very way that schools conceptualize the nature of teaching and learning. It

further the democratic principles of social justice because it uses critical pedagogy as its underlying philosophy and focuses on knowledge, reflection, and action (praxis) as the basis for social change (p. 208).

For the purpose of this study, ME is defined as programs and curricula dealing with racial and cultural diversity. Programs and curricula dealing with gender were not included for the following reasons:

1. The effects of ME on gender associations apply to all cultures. However, the studies on the effects of ME on gender associations did not identify the distinct impact of race and ethnicity on students' gender associations (Grant and Sleeter, 1986).
2. The researcher is primarily interested in the impact of ME on the attitudes of members of a different race and culture toward members of their race, and toward members of other races and cultures. Changes in racial and prejudicial attitudes, therefore, were the focus of this study.

Goals of Multicultural Education

The major goal of multicultural education is to see that students from diverse racial, ethnic, and social-class groups experience educational equality by reforming the school and other educational institutions (Banks, 1994). Other goals of multicultural education identified by Shade (1989) are:

To ensure that males and females receive an equal opportunity to

succeed educationally and to realize the rewards of the education. This goal, however, was not examined in this study.

To make accessible to each culture information about different cultures, in order to help people from each culture see themselves as other cultures see them.

To ensure that all cultures, not only the Eurocentric one, are included in the schools' curriculum. Students from ethnic minority groups sometimes do not acquire the skills they need to succeed in society when educators view them negatively.

Banks, (1994) developed five dimensions of multicultural education through research, observations, and work in the ME field from the 1960s to 1991. These are:

1. Content integration which deals with the extent to which teachers use examples and content from a variety of cultures and groups to illustrate key concepts, principles, generalizations, and theories in their subject area or discipline.
2. The knowledge construction process which relates to the extent to which teachers help students to understand, investigate, and determine how the implicit cultural assumptions, frames of references, perspectives, and biases within a discipline influence the ways in which

knowledge is constructed within it.

3. Prejudice reduction which focuses on the characteristics of students' racial attitudes and how they can be modified by teaching methods and materials.
4. An equity pedagogy which exists when teachers modify their teaching in ways that will facilitate the academic achievement of students from diverse racial, cultural, and social-class groups. This includes using a variety of teaching styles that are consistent with the wide range of learning styles within various cultural and ethnic groups.
5. An empowering school culture and social structure which involve grouping and labeling practices, sports participation, disproportionality in, and the interaction of the staff and the students across ethnic and racial lines are among the components of the school culture that must be examined to create a school culture that empowers students from diverse racial, ethnic, and cultural groups. (p. 5)

The third dimension which dealt with prejudice reduction was of the most relevance to this study.

The Need for Multicultural Education

According to the National Association of Secondary School Principals (NASSP) (1996) young people learn about their world through their daily

activities, their peers, the media, and the schools' provision of a variety of planned perspectives, viewpoints, and training. In its report on what the high school of the 21st century should be, NASSP stated that:

An understanding of and respect for diversity should be absorbed into the fabric of each high school, whatever the composition of its enrollment. Schools ought to help students to see diversity in its broadest sense as an expression of the American experience. Diversity should be considered in connection with the school's curriculum, instructional practices, and staffing. In the end, education ought to equip students for the interdependency of life in the 21st century. (p. 68)

Marshall (1998) also stated that presenting correct factual details concerning the differences among children - beliefs, attitudes, values and customs - that one experiences in the classroom everyday is important to the process of exploring diversity with children. It is important, therefore, that schools stay abreast of developments in ME, and implement multicultural education consistently.

Additionally, the demographics of the United States is increasingly becoming less White and more diverse. Schools, as powerful institutions of society where students from all ethnic groups converge to receive an education, reflect this change in demographics. Banks (1993a) stated that

out of the fifty largest school districts in the nation, ethnic minority students have the highest enrollment in twenty-five of them. He also stated that ethnic minority students make up thirty percent of the total population of students in US public schools.

According to the National Center for Education Statistics (NCES) (1987), seventy percent of the entire enrollment in the largest twenty school districts were ethnic minority students. Snyder and Wirt (1998) of NCES in their report to the US Congress on the condition of education in 1998 stated that in 1995, thirty-five percent of grades one through twelve students enrolled in public schools belong to a minority group. This eleven percent increase from 1976 enrollment status was primarily due to an increase in the enrollment of Hispanic students. Since 1970, one student out of three has been black in central city public schools. In metropolitan area public schools outside of central cities, black students increased from six percent in 1970 to eleven percent of the school population in 1995. In 1972, one out of ten students in central city public schools was black while in 1995 the ratio of Hispanic students increased to one out of four students.

In the District of Columbia, and the states of California, Hawaii, Mississippi, New Mexico, and Texas minority students are the majority. In some states like Florida, Georgia, Louisiana, Maryland, New York, and South Carolina minority enrollment was almost equal to the enrollment of Whites

(NCES, 1998).

The following table clearly shows the minority enrollment trend. Additional tables in the Appendix depict the minority enrollment trend by urban/metropolitan area, and by state.

Table 1

Percentage Distribution of Enrollment in Public Elementary and Secondary Schools by Race/Ethnicity: 1976-1995

Race/Ethnicity	1976	1984	1986	1988	1990	1992	1993	1994	1995
Total	100	100	100	100	100	100	100	100	100
White/non Hispanic	76.0	71.2	70.4	70.7	67.8	66.7	66.1	65.6	64.8
Total Minority	24.0	28.8	29.6	29.3	32.1	33.3	34.0	34.4	35.1
Black/non-Hispanic	15.5	16.2	16.1	15.2	16.2	16.5	16.6	16.7	16.8
Hispanic	6.4	9.1	9.9	10.1	11.5	12.3	12.7	13.0	13.5
Asian/Pacific Islander	1.2	2.5	2.8	3.1	3.4	3.5	3.6	3.6	3.7
American Indian/ Alaskan Native	0.8	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1

Source: U. S. Department of Education, and National Center for Education Statistics (NCES) 1998.

Table 1 shows that the minority students' population is increasing. The demographic diversity of US society and schools, therefore, emphasizes the importance of creating a curriculum that ensures that the cultural needs as well as the academic needs of all students are met regardless of race or ethnicity. By meeting the cultural and academic needs of all students through the emphasis of the importance of all races and cultures,

the attitudes of students toward themselves and toward other cultures would likely be improved (Sleeter and Grant, 1988). Multicultural education has been touted as one of the planned activities that could bring about attitudinal change (Banks, 1991). (Jackson 1944; Agnes, 1947; Fisher, 1965; Hayes and Conklin, 1953; Jackson, 1944; Leslie and Leslie, 1972; Lessing and Clarke, 1976; Litcher and Johnson, 1969; Shirley, 1988; Trager and Yarrow, 1952; and Yawkey, 1973) found that students developed positive racial attitudes after exposure to multicultural education. Hence, the researcher proposed to use this meta-analysis to find out if ME led to a change in attitude. If it did, which types of ME programs and curricula brought about the desired change in attitude.

Need for the Study

Intellectuals in the field of multicultural education have debated over the years about what ME entails. From the previous discussions, schools mostly taught ME as individual ethnic studies. Recently, the debate has centered on how to infuse ME into the mainstream curriculum instead of teaching it separately. This led to an outcry by Western Traditionalists and proponents of Core Knowledge curriculum (Hirsch, Jr., 1987; Ravitch, 1992; Schlesinger, Jr., 1991; and Shanker, 1991), and a vigorous debate and furor by educational specialists about what the school curriculum should include.

As noted by Berube (1994), intellectuals and educational specialists waged culture wars about the content of the curriculum of the United States schools. The Western Traditionalists wanted to continue the Eurocentric, male oriented curriculum. The practitioners of multicultural education wanted a curriculum that combined Eurocentric culture and other cultures. The Afrocentrists wanted an Africa oriented curriculum.

In the midst of this debate, it was evident that U.S. schools were increasingly becoming less White and more diverse. This was occurring because the minority population of U.S. cities and suburbs was increasing. According to the demographic projections by the Census Bureau (NCES, 1998), minority students would become the majority in U.S. schools by the 21st century. A report by the Educational Research Service (ERS) stated that between 1993 and 2030, there would be significant changes in the school-age population. Non-Hispanic white children would drop to 49 percent from 68 percent. Hispanics would rise to 22.6 percent from 12.5 percent; Blacks would increase to 17.7 percent from 14.7 percent; and Asians and Pacific Islanders would grow to 9 percent from 3.5 percent.

As a result of these changes, proponents of ME contended that there was strong educational and social need for multicultural education. Schools as part of the social/cultural system, should help in the perpetuation and continuation of society's principles. It is imperative, therefore, that schools turn out citizens who are quite capable of surviving and succeeding in this

changing climate by ensuring that the curriculum is one that would lead to the success - psychological and academic - of all students irrespective of cultural and gender differences.

A number of studies have been done on the different aspects of multicultural education. Such studies have examined its meaning and usefulness, its curriculum/content, and its means of instruction. Other studies have looked at its relationship to achievement and to attitude. The studies on the effects of the various types of multicultural education on attitude and academics have yielded positive, negative or no effects, depending on the study. However, a meta-analysis on these effects has not been done.

This meta-analysis examined the relative effects of the racial attitude modification types of multicultural education identified by Banks (1991) as: 1) curricular intervention programs, 2) reinforcement programs, and 3) the perceptual differentiation programs. However, since there was a paucity of perceptual differentiation programs, the perceptual differentiation programs were not included in the comparison of ME types. It assessed the relative effects of these ME programs in changing students' attitudes in urban areas and suburbs since these locations have a diverse population. It further examined the relative effects of ME in changing students' attitudes across pre-k through 12th grade age groups since research showed that children's attitudes are easier to change. Finally,

policy makers could use the findings from this study to determine what ME programs to endorse, at what location, and for what age group and grade level.

Reasons for Studying Attitudes

Research on attitudes has shown that planned interventions, programs, and activities are capable of positively modifying racial attitudes (Jackson (1944); Agnes, 1947; Fisher, 1965; Hayes and Conklin, 1953; Jackson, 1944; Leslie and Leslie, 1972; Lessing and Clarke, 1976; Litcher and Johnson, 1969; Shirley, 1988; Trager and Yarrow, 1952; and Yawkey, 1973). According to Yawkey and Geletka, (1973) children possess attitudes toward political objects, and these attitudes change as children age. Swick and Blackwell, (1972) also found that four year-old black children possess attitudes toward political and cultural groups.

The existence of attitudes toward political and cultural groups in young children might help explain the nature of the relationship among the diverse members of the US population because young members of each group have developed attitudes about themselves and other ethnic groups. It is evident from news media reports that despite the gains made in the area of peaceful race relations since the abolishment of slavery, there still exist a deep mistrust and racial divide among the various ethnic groups.

The media clearly presented the March 3, 1991 beating of Rodney King by Los Angeles police officers, the acquittal of those police officers

involved which led to the subsequent riots in South Central LA culminating in the beating of the white truck driver, Reginald Denny, by rioters; the July 1997 beheading of a black man by two white men in Grayson County, Virginia; the 1995 shooting of a black couple by two members of the 82nd Airborne Division in North Carolina; and the June 1998 dragging to death by truck of a black man by three white supremacist drivers in Jasper, Texas as some prominent examples of this mistrust. The racial divide could be seen from the polarized reactions and conclusions reached by whites and blacks after the acquittal of O.J. Simpson by all- black jurors for the murder of his wife in October of 1995.

It is necessary, therefore, that there be interventions and programs designed to increase communication among racial groups, and subsequently change the deep-seated attitudes that led the people discussed above to commit such horrific racially motivated crimes. This research, utilizing a meta-analysis, sought to determine if multicultural education was capable of bringing about changes in attitudes.

Purpose of the Study

This meta-analysis examined the overall effects of multicultural education on the attitudes of pre-k through 12th grade students to determine if ME led to change in attitudes. Then it examined the relative effects of the curricular intervention and reinforcement dimensions of ME

on the attitudes of pre-k through 12th grade students in order to determine which dimension of ME yielded the most effects, and should be developed for schools.

It determined the relative effects of ME on the attitudes of pre-k through 12th grade students in suburban and urban locations in order to ascertain in which locations ME yielded the most effects, so that ME that is relevant in each location should be developed.

It also examined the relative effects of ME on students' attitudes across pre-k through 12th grade age groups in order to determine in which age groups ME yielded the most effects, so that ME that is suitable for each age group should be developed.

The researcher hopes that such information would assist educators in deciding what types of multicultural education should be developed, and targeted for specific locations, age groups and grade levels.

Relevance to Urban Studies

This study is relevant to urban studies because statistics show that the minority population of US cities and suburbs have increased, and will continue to increase. Minority groups are mostly concentrated in the cities where their impact on all aspects of the city life is greatly felt. Cities also have a variety of ethnic groups dwelling within them. The racial attitudes, positive or negative, of all groups in the city affect the nature of

communication among these groups. The results of the study could shed light on the methods that could be utilized to bring about change in attitudes and ensure peaceful cohabitation of all ethnic groups.

This study could determine which dimensions of ME would yield the most effects in urban areas. Thus policy makers could sanction the implementation of such dimensions of ME in urban areas.

Statement of the Problem

In order to create a society in which all ethnic groups participate effectively, schools through formal and informal curricula, and through administrators and teachers, need to be willing to devote the time needed to create an institutionalized move towards ensuring that students from all ethnic backgrounds enjoy equal educational opportunity (Banks, 1993a; and Suzuki, 1984). A sense of full and equal participation by all ethnic groups will minimize, and may eliminate, ethnic strifes and rivalry.

In order to make progress toward the goal discussed above, this study sought to answer the question of whether multicultural education, operationalized as programs and curricula dealing with diversity issues, influenced the attitudes of students in prekindergarten through twelfth grade.

The data of the available studies on the effects of multicultural education on students' racial attitude was analyzed to determine which

dimension of ME - the curricular intervention or the reinforcement - yielded the most effects.

The data of the available studies on the effects of multicultural education on students' racial attitude was analyzed to determine in which specific location - suburban or urban - ME yielded the most effects.

This research also analyzed the data of the available studies on the effects of multicultural education on students' racial attitude to determine in which pre-k through 12th grade age groups ME yielded the most effects.

Also compared was the traditional curriculum and ME curriculum to ascertain which curriculum brought about the most change on students' attitudes toward themselves and members of different ethnic groups.

Significance of the Study

Most of multicultural education's problems are in the area of teaching practices. Multicultural education should not be confused with global education. It might be easier for teachers to teach about foreign countries than about the ethnic groups within a nation, however, teaching about Africa is not the same as discussing the culture of African Americans. The two complement each other but are not the same (Banks, 1994).

Research has shown that racial attitudes could be modified, at different locations and among different age groups, through the use of different types of multicultural education. However, a meta-analysis that would make relative comparisons of the effects of the different types of ME at different locations, and among different age groups had not been done.

The result of this study would have implications for the practice of multicultural education because it could reveal that the study and practice of ME as it is currently done need not be changed, or it could identify ME activities and practice that lead to positive racial attitudes at different locations, and among different age groups and grade levels.

This research might reveal that multicultural education should be reviewed, revised, and refined in terms of curriculum content and teaching procedures. Schools might need to change the type of ME they are teaching, and or increase programs dealing with cultural diversity. Schools might also need to provide teachers with opportunities for training and to attend workshops on how to implement ME curriculum.

The result of this study might provide educators with the information needed to design relevant staff development programs, and to create age/grade level specific courses and units of instruction that would help students acquire democratic attitudes and beliefs.

Policy makers could also use the results of this study to develop

policies that influence the design, development, and implementation of multicultural education. Such policies might involve the decision to allocate resources necessary to implement ME within individual schools, and within the entire school system, especially in a time of dwindling resources, if it was determined that ME significantly changes racial attitudes.

Methodology

The studies included in this research were analyzed using a meta-analysis. Scientists, and scholars (Hedges & Olkin, 1980; Hunter, Schmidt, and Jackson, 1982; Wolf, 1986) in the field of social and behavioral sciences have known for a long time that single studies or experiments were not absolutely useful in answering the questions posed by the problem under study. As a result, the body of knowledge derived from numerous studies was used to establish facts and to form theories using mostly narrative reviews. However, narrative reviews usually do not use statistical analysis to reach conclusions. Statistical analysis allowed for the exploration of several dimensions of potential importance in research.

The problems of narrative review according to Wolf, (1986) were as follows: the subjective selection of studies by the reviewer; the interpretation of a set of findings was done using different subjective weighting; erroneous interpretations of the results of the study; not investigating the qualities of the studies that might explain the consistency

or varying results across studies; and not exploring the moderating variables in the relationships under study. Meta-analysis as an alternative to narrative review solved the problems of narrative reviews by utilizing the characteristics described below.

Characteristics of Meta-Analysis

Glass, G. V., McGaw, B., & Smith, M. L. (1981) described three major characteristics of meta-analysis as follows:

1. Meta-analysis is quantitative because it utilizes numbers and statistical procedures to organize and extract facts from extensive batches of data which would have been difficult to analyze otherwise.
2. Meta-analysis does not exclude studies based on the researcher's nonempirical belief that the studies have methodological deficiencies such as bad/poor research design, incorrect measurement, and treatment that is poorly implemented. There is no evidence that the existence of these weaknesses has impacted the results of the studies. Instead methodological weaknesses found in the original studies should be noted, and their relationship to the study findings should be examined.
3. Meta-analysis draws general conclusions by ignoring the insignificant differences among the studies being integrated. The studies that should be integrated in a meta-analysis should be those that are not the same in all aspects, but are not widely different either so that a practical and a useful generalization can be reached.

Relevance of Meta-Analysis to Study

Meta-analysis was chosen for this study because procedures that stressed explicit judgment rules, methodical retrieval of data from constituent studies, and quantitative techniques for integration of results, have replaced subjective and haphazard procedures (Cooper and Dorr 1995a). This is because meta-analysis might provide more statistically useful information. Meta-analysis (Glass, G. V., McGaw, B., & Smith, M. L. (1981) is the statistical analysis of the findings of many original empirical studies. It involves calculating effect size to determine the statistical difference in mean standard deviation. Meta-analysis, as a result, yielded results that were more representative and covered a broader range of content, treatment, variation, population, and means of measurement than the results of the original studies.

It is hoped, therefore, that the result of this study would cover a broader range of multicultural education dimensions, treatment, variation, population, and means of measurement which would be more representative of the effects of multicultural education on the racial attitudes of prekindergarten through twelve students.

This meta-analysis synthesized the findings from selected studies on the effects of multicultural education on attitudes in order to determine 1) whether ME modified pre-k through 12th grade students' attitudes; 2) which dimensions of ME, curricular intervention programs or

reinforcement programs, yielded the most effects; 3) which specific setting - suburban or urban - yielded the most effects; and 4) which age groups and or grade levels yielded the most effects.

Limitations

The accuracy of the data analyzed in this meta-analysis depended on the accuracy of the information provided in the original studies.

Multicultural education as it pertained to this study was limited to programs and curricula that dealt with race. Other forms of ME such as gender, disability and social class were not studied because the presence of various cultures in the U.S. highlighted the importance of examining the nature of racial attitudes, and the interventions that brought about change in attitudes.

Since multicultural education involved different programs and curricula, there was no uniformity in the types of ME programs examined. While some studies looked at the effects of ME that was embedded in the curriculum, others looked at reinforcement programs and activities that were not part of the school's official curriculum.

This study only examined the effects of multicultural education on racial attitudes, and did not look at the effects of ME on the self-concepts of the students under study. It also did not look at the impact of self concept on the attitudes of the subjects under study. This was because

while self-concept dealt with how people perceived themselves, racial attitudes dealt with how people related to other people within and or outside their cultures (James, 1890).

The original studies examined in this meta-analysis also used a variety of attitude scales to measure students' attitudes, therefore, there was no uniformity in the scale of measurement used in all the studies.

Methodological Concerns

Some methodological concerns about meta-analysis were briefly discussed here. Cooper and Door (1995a) state that:

- a. Meta-analysis is not capable of determining if there were causal relationships between variables investigated at the level of study differences;
- b. The problem of confounding variables found in the original studies cannot be eliminated by meta-analysis;
- c. Meta-analysis, as a statistical technique, cannot take the place of common sense because it cannot promulgate non-existent theories, and cannot decide what issues are important enough to research.

Despite these concerns, meta-analysis is still the best alternative to narrative reviews (Cooper and Door, 1995).

Research Questions

This meta-analysis answered the following questions:

1. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to multicultural education, operationalized as programs and curricula dealing with diversity issues, and same grade students who were exposed to the traditional methods of instruction?
2. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to curricular intervention dimension of ME and same grade students exposed to reinforcement dimension of ME?
3. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to multicultural education in suburban settings and same grade students exposed to ME in urban settings?
4. What were the differences in the racial attitudes of ages 3-8 students, and ages 9-16 students who were exposed to multicultural education?

Definition of Terms

The following definitions were used in this study for these terms.

Afrocentric: Attributes, descriptions, principles, educational curriculum and materials associated with the history and culture of descendants of African people.

Afrocentrists: Proponents and practitioners of Afrocentricity.

Attitudes: The convictions and opinions held by people towards anything. In this study, racial attitudes, and students overall attitudes to multicultural programs are examined.

Bilingualism: The practice and process of speaking two languages. In bilingual education, those who speak minimal English are taught in their native language.

Culture: The conducts, formulations, symbols, values and the belief system that are shared by a group of people. It can also mean the institutions and modules that societies create in order to survive.

Curriculum: The organized set of goals, objectives, units of instruction, and lesson plans that are used mostly in educational institutions to impart learning. It could be in the form of textbooks. There is also hidden curriculum which is expressed in the form of positive and negative, intentional and unintentional messages in an educational setting.

Discrimination: When individuals or groups are treated differently because of their race, gender, ethnicity, social class or disability.

Effective: When something produces the desired effect or outcome.

Ethnic Group: People who share a common and similar set of values, beliefs, economic status, political interests, and cultural background.

Eurocentric: Attributes, descriptions, principles, educational curriculum and materials associated with the history and culture of descendants of European people.

Meta-analysis: Meta-analysis is the statistical analysis of the findings of many original empirical studies (Glass, G. V., McGaw, B., & Smith, M. L. (1981).

Minorities: Non-White racial groups that have experienced institutionalized racism and discrimination in the United States. African Americans, Asian Americans, Hispanic Americans, and Native Americans are known as minorities.

Multicultural Curriculum: A curriculum that reflects the opinions and experiences of the diverse groups that make up a country and or continent (see p. 40).

Multicultural Education: A process of comprehensive school reform and basic education for all students that challenges and rejects racism and other forms of discrimination in schools and society and accepts and affirms pluralism (Nieto, 1992).

Prejudice: A set of unsubstantiated, rigid and unfavorable attitudes and behavior toward an individual or group. Prejudice usually leads to discrimination.

Race: The classification of humans according to their physical traits by physical anthropologists.

Racism: A belief that one race is better than the other, usually practiced when the race with political and economic power oppress and deny the other races their opportunity to achieve success.

Suburb: A geographical area near a city characterized by mostly residential dwellings. A study's setting is classified as suburban if the study's author stated so (pp. 63-65).

Urban: A geographical area characteristic of the city way of life. A study's setting is classified as urban if the study's author stated so (pp. 63-65).

CHAPTER 2

REVIEW OF LITERATURE

An effective multicultural education, is one that has well designed curriculum and programs. A well designed multicultural curriculum includes the different components of students' cultural identities such as ethnicity and race (Gollnick, 1995). Since this study sought to determine if ME brought about change in pre-k through 12th grade students' attitudes, and also since research (Fisher, 1965; Trubowitz, 1969; Williams and Edwards, 1969; Yawkey, 1973; and Yawkey and Blackwell, 1974) has shown that multicultural curriculum could bring about changes in racial attitudes, it would be necessary to review what multicultural curriculum and programs entail.

Multicultural curriculum refers to courses designed and taught as an integral part of a school's curriculum, or as an addendum to an existing curriculum. Multicultural programs are activities that are not designed as part of a school's curriculum but are conducted within and or outside the formal classroom. Multicultural curriculum and multicultural programs are both designed to ensure that the educational and cultural needs of students from all ethnic backgrounds are met (Grant, 1977).

Multicultural Curriculum and Programs

In order to fully understand what multicultural curriculum was, it

was important to understand what it was not, and how it evolved. The discussion of multicultural curriculum and programs in this chapter was based on the detailed and extensive work done by Banks (1991; 1994 & 1995), the esteemed expert on multicultural education. As a result of the Civil Rights Movement of the 1960s, ethnic studies courses which depicted the social and political requests of local communities were designed. These courses which reflected the history and experience of ethnic minority groups of color (African Americans, Native Americans, Hispanic Americans, and Asian Americans) with little or no mention of European American ethnic groups (Italian Americans, Polish Americans, and Jewish Americans), were quickly put together by curriculum specialists to appease militant ethnic students and faculty while paying little or no attention to social science theory, the psychological and social needs of students, research, or the nature of learning.

This approach, known as the ethnic additive approach, created fragmented and problematic curriculum which still exists in some form today even though the ethnic studies courses have become more scholarly and more global in scope. In the 1980s, ethnic studies problems were exacerbated by the campaign for nationalism and conservatism in Australia, the United Kingdom, and the United States (Banks, 1994), because there was a push for one inclusive culture instead of many distinct cultures.

Some educators believed that a curriculum was multicultural when isolated facts about ethnic minority groups were added to the mainstream curriculum. As a result, these educators added a list of some notable African American, Native American, Asian American, and Hispanic American heroes to the mainstream curriculum to be memorized with the mainstream heroes. This approach, known as the contributions approach, does not arouse students' intellect, instead ethnic content should be integrated into the entire curriculum. Ethnic studies is not the study of customs (food and artifacts), that are strange to mainstream teachers and their students, as is frequently done in the elementary grades, because instead of helping students acquire cultural sensitivity it fosters the existent stereotypes and misconceptions (Banks, 1994). Ethnic studies is also not the study of ethnic holidays or ethnic cultures on special days and units. The contributions approach to multicultural curriculum fosters the assumption that the histories of minority ethnic groups are separate from the history of the entire country.

The above approaches to multicultural curriculum according to (Banks,1994):

prevent the development of a broadly conceptualized multicultural curriculum that compares and contrasts the experiences of all of the diverse groups within a society and that helps students fully understand the

complex role of ethnicity in modern Western societies such as the United States, the United Kingdom, Canada, and Australia. (p. 203)

The transformation approach to multicultural curriculum, however, alleviated the problems of the ethnic additive, and the contributions approaches. It helped students to understand completely the role of ethnicity in modern western societies by ensuring that information about the diverse facets of all the ethnic groups were included in the curriculum.

The decision-making and social action approach included all the elements of the transformation approach. However, it extended the scope of the transformation approach by having students make decisions about, and act on the concepts, issues and problems discussed. Students, for example, might decide to come up with steps to identify and eradicate discrimination in their schools (Banks, 1994). In order to do so, students would conduct research on discrimination, evaluate and integrate their own beliefs and values, and identify alternative plans of action before finally deciding on how to eradicate discrimination in their schools. The primary goal of this approach was to politically empower students by teaching them thinking and decision-making skills.

Banks (1994) formulated two ideal curricular models that would create an open society if implemented properly. However, since these are ideal models, they would be difficult to implement completely due to the

laws that are currently in existence, and the current arrangement of schools. As a result, these models should serve as a guide to curriculum specialists in designing an effective multicultural curriculum for all ethnic groups that is capable of positively changing racial attitudes.

Model I: The Shared Power Model involves allowing the ethnic groups traditionally excluded from powerful positions to control some economic, social and political institutions by deciding who may participate in these organizations, and how to distribute the benefits.

With this model in mind, curriculum specialists would develop a curriculum that would help students from minority ethnic groups acquire necessary skills, attitudes, and strategies to achieve power. Exposure to how other powerless groups attained power would help these students learn that not taking action when necessary, or taking actions without serious thought could sometimes lead to more persecution.

Model II: The Enlightening Powerful Groups Model involves assisting mainstream students to cultivate positive attitudes towards ethnic minority groups. This is done by teaching mainstream students about the victimizations endured by minority ethnic groups because it is assumed that mainstream members perceive a moral confusion from the inconsistency that exists between their ideals of equality and the discrimination endured by ethnic minority groups. However, this assumption which came about as a result of a study conducted by Myrdal

(1962) is not very valid. Mainstream students' attitudes toward ethnic minority groups might not change by learning about the victimizations of these groups because according to Carnoy (1974), and Katz (1975), revisionist historians believe that policies that discriminate against ethnic minorities are deliberate. Even though research shows that curriculum interventions can change racial attitudes of children (Katz & Zalk, 1978), it is difficult for adults to unlearn their attitudes by taking a course. According to Allport (1979), curricular interventions probably change students' racial beliefs (opinions) rather than their racial attitudes (behavior). According to Glock C. Y., Wuthnow, R., Piliavin, J. A., & Spencer, M. (1975), the racial attitudes of children in kindergarten were not as negative and substantial or developed as that of fifth graders. As a result, Model II is not as effective as Model I in older children and adults.

Using the above models, Banks (1994) recommended a multicultural curriculum that would include elements of both models in a complementary fashion. Such a curriculum would teach minority ethnic groups how to free themselves from psychological captivity, stress social action, acquire humanistic dispositions toward all ethnic groups, realize power and ethnic identity without being chauvinistic and ethnocentric, and acquire the national identity and skills necessary to participate completely in the society.

Thus to portray a correct picture of a society and culture, and to

sustain a democratic society:

schools in a pluralistic democratic society, in order to promote the structural inclusion of diverse groups and help them to develop a commitment to the national ethos and ideology, should structure a curriculum that reflects the perspectives and experiences of the diverse groups that constitute the nation-state (Banks, 1991, p. 617).

The courses designed to change racial attitudes should be started at very early years and continued through all levels of education.

The Afrocentric Approach to School Curriculum

A discussion of the Afrocentric approach to school curriculum would enrich the discussion on multicultural curriculum by highlighting the differences between multicultural education and Afrocentricity.

Afrocentricity, according to Asante (1992) is:

the belief in the centrality of Africans in post modern history. It is our history, our mythology, our creative motif, and our ethos exemplifying our collective will. On basis of our story, we build upon the work of our ancestors who gave signs toward our humanizing function. The songs, poems, stories, sermons, and proverbs demonstrate our ancestors inexorable movement toward the humanizing

function, more fitted by a higher civilization, a peaceful agrarian mythology, and spiritual explorations, our people affirm in the Diaspora and on the continent the mission of spirit. (p. 6)

Afrocentricity was influenced by past and present African and African American leaders, as well as by the movements that some of these past leaders initiated. The late Senegalese activist scientist, Cheikh Anta Diop, emphasized "the anteriority of Egypt" (Asante, 1992 p. ix) as a result of his researches and analyses of Africa. Booker T. Washington emphasized economic freedom for blacks. Marcus Garvey started the Universal Negro Improvement Association and the African Communities League. Martin Luther King and the Civil Rights Movement left the legacy of non-violent civil disobedience which brought about social and legal changes in America. Elijah Mohammed preached the self-help philosophy. W. E. B. DuBois and Malcolm X fought against racism through intellectual courage.

Afrocentricity requires one to be intelligent and bold in order to be truly Afrocentric. Being intelligent requires a very sharp awareness of one's self. It also involves perceiving others and the universe from an Afrocentric outlook. Being bold, on the other hand, means being assertive without being cocky and aggressive. The two qualities complement each other. It is not enough to have one and not the other. "To assert without

intelligence is force but it is never seen as power until it is coupled with intelligence" (Asante, 1992, p. x).

While there is no specific Afrocentric curriculum, Asante (1992) recommended that educators should use the common-sense Afrocentric ideas to ensure that young African Americans are helped to reach a sharp self-realization. Afrocentricity is an intangible fight for the souls of people of African descent. It urges African Americans to be intellectually vigilant by recognizing that the origin of civilization is in East Africa.

Afrocentricity does not advocate the degrading of other cultures. however, it requires that people of African descent reach within themselves to draw strength and pride from their African ancestry. It advocates that after African American students have been indoctrinated in Afrocentricity, and are quite confident of who they are, then they would be ready to practice multiculturalism. The new cultures that these students learn would be complementary to their culture instead of overriding their culture.

The Suburban School Experience

Research has shown that multicultural education produced positive changes in students' racial attitudes in suburban locations (Fisher, 1965; and Williams and Roberson, 1967). Understanding the necessary elements of the suburban school experience would assist educators in designing

effective multicultural curriculum and programs that would produce positive change in pre-k through 12th grade students' attitudes in suburbs.

According to Wynne (1977):

Suburbs are a segment of American life pervaded with post-industrial characteristics because most of them have been built since 1950, that is, after the time that post-industrial influences began to prevail in our society. (p. 5)

These post-industrial characteristics - heavy use of and reliance on contemporary technology such as the computer, television and telephone; intricate network of remote, technical, and abstract systems; coordination of large and decentralized organizations; emphasis on individualism, privacy, emotional self-control, and attainment of wealth; and well educated and high income residents - greatly influence the nature of suburban schools.

Suburban schools are usually large, emphasize abstract cooperation among students and faculty, with a high student population, and a large faculty of core teachers, special area teachers, administrators, counselors, psychologists, office personnel, security guards, and custodians. Wynne (1977), stated that as a result of the numerous specialists, the large number of students, and the variety of programs, most students deal with different adults during the course of a day, school term, and individual adults similarly deal with hundreds of students. Since most residents of a

particular suburb have about the same income level, the students in these suburban schools tend to be homogeneous in nature. The possibility of having a large number of minority students is usually remote.

Suburban schools like most post-industrial organizations are divided into numerous subdivisions which makes it difficult for parents and students to develop a sustained relationship. These students feel safer investing in short-term relationships. Suburban schools protect the privacy of students by not encouraging the sharing of information about their personal lives, and tend to encourage that the students practice self-restraint. Most of these students, therefore, tend to have feelings of alienation. The residents of suburbs spend a lot of money to build flamboyant schools, attract highly qualified personnel, and to guarantee low teacher-pupil ratios.

The social environments around suburban children are emotionally barren because they are (1) more homogeneous than those around their parents (and homogeneity deprives people of emotion-stretching experiences), (2) largely populated by young persons who have had few occasions to develop or test their emotions, (3) pervaded with transitory relationships that discourage serious emotional engagement, and (4) lacking in tangible cooperative activities aimed at producing goods or services for actual users or buyers (and

such responsibilities stimulate emotional maturation). Many young persons maturing in such environments will tend to hide their emotions, or fear them, or have an excessive or unhealthy fascination with them, or occasionally release them in awkward or sometimes harmful fashions.

(Wynne, 1977, pp. 18-19)

The Urban School Experience

The urban school experience is very important in the development and implementation of multicultural education curricula and programs because of greater minority population in urban areas. Urban areas have greater diverse population than suburbs and rural areas. Due to the diverse racial mix in urban areas, urban areas might have a greater proportion of racially motivated conflicts than in the suburbs. Schools in urban areas with diverse cultures, therefore, would benefit from the types of multicultural education that is geared towards positive changes in racial attitudes.

Research has shown that multicultural education produced positive changes in students' racial attitudes in urban locations (Litcher and Johnson, 1969; and Yawkey and Blackwell, 1974). A review of the urban school experience might help educators understand the necessary elements of the urban school experience that would assist them in designing

effective multicultural curriculum and programs that will produce positive change in attitudes in urban areas.

The urban school experience was discussed in this chapter, in terms of social economic status (SES) of students, student culture, and the teacher impact or influence.

Young (1998) in her report to the National Center for Education Statistics (NCES) on the characteristics of the 100 largest K-12 public schools in US asserted that the proportion of minority students in the stated schools was 65 percent while minority students made up 36 percent of the total school population. She also found that 45 percent of students in the 100 largest school districts were eligible for free lunch while only 33 percent of students were eligible in all the reporting districts and states in the U.S.

Most of the students who attend inner city schools are from low income families whereas in the suburbs, the SES of students in the schools correlates with the neighborhood in which the school is located. This is because most suburbs as previously discussed have neighborhood schools. It is not uncommon to find that there are very rich schools and very poor schools within the same suburban school district. According to Kozol (1991), the disparity between some schools within the same school districts, whether in central cities, suburbs, or rural areas, could lead to the comparison of these schools to schools situated in different worlds. Sleeter

and Grant (1994) found that schools within a district could cater to mainly upper-class, middle-class, working-class, or lower class students. The differences in these schools were seen in the areas of teacher salaries, curriculum offerings, methods of instruction and availability of resources.

Most of the students in these poor schools are minority students, students from single parent homes, and or students from homes with females as head of households. It is evident that there is a wide wage gap between men and women. It is also evident that minorities, even with the same level of education as Whites, do not enjoy the same employment opportunities as their White counterparts (Sleeter & Grant, 1994). These wage gaps highlight why the households discussed above mostly have low SES status.

The parents of these students do not have the economical and political clout to demand the same quality of education that the rich parents demand for their children. As a result, the public schools do not meet all the educational needs of minority students, and students from low SES households as equitably as those of students from high SES households.

One clear evidence of how these students' needs are not being met could be seen from the dropout rates. According to the National Center for Education Statistics report on the 1996 dropout rates, McMillen & Kaufman (1997) confirmed the results of prior studies that showed a strong relationship between dropping out of school and ethnicity and race.

African Americans and Hispanics are more likely to drop out than Whites although Hispanics have a higher dropout rate. In 1996 White students had a dropout rate of 4.1 percent, African American students had a 6.7 percent rate, and Hispanics had a 9.0 percent rate. They also found that SES of students influenced the dropout rate. In 1996, the students from the lowest twenty percent of the family income distribution had a dropout rate of 11.1 percent, those from the middle sixty percent of the family income distribution had a dropout rate of 5.1 percent, and those from the top twenty percent of the family income distribution had a dropout rate of 2.1 percent.

Student cultures according to Sleeter & Grant (1994), mirrored the patterns that existed in the larger society, thereby making it difficult to modify student behavior, and convinced teachers that their behavior toward students was right. Students come to school with the knowledge of the environment they live in, and with their developed attitudes towards education as a result of this knowledge. Teachers respond to them according to these attitudes. Everhart (1983), and Gaskell (1985) both found that teacher influence was very important in the formation of student culture. Students from low SES homes are usually not challenged at school. They found school boring, and thus developed a culture that would help them get through school. This culture made teachers believe that they were right in not challenging the students because the students

were not interested in academics.

These teachers blamed the students' home life and the society for the students' apathy towards education. However, even though students' are affected by the society and their family background, they form their school culture as they try to adjust to their school experience. Their experiences outside school which differ according to social class, race, and gender give them the frameworks they use in assessing their school experience (Sleeter & Grant, 1994). An understanding of the nature of students' school culture would enrich educators knowledge as they strive to design effective curriculum and programs that would lead to a reduction in students' racial attitudes.

Attitudes of Students

A number of studies have been conducted on students' racial, gender, and democratic attitudes. Most of these studies have concentrated on racial attitudes and have involved younger children in pre-school and elementary schools. These studies were primarily conducted in order to identify and understand how early children developed racial attitudes, and if these attitudes could be modified. The goal of modifying students' attitudes is to assist them to develop more democratic attitudes and values. Contrary to what most elementary school teachers believe, about fifty years of research has shown that children are aware of racial

differences as early as at the age of three (Phinney & Rotheram, 1987), and have acquired attitudes toward themselves and other races just as the adult members of society.

Trubowitz, (1969), and Yawkey and Blackwell, (1974) found that the formative years were when children acquired their attitudes toward themselves and members of a different race. Studies in the Social Studies field (Yawkey and Geletka, 1973), in the Language Arts field (Fisher, 1965), in the Mathematics field (Yawkey, 1971), and studies on racial attitudes (Williams and Edwards, 1969; and Yawkey, 1973) all concluded that young children's pre-formed attitudes were developmental and changed with age; and with exposure to planned activities, and experience.

Other studies that showed that children's racial attitudes were formed early in life were Lasker (1929), Minard (1931), E. L. Horowitz (1936), and R. E. Horowitz (1939). The Horowitzes found that both African American and White nursery school children preferred Whites, which was an indication of self-rejection on the part of the African American children. Clark & Clark (1939a, 1939b, 1940, 1947, 1950) in a series of studies found that the African American nursery school children preferred the white dolls over the black ones, thereby confirming the Horowitzes findings of self-rejection on the part of the African American children studied. Subsequent studies also had similar findings (Radke & Trager, 1950; Morland, 1966; Porter, 1971; Williams & Morland, 1976).

A group of other studies have challenged the self-rejection findings of the studies noted above. These studies (W. C. Banks, 1976; Spencer, 1982; J. A. Banks, 1984; Cross, 1985; Spencer, 1985, 1987; Cross, 1991) showed that the African American children expressed a white bias because of what they have learned from the larger society, and not because they have low self-esteem or self-concept. These children were able to differentiate between personal identity and group identity when making decisions about race.

Having affirmed that children have racial attitudes, researchers decided to see if these attitudes could be modified after being exposed to some planned interventions. Banks (1991) divided the modification studies into four groups: (a) studies that dealt with curricular interventions, (b) studies that dealt with reinforcement, (c) studies that dealt with perceptual differentiation, and (d) cooperative learning studies.

This meta-analysis examined studies that dealt with curricular interventions, studies that dealt with reinforcement, and studies that dealt with perceptual differentiation.

The earliest type of modification studies, which started during the 1940s intergroup education period, were the studies that dealt with curricular interventions. These studies involved teaching students a course or unit on multicultural education over a period of time in order for the students to acquire positive racial attitudes.

Agnes (1947) and Jackson (1944) found that students developed positive racial attitudes after reading articles about African Americans. Trager and Yarrow (1952) concluded that both students and teachers developed more positive racial attitudes after exposure to a democratic curriculum. According to Hayes and Conklin (1953), the racial attitudes of students became more positive after learning an intercultural curriculum. Litcher and Johnson (1969) concluded that multiethnic readers created a positive effect on the racial attitudes of White second grade students. However, when Litcher, Johnson, and Ryan (1973) replicated the study using photographs, no significant effects on the racial attitudes of White second graders were found. The different ethnic make-up of the cities studied, and the shorter period of the second study might have caused the different results. Other curricular intervention studies which found positive effects on racial attitudes are Fisher (1965), Leslie and Leslie (1972), Yawkey (1973), Lessing and Clarke (1976), and Shirley (1988).

Banks' (1991) narrative review summarized the effects of curricular intervention studies as bringing about positive racial attitudes on students. However, these effects were not consistent due to the different duration of the individual studies, and the use of different attitude change measures.

Reinforcement studies were conducted to reduce white bias of young children by positively reinforcing the children for choosing black objects, and negatively reinforcing them for choosing white objects (Banks, 1995).

Studies developed by Williams & Edwards (1969); Williams, Best, Wood, & Filler (1973); and Williams & Morland (1976), all concluded that white bias in children were reduced by these activities. Yancey (1972) also concluded after developing and conducting a thirty-minute per day, thirty consecutive school days study that reinforcement activities increased the expression of positive racial attitudes.

However, Shanahan's (1972), and Collins's (1972) studies did not have significant results. McAdoo (1970) did not find measurable effects on the African American preschool children's racial attitudes at the conclusion of his study. Also, Walker's (1971) study did not obtain positive racial attitudes in the kindergarten children studied.

Reinforcement studies are more theoretically grounded than curricular intervention studies because laboratory reinforcement studies have usually confirmed the findings of studies done in the field of education. They have also produced richer and consistently positive results (Banks, 1995).

Perceptual differentiation studies, (Katz, 1973; Katz & Zalk, 1978), showed that children could better differentiate the faces of members of their ethnic group than faces of those outside their ethnic group. However, children could be taught to differentiate the faces of out-group members.

Thus, when children were taught how to differentiate the faces of those outside their ethnic group, prejudice and racial bias were diminished

because the children had become more familiar with the faces of the out-group members. Katz & Zalk (1978) also stated that vicarious interracial contact was effective in reducing prejudice as well as perceptual differentiation. Perceptual differentiation studies are also more grounded in theory than curricular intervention studies. They have produced richer and consistently positive results (Banks, 1995).

Cooperative learning studies. (Allport, 1954; Cohen, 1972; Aronson & Bridgeman, 1979; Slavin, 1979, 1985), showed that when students were taught in a cooperative learning environment, friendships across races and positive racial attitudes were developed. However, Cohen (1972) stressed that unless students were given opportunities to undergo equal-status interactions, both White and minority students would expect the White ones to control the group activity. Such learning environments primarily increased minority students' academic achievement.

Multicultural education is a vast field which has utilized a variety of interventions to disseminate its goals of modifying racial attitudes. This meta-analysis focused on curricular intervention studies, reinforcement studies, and perceptual differentiation studies. Using cooperative learning as an agent for changing attitudes is complicated because of the extraneous variables that might interact with the cooperative learning. It might, therefore, in some cases not be very clear whether the findings of the study were as a result of the cooperative learning technique alone or as a

result of the cooperative learning technique interacting with other variables such as the topic of the lesson. Most cooperative learning studies primarily focused on academic achievement, and examined racial attitudes secondarily. Since this study specifically looked at racial attitudes, cooperative learning studies were not examined. It is hoped that the results of this study would determine whether curricular intervention studies yielded more positive effects than reinforcement studies, or whether reinforcement studies yielded more positive effects. Perceptual differentiation studies were not included in the comparison to determine which type of ME studies yielded more positive effects because only one study of this type was identified that could be used in a meta-analysis.

Summary of the Review of Literature

There are various definitions of multicultural education reflecting the beliefs of different disciplines such as psychology, anthropology, sociology and education. These definitions claim that multicultural education is for all students and is designed to ensure that all students receive equal educational opportunities (Suzuki, 1984; Hernandez, 1989; Nieto, 1992; and Banks, 1994).

The definitions of ME connote that multicultural curriculum should reflect the beliefs and experiences of all the ethnic groups within a community. Multicultural curriculum was greatly influenced by the ethnic

studies movement, the 1950s intergroup education movement and the Civil Rights Movement of the 1960s which sought to integrate school curricula by incorporating the cultures of all members of the community.

Banks (1994) recommended a multicultural curriculum that would teach minority ethnic groups how to free themselves from psychological captivity, stress social action, acquire humanistic dispositions toward all ethnic groups, realize power and ethnic identity without being chauvinistic and ethnocentric, and acquire the national identity and skills necessary to participate completely in the society. This study examined the effects of multicultural education on the racial attitudes of pre-k through 12th grade students to determine if multicultural education is capable of changing students' racial attitudes. It compared the relative effects yielded by curricular intervention studies on racial attitudes of pre-k through 12th grade students to the effects yielded by reinforcement studies. It compared the relative effects of ME yielded by studies conducted in suburban locations on racial attitudes of pre-k through 12th grade students to the effects yielded by studies conducted in urban locations. It also compared the relative effects of ME on racial attitudes of students within the one through eighth age group, to the effects on the ninth through sixteenth age group's racial attitudes.

This meta-analysis did not examine studies that dealt with self esteem because the perception of one's self was not the focus of this

analysis. This analysis focused on the attitude of people towards members of their culture and members of other cultures. Also this meta-analysis did not examine the impact of gender on racial attitudes since all cultures have the same gender classifications.

The proponents of Afrocentricity believe that students should be taught from an Africa-oriented point of view, especially students of African origin in order to help young African Americans to reach a sharp self-realization. After the young African American students have become knowledgeable about their culture, they could practice multiculturalism.

The demographics of the United States and its schools is increasingly becoming less White and more diverse. According to the National Center for Educational Statistics (1995), thirty-five percent of grades one through twelve students enrolled in public schools belong to a minority group. This is an eleven percent increase from 1976. Most of these minority students are in the inner city schools which are highly populated. The social economic status (SES) of these students are low. They have an anti-academics student culture, which is reinforced by low teacher expectations. As a result, there are high dropout rates in urban schools, and among minority students.

Suburban schools are heavily influenced by the post-industrial characteristics that pervade the core of most suburbs - heavy use of and reliance on contemporary technology such as the computer, television and

telephone; intricate networks of remote, technical, and abstract systems; coordination of large and decentralized organizations; emphasis on individualism, privacy, emotional self-control, and attainment of wealth; and well educated and high income residents. Suburban schools, therefore, are usually more financially solid than their counterparts in urban areas. However, students in suburban schools tend to exhibit signs of emotional maladjustment due to their feelings of alienation.

Most of the studies on students' attitudes have shown that children developed racial attitudes early, but these attitudes could be modified through various activities and interventions to assist them develop more democratic attitudes and values.

Despite the methodological concerns of meta-analysis discussed earlier, it is still, so far, the best alternative to narrative reviews (Cooper and Door, 1995a) because it yields statistically useful information by determining the effect sizes of the variables under investigation.

Research Questions

Based on the discussions in this chapter, this meta-analysis answered the following questions:

1. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to multicultural education, operationalized as programs and curricula

dealing with diversity issues, and same grade students who were exposed to the traditional methods of instruction?

2. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to curricular intervention dimension of ME and same grade students exposed to reinforcement dimension of ME?

3. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to multicultural education in suburban settings and same grade students exposed to ME in urban settings?

4. What were the differences in the racial attitudes of ages 3-8 students, and ages 9-16 students who were exposed to multicultural education?

CHAPTER 3

METHODOLOGY

In order to select the studies that were used in this research, an extensive and a systematic literature search was conducted. The breadth of the search covered electronic searches on these databases: the Dissertation Abstracts International (1965-1999), Educational Resources Information Center (ERIC 1966-1999), Psychological Literature (1965-1999), Sociological Abstracts (1965-1999); the web-site of the Journal of Negro Education, and the American Educational Research Association (AERA) web-site on the internet.

The search on AERA involved searching the abstracts of the following journals which AERA publishes: Educational Researcher (ER), American Educational Research Journal (AERJ), Educational Evaluation and Policy Analysis (EEPA), Journal of Educational and Behavioral Statistics (JEBS), Review of Educational Research (RER), and Review of Research in Education (RRE). Other citations were found through manual tracking of references found in primary studies and research articles, and in Banks, J. A., & Banks, C. A. M. (Eds.). (1995). Handbook of research on multicultural education.

Criteria for Inclusion of Studies

The studies included in this meta-analysis met the following criteria:

1. The study used some form of experiment (treatment and non-treatment groups).
2. The study examined the effects of multicultural education (curricular intervention programs, reinforcement programs, or perceptual differentiation programs) on racial attitudes. The studies that examined the effects of multicultural education on self-concept were excluded. Also the studies that looked at other forms of multicultural education such as gender were excluded.
3. The subjects of the study were pre-school to twelfth grade children. The studies involving college/post-secondary participants were excluded.
4. The study was conducted in the classroom or in a structured setting outside the classroom.
5. The study reported the outcomes of both the control group and the experimental group separately.
6. The study had a minimum sample size of forty students.
7. The treatment lasted at least one session.
8. The study was conducted between 1965 and 1998

Using the above criteria, thirty studies out of about 300 relevant studies were selected for this study. Most of the relevant studies were excluded because they did not utilize statistical measurement and analysis of data.

Meta-analysis, which calculates effect size to determine the presence of the phenomena under study in the population being studied, is the research design used in this study. According to Glass, G. V., McGaw, B., & Smith, M. L. (1981), meta-analysis is the statistical analysis of the findings of many original empirical studies. It involves calculating effect size to determine the statistical difference in mean standard deviation. Meta-analysis, therefore, yielded results that were more representative and covered a broader range of content, treatment, variation, population, and means of measurement than the results of the original studies.

A detailed description of the studies included in this study, and how to calculate effect sizes are furnished in this chapter.

Table 2 itemized the researchers, the publication dates, sample sizes, age of subjects, and location of the studies.

Table 2

Studies Included in the Meta-Analysis

Author (s)	Study		Sample Size	Approximate	
	Date	Type		Age	Location
Asan, G. T.	1991	C.I.	240	13	Urban, Suburban, & Rural, WA
Best, et. al.	1975	R.	109	4 - 6	Suburban, NC
Collins, J. L.	1972	R.	60	4	Suburban, TN

Table 2 (continued)

Studies Included in the Meta-Analysis

Author (s)	Date	Study	Sample	Approximate	
		Type	Size	Age	Location
Dunbar, L. H.	1980	C.I.	292	13	Suburban, CA
Fisher, F. L.	1965	C.I.	437	10	Suburban, CA
Howell, M.	1973	C.I.	137	10	Rural, IL
Jha, R.	1993	C.I.	66	10-12	Montreal, Canada
Katz, P. & Zalk, S.	1978	P.D.	160	7-10	Urb/Suburb, NY
Kimoto, C. K.	1974	C.I.	150	10-11	Suburban, WA
Koeller, S.	1977	C.I.	220	11	Urban, CO
Lancaster, J. W.	1971	C.I.	145	10	Suburban, MA
Leslie, et. al	1972	C.I.	89	11	Suburban, UT
Litcher & Johnson	1969	C.I.	68	7	Urban, US
Litcher, et. al.	1973	C.I.	128	7	Suburban, MN
McAdoo, J. L.	1970	R.	65	3-5	Suburban, MI
Parish, et. al.	1976	R.	94	11	Rural, Mdwst US
Ramirez Vida, R. M.	1980	C.I.	108	10	Urban, TX
Santos, S. L.	1979	C.I.	67	9-13	Suburban, US
Shanahan, J. K.	1972	R.	56	6	Urban, NW, US
Shirley, O. B.	1988	C.I.	721	10-12	Urban, MS

Table 2 (continued)

Studies Included in the Meta-Analysis

Author (s)	Date	Study	Sample	Approximate	
		Type	Size	Age	Location
Singh & Yancey	1974	C.I.	41	6	Suburban, PA
Tauran, R. H.	1967	C.I.	236	8	Suburban, MD
Terri, P.	1981	C.I.	200	9-12	Urban, CA
Verma, G. K.	1977	C.I.	1504	14-16	Urban & Rural, Britain
Walker, P. A.	1971	R.	85	5	Urb/Suburb, KY
White, D. A.	1971	C.I.	85	6-8	Suburban, US
Williams & Edwards	1969	R.	84	5	Suburban, NC
Williams & Roberson	1967	R.	111	4-7	Suburban, NC
Yawkey, T. D.	1973	C.I.	104	7	Urb & Rural, US
Yawkey & Blackwell	1974	C.I.	54	4	Urban, MD

Note. "C. I." symbolizes curricular intervention studies. "P. D." symbolizes perceptual differentiation studies. "R." symbolizes reinforcement studies.

Calculation of Effect Sizes

The primary statistical method employed by meta-analysis is the calculation of an effect size. The effect size shows the extent that the phenomenon under study is existent in the study's population (Glass et. al., 1981). Calculation of effect size involves the determination of the mean difference between the experimental and control groups divided by the standard deviation of the traditional/control group. This method described above, the definitional formula, is believed to yield the most data in a direct way (Glass et. al., 1981); and would determine the statistical difference in mean standard deviation units (Wolf, 1986). The use of the definitional formula below to calculate effect sizes depends on the study's data including the control group's standard deviation, and the means of both the control group and the experimental group.

$$ES = \frac{\bar{X}_m - \bar{X}_t}{Sd_t}$$

\bar{X}_m is the experimental group's mean or the mean of those who received multicultural education, \bar{X}_t is the traditional/control group's mean or the mean of those who did not receive multicultural education, and Sd_t is the traditional group's standard deviation.

Table 3 below illustrates four different ways of calculating effect sizes depending on the research design of the original study. If the statistical

method of the original study yields an F ratio as can be found in studies employing multivariate analysis, or the correlation coefficient (r) as in correlational studies, or a t value as in studies comparing two means, or a Z value as in studies reporting only the z value without indicating the F ratio, the mean, and the standard deviation, the respective effect size equation would be used in the place of the definitional formula to calculate the effect size of the study.

Table 3

Effect Size Formula Conversion

Statistic	Formula Conversion to Effect Size
F ratio	$ES = \frac{\sqrt{2F}}{\sqrt{df}}$
r	$ES = \frac{2r}{\sqrt{1-r}}$
t -value	$ES = \frac{2t}{\sqrt{df}}$
Z -value	$ES = \frac{Z}{\sqrt{N}}$

Holmes (1984) developed the following formula for calculating the effect size when the sizes for both the control and experimental groups, and the F ratio are specified :

$$ES = \sqrt{\frac{F[\frac{1}{n_m} + \frac{1}{n_t}]}{[n_m + n_t]}}$$

F is the F ratio, n_m is the experimental group's size, and n_t is the control group's size.

The studies to be included in the meta-analysis are described below in order of sample, location and setting, methods, variables, findings, and effect sizes.

Review of Studies

Asan, G. T. (1991). The affective and cognitive effects on eighth-grade students of the Project REACH multicultural program. (Unpublished doctoral dissertation, Seattle University).

Sample: 103 (experimental group had REACH curriculum instruction) and 137 (control group did not) equals 240 8th grade students.

Location: High, medium, and low ethnicity schools in some cities, suburbs and rural areas of western Washington.

Method: A pretest/posttest control group quasi-experimental design was used to compare the students scores on three test instruments to see if the

REACH curriculum changed students' attitudes, changed their self concept, and made them familiar with key ethnic groups. A t-test and analysis of variance (ANOVA) were used to analyze the data at .05 significance level.

Variables: Dependent variables - subjects' racial attitudes, subjects' self concept, and subjects' familiarity with key ethnic groups. Treatment variable - REACH curriculum instruction.

Findings: No significant difference at the .05 level in the attitudes, self-concept, and ethnic awareness of both groups was found. However, the experimental group had higher posttest scores.

Effect Sizes to be Calculated: Two, using the t -value formula transformation: the responses to the adapted Bogardus Social Distance Scale (attitude), and Ethnic Awareness Survey (knowledge).

Best, D. L., Smith, S. C., Graves, D. J., & Williams, J. E. (1975). The modification of racial bias in preschool children. Journal of Experimental Child Psychology, 20, 193-205.

Sample: 39 (29 Euro and 10 Afro) in Experiment 1, and 70 (Euro) in Experiment 2, equals 109 kindergarten children.

Location: Church-related preschools in Winston-Salem, North Carolina.

Method: In Experiment 1, the Preschool Racial Attitude Measure (PRAM) II series were given in three phases to 39 students with a score of 14 or more in Phase I. A year later, 30 of these students received Phase IV of

the treatment. In Experiment 2, 70 children received a pre assessment using the PRAM II A series and Peabody Picture Vocabulary Test and a post assessment using PRAM II series B and the Color Meaning Test. 30 (experimental, 30 control, and an untreated control group of 10 students. .01 and .05 significance levels were used for the ANOVA's performed.

Variables: Dependent variable - students' racial attitudes based on PRAM II (A & B), and the Color Meaning Test scores. Treatment variables - Machine Advance or Token Reinforcement Training, race and color-related curriculum, and race of the teacher delivering the special curricula.

Findings: Experiment 1 - students associated Afro figures positively, and Euro figures negatively, but reversed these associations a year later.

Experiment 2 found nonsignificant results in the students' racial attitudes.

Effect Sizes to be Calculated: Two, using the Holmes (1984) formula: the PRAM II A & B series from experiments I and II, and one, using the definitional formula: the Color Meaning Test.

Collins, J. L. (1972). The effect of differential frequency of color adjective pairings on the subsequent rating of color meaning and racial attitude in preschool children. (Unpublished master's thesis, East Tennessee State University).

Sample: 56 (white) and 4 (African American) equals 60 preschoolers.

Location: Church Kindergarten, day care program, and East Tennessee State University Child Study Center in Johnson City, Tennessee.

Method: Five experimental groups of 12 subjects were given the Color Meaning Test II (CMT II), and the PRAM II after listening to two children's stories with both positive (PEA) and negative (NEA) evaluative adjectives about white and black characters. Anovas and t-tests were performed.

Variables: Dependent - subjects' racial attitudes based on CMT II and PRAM II scores. Treatment variable - stories with PEA and NEA.

Findings: No significant difference was found due to exposure to treatment, and due to age of subjects on the attitudes of subjects.

However, a t-test on the extreme age groups CMT II scores indicated that age was a factor in score differences.

Effect Sizes to be Calculated: Two, using the f -value formula transformation: CMT II scores and PRAM II scores.

Dunbar, L. H. (1980). The utilization of values clarification in multicultural education as a strategy to reduce prejudicial attitudes of eighth grade students (Doctoral dissertation, Northern Arizona University, 1980). Dissertation Abstracts International, 41 (3), AYE.

Sample: 5 morning classes (121 experimental group) and 5 afternoon classes (171 control group) equals 292 eighth grade students.

Location: Meadow brook Middle School, Pow, California.

Method: A pretest/posttest control group design was used to examine six hypotheses, but only hypothesis one dealing with reduction of racial prejudice will be analyzed here using a t-test. The Multicultural Student Survey was used for the pre and post tests within a five months interval - with emphasis on items 9, 10, 11, 12, 15, 16, 17, 23, 25, 29, 31, and 35 dealing with hypothesis one. The treatment was the implementation in their classrooms of the Multiethnic Education Enriches the Social Sciences (MEETS) program's multiethnic education teaching strategies and units in the social sciences by the teachers of the experimental groups.

Variables: Dependent variable - subjects' racial prejudice. Treatment variable - MEETS.

Findings: No significant difference was found in the racial prejudice of the experimental and control groups.

Effect Sizes to be Calculated: One, using the t -value formula transformation: the responses from Multicultural Student Survey.

Fisher, F. L. (1965). The influences of reading and discussion on the attitudes of fifth graders toward American Indians. (Unpublished doctoral dissertation, University of California, Berkeley).

Sample: Eighteen fifth grade classes equals 437 fifth grade students divided into two experimental groups, and one control group.

Location: Six elementary schools in Berkeley, California.

Method: After conducting a pilot study to test the instruments, the combined attitude scale and information test, and the social distance scale were given to subjects using a pretest/posttest control group design. Groups A and B read a story about American Indians every Monday and Wednesday for three weeks. Group B discussed the stories while Group A did not. Group C, control group) did not read or discuss stories. Analysis of Covariance (ANCOVA) and t-test were used to analyze only hypotheses one-three, which dealt with attitude change relevant to this study, out of five hypotheses.

Variables: Dependent variable - attitude of fifth graders towards American Indians based on scores from the attitude-information tests. Treatment variable - reading and discussing stories about American Indians.

Findings: The attitude change in Group B was significantly greater than in Group A, and the attitude change in Group A was significantly greater than in Group C.

Effect Sizes to be Calculated: Two, using the definitional formula: Group A response to the attitude-information tests, Group B response to the attitude-information tests, and one, using the t -value formula transformation: Group C response to the attitude-information tests.

Howell, M. (1973). A study of the effects of reading upon the attitudes of fifth graders toward Mexican Americans. (Unpublished doctoral dissertation, Southern Illinois University).

Sample: 43 (Group A - control), 45 (Group B - experimental), and 49 (Group C - experimental) equals 137 fifth graders.

Location: Fifth grade classes in the Bushnell School System, and the Western Illinois University Laboratory School, Illinois.

Method: A pretest/posttest control group design was used to assess students' responses to the attitude scales - Semantic Differential, Social Distance, Social Attitude, and Purdue Master Attitude - after reading stories about Mexican Americans for a period of five (Group B) to ten (Group C) weeks. A t-test and ANOVA were used to test the three hypotheses at the .01 significance level.

Variables: Dependent variable - subjects' attitudes toward Mexican Americans. Treatment variable - reading lessons.

Findings: The reading lessons did not provide a total change in attitudes although the group with the longer instruction showed minor significance.

Effect Sizes to be Calculated: One, using the Holmes (1984) formula: the responses to the Semantic Differential, Social Distance, Social Attitude, and Purdue Master Attitude scales of the experimental and control groups.

Jha, R. (1995). The study on the effect of multicultural education on attitude change. (Unpublished master's thesis, McGill University, Montreal, Canada).

Sample: 35 (experimental group) and 31(control group) equals 66 fifth grade students.

Location: Lakeshore school district of Montreal West, Canada.

Method: Pretest/posttest control design was used to assess attitudes after four months exposure to For All Cultures in Every Society (F.A.C.E.S.) ME program, using a questionnaire developed to address ethnocentrism, pluralism, personal contact, stereotypes, and acceptance of others.

Variables: Dependent variable - subjects' racial attitudes. Treatment variable - F.A.C.E.S.

Findings: F.A.C.E.S. improved subjects towards other ethnic groups.

Effect Sizes to be Calculated: One, using the Holmes (1984) formula: the pre and post tests responses from the experimental and control groups.

Katz, P. A., & Zalk, S. R. (1978). Modification of children's racial attitudes. Developmental Psychology, 14, 447-461.

Sample: 160 white second and fifth graders from two public schools.

Location: Lower-middle class school in New York City, and a middle class school in a suburb close to New York City.

Method: Pretest/posttest control group design using three attitude

measures (K-Z test, Koslin Social Distance Scale, and the Friendship Questionnaire) was used to examine the subjects responses after participation in the four experimental and control group conditions (Group interaction technique, Vicarious identification, Stimulus redifferentiation groups, and Conditioning group). A multivariate analysis of variance (MANOVA) was used to analyze the data at the .05 significance level.

Variables: Dependent variable - subjects' racial attitudes from scores of the three attitude measures. Treatment variables - Group interaction technique, Vicarious identification, Stimulus predifferentiation groups, and Conditioning group.

Findings: Experimental subjects exhibited more tolerant racial attitudes in the two-week posttest than the control group. However, in a 4-6 month follow-up posttest after the experiment, the rate of tolerance was reduced. The effects of treatment appeared stronger in the younger children.

Effect Sizes to be Calculated: Three, using the f -value formula transformation: Responses to the K-Z test, Koslin Social Distance Scale, and the Friendship Questionnaire.

Kimoto, C. K. (1974). The effects of a juvenile literature based program on majority group attitudes toward black Americans.

(Unpublished doctoral dissertation, Washington State University).

Sample: 50 fifth graders and 19 sixth graders (experimental groups), and

44 fifth graders and 24 sixth graders (control groups) equals 137 university town students.

Location: Pullman Public Schools, Washington with 96.5% white children.

Method: Pretest/posttest control group design using three attitude measures were used to evaluate the attitudes of the subjects' after exposure to a literature based ME program. ANCOVA at the .10 level of significance was used to compare both groups' scores on the attitude measures and the Likert Scores on the pretest and the posttest, and the one month follow up posttest.

Variables: Dependent variable - subjects' attitudes towards minority groups. Treatment variable - literature based ME program.

Findings: The literature based ME program led to more positive attitudes towards minority groups by the experimental subjects.

Effect Sizes to be Calculated: One, using the Holmes (1984) formula: the Likert Score on the three attitude measures.

Koeller, S. (1977). The effect of listening to excerpts from children's stories about Mexican-Americans on the attitudes of sixth graders. Journal of Educational Research, 70, 329-334.

Sample: 220 sixth graders randomly assigned to experimental and control groups.

Location: Three school districts in the Denver metropolitan area.

Method: Posttest only design using ANOVA at .05 significance level was used to analyze subjects' responses to Koeller's Semantic Differential of Attitudes toward Mexican-Americans, and Coopersmith Self-Esteem Inventory after six weeks of listening to excerpts from books on Mexican-Americans. The results of the Self-Esteem Inventory was excluded from this study.

Variables: Dependent variable - subjects' attitudes towards Mexican-Americans based on the attitude measure. Treatment variable - listening to excerpts from books on Mexican-Americans.

Findings: Positive ethnic attitudes were promoted inconsistently amongst experimental groups.

Effect Sizes to be Calculated: One, using the f -value formula transformation: the scores on the Koeller attitude measure.

Lancaster, J. W. (1971). An investigation of the effect of books with black characters on the racial preferences of white children. (Unpublished doctoral dissertation, Boston University).

Sample: 145 fifth graders in a school where only two students are black.

Location: Suburb of Boston Massachusetts.

Method: The pretest was given to 21 students (1/5th of the sample) a week before the introduction into the classroom of the books to be read. The posttest was given to all students after the six weeks of reading books

with black characters were over. Multiple regression was used to analyze the data from both pre/post tests on the racial preference measure. The students were put into two groups - the Bias/No Preference Group and the Prejudiced Group.

Variables: Dependent variable - Subjects' racial preference. Treatment variable - the free reading of selected books with black characters.

Findings: The Bias/No Preference Group had less tendency to use race as a decision making tool. while the Prejudiced group had more tendency to do so with the reading of more books. Therefore, the number of books read influenced racial prejudice.

Effect Sizes to be Calculated: Two, using the Holmes (1984) formula: Scores of the Bias/No Preference Group and the Prejudiced Group.

Leslie, L. L., & Leslie, J. W. (1972). The effects of a student centered special curriculum upon the racial attitudes of sixth graders. Journal of Experimental Education, 41, 63-67.

Sample: 3 social studies classes (low, middle, and high achievement) each divided into experimental group (E), control group (C), and a second control group (T) equals 89 sixth graders.

Location: Salt Lake City suburbs with strong Mormon Church's influence.

Method: A pretest/posttest design was used to examine the results of the attitude measure on the four scales of interest (Direct Comparisons Test.

Show Me test, Purdue Test, and Own Assessment Test). Wilcoxon Matched-Pairs Signed Rank Test was used to analyze the data.

Variables: Dependent variable - students' attitudes towards African Americans based on scores from the four attitude tests. Treatment variables - enriched curriculum and materials, direct contact with African Americans, teaching classmates about African Americans, and peer influence.

Findings: The experiences of the total group positively altered the subjects' attitudes towards African Americans.

Effect Sizes to be Calculated: Four, using the z -value formula transformation: the pretests/posttest scores of all the four tests.

Litcher, J. H., & Johnson, D. W. (1969). Changes in attitudes toward negroes of white elementary school students after use of multiethnic readers. Journal of Educational Psychology, 60, 148-152.

Sample: 34 (experimental group) and 34 (control group) equals 68 white middle class second graders.

Location: Two public schools in a predominantly white Midwestern city, with less than 100 African Americans out of 50,000 inhabitants.

Method: A pretest/posttest control group design controlling for the teacher, the classroom, the school, and the subjects' reading ability was used to assess the results of four attitude measures, Clark Doll, Show Me,

Categories, and Direct Comparison tests, after the experimental group's exposure to four months of multiethnic readers. ANCOVA was used to analyze the posttest data.

Variables: Dependent variable - subjects' attitudes based on the scores from the attitude tests. Treatment variable - multiethnic readers.

Findings: The experimental group developed more favorable attitudes towards African Americans.

Effect Sizes to be Calculated: Four, using the Holmes (1984) formula: the subjects' posttest scores on all the four attitude tests.

Litcher, J. H., Johnson, D. W., & Ryan, F. L. (1973). Use of pictures of multiethnic interaction to change attitudes of white elementary school students toward blacks. Psychological Reports, 33, 367-372.

Sample: 48 (2 experimental groups of 24 each) and 80 (divided into 3 control groups) equals 128 middle class white second graders.

Location: Suburb of Minneapolis-St. Paul metropolitan area.

Method: A pretest/posttest control group design was used. Experimental Group 1 used mixed racial groups materials of children in middle class, suburban settings, while Experimental Group 2 studied children in lower-class, inner-city settings for four weeks. After the treatment, the two (E) groups and one control group received only the posttests. One control group received only a pretest, while another control group received both a

pretest and a posttest. The tests are Clark Doll, Show Me, Peer Evaluation and Preference, Categories, and Direct Comparison tests. ANOVA was used to analyze the data.

Variables: Dependent variable - subjects' attitudes towards African Americans based on scores from the five attitude tests. Treatment variable - racially mixed multiethnic readers.

Findings: No significant difference was found between the attitudes of the experimental groups and the control groups.

Effect Sizes to be Calculated: Five, using the Holmes (1984) formula: the subjects posttest scores on all the five attitude tests.

McAdoo, J. L. (1970). An experimental study of racial attitude change in black preschool children. (Unpublished doctoral dissertation, University of Michigan).

Sample: 65 (3 experimental groups of 23-BC, 22-PR, and 20-NR) 3 - 6 year old African American preschool children.

Location: 3 integrated day care centers in 3 respective suburbs of Detroit.

Method: A pretest/posttest design was used to assess the 3 experimental groups' (Black consciousness, positive reinforcement, and negative reinforcement) responses to the two measures (Racial-Attitude-Sex-Role Picture Series and Racial Preference Test) after exposure to the Black Consciousness Series preschool curriculum. ANCOVA was used for data

analysis.

Variables: Dependent variables - subjects' racial attitudes, and racial preferences. Treatment variable - Black Consciousness Series preschool curriculum.

Findings: There was a significant difference in the racial attitudes, but not in the racial preference of the three groups.

Effect Sizes to be Calculated: Two, using the Holmes (1984) formula: Racial-Attitude-Sex-Role Picture Series and Racial Preference Test.

Parish, T. S., Shirazi, A., & Lambert, F. (1976). Conditioning away prejudicial attitudes in children. Perceptual and Motor Skills, 43, 907-912.

Sample: 30 (experimental group I), 31 (experimental group II), and 33 (control group III) equals 94 Euro-American sixth graders.

Location: A rural elementary school in the midwestern United States.

Method: A pretest/posttest control group design was used to compare the subjects' responses to the attitude scale after viewing the Afro-American and Vietnamese slides, and listening to the positive or neutral words. Two ANCOVAs were used to analyze the data.

Variables: Dependent variable - subjects' prejudicial attitudes.

Treatment variables - Viewing Afro-American and Vietnamese slides with positive or neutral words.

Findings: No significant difference was found in the attitudes of the

subjects toward African-Americans, while a significant difference was found in the subjects' attitudes toward the Vietnamese.

Effect Sizes to be Calculated: Two, using the Holmes (1984) formula: the students' responses to the attitude scales on African Americans and on the Vietnamese.

Ramirez, V. R. M. (1980). The effect of culturally relevant units of instruction on the attitude of fifth grade social studies students (Doctoral dissertation, University of Texas, 1980). Dissertation Abstracts International, 41, 04A, 1370.

Sample: 108 fifth graders.

Location: Two schools with predominantly low socioeconomic Mexican American students in the east section of the city of Austin, Texas.

Method: A pretest/posttest control group design was used to examine the students' responses to the attitude measures (St. Lambert Experiment Attitude Scale, and the Attitude of Mexican American Student Scale) after the experimental groups' exposure to the culturally relevant social studies curriculum. ANOVAs were used to analyze the data at .05 significance level.

Variables: Dependent variable - racial attitudes. Treatment variable - culturally relevant social studies curriculum.

Findings: A significant difference was found in the attitudes of the

experimental group towards Mexican Americans.

Effect Sizes to be Calculated: Two, using the definitional formula:

St. Lambert Experiment Attitude Scale, and the Attitude of Mexican American Student Scale.

Santos, S. L. (1980). The effects of the inclusion of bilingual/multicultural content into the daily curriculum of elementary school children (Doctoral dissertation, Kansas State University, 1980). Dissertation Abstracts International, 40, 4460-61A.

Sample: 36 (experimental group) and 31 (control group) equals 67 fourth, fifth, sixth graders who are US military dependents.

Location: A midwestern elementary school.

Method: After 7 weeks of the experimental groups' exposure to the Bilingual/Multicultural Enrichment Program, a posttest-only control group design was used to examine the students' responses to the Personal Attribute Inventory for Children, and the inter-cultural knowledge measure. ANOVAs were used to analyze the data at .05 and .001 significance levels.

Variables: Dependent variable - racial attitudes. Treatment variable - Bilingual/Multicultural Enrichment Program.

Findings: Both groups of grade five students had significantly less positive attitudes towards Anglos, Hispanics, Orientals, and Native

Americans but they did not differ in attitudes towards blacks. No significant difference was found between both groups in each grade. The experimental non- Anglos scored a more positive attitude than the control Anglos on the Hispanic Personal Attribute Inventory for Children.

Effect Sizes to be Calculated: Two, using the definitional formula: Personal Attribute Inventory for Children, and the inter-cultural knowledge measure.

Shanahan, J. K. (1972). The effects of modifying black-white attitudes of black and white first grade subjects upon two measures of racial attitudes. (Unpublished doctoral dissertation, University of Washington).

Sample: 56 black and white first graders.

Location: Five Northwestern urban Catholic schools.

Method: A posttest-only control group design was used to assess students' responses to these three measures - Color Meaning Test II (CMT II), Preschool Racial Attitude Measure II (PRAM II), and Pick-A-Class Test (P-A-C) after the experimental groups' exposure to Positive/Negative Reinforcement following the Color Meaning Test II. ANOVAs and Chi-square were used to analyze the data at .05 significance level.

Variables: Dependent variable - racial attitudes. Treatment variable - Positive/Negative Reinforcement following the Color Meaning Test II.

Findings: While the CMT II yielded a significant difference between the

experimental groups and control groups, the PRAM II and the P-A-C Test did not.

Effect Sizes to be Calculated: Two, using the definitional formula: from the CMT II and PRAM II test responses, and one, using the Holmes (1984) method: from the responses to the P-A-C Test.

Shirley, O. L. B. (1988). The impact of multicultural education on self-concept, racial attitude, and student achievement of black and white fifth and sixth graders. (Unpublished doctoral dissertation, University of Mississippi).

Sample: 365 (experimental group) and 356 (control group) equals 721 fifth and sixth graders.

Location: Jackson Public School District in Mississippi.

Method: Trained teachers taught the experimental groups multicultural curriculum and involved them in cooperative learning activities. A pretest/posttest control group design was used to examine the students' responses to the Stephan-Rosenfield Racial Attitude Scales. ANCOVA was used to analyze the data at .05 level of significance.

Variables: Dependent variable - racial attitudes. Treatment variable - multicultural curriculum / participation in cooperative learning activities.

Findings: The racial attitudes of white students in the experimental groups became significantly more positive toward blacks than that of

white control group children.

Effect Sizes to be Calculated: One, using the definitional formula:

Stephan-Rosenfield Racial Attitude Scales.

Singh, J. M. and Yancey, A. V. (1974). Racial attitudes in white first grade children. The Journal of Educational Research, 67, 370-372.

Sample: 20 (experimental group) and 21 (control group) equals 41 white first graders.

Location: An elementary school in State College, Pennsylvania.

Method: A pretest/posttest control group design was used to examine the students' responses to Series A and B of the PRAM II after the experimental group's 30-day exposure to an intensive, multi-factor racial prejudice reduction program. A t-test was used to analyze the data.

Variables: Dependent variable - racial attitudes. Treatment variable - an intensive, multi-factor racial prejudice reduction program.

Findings: The experimental group demonstrated a significant reduction of negative racial attitudes.

Effect Sizes to be Calculated: One, using the definitional formula: Series A and B of the PRAM II.

Tauran, R. H. (1967). The influences of reading on the attitudes of third graders toward Eskimos. (Unpublished doctoral dissertation.

University of Maryland).

Sample: 8 groups in school I, and 8 groups in school II equals 236 mostly white third grade students.

Location: Third grade classes in the Montgomery and Prince Georges Counties, Maryland.

Method: A Solomon's pretest/posttest control group design was used to assess the students' responses to the Likert-type attitude scale. Four groups received a pretest. After a two-week exposure to unfavorable reading material (2 groups only), favorable reading material (2 groups only), and a combination of favorable and unfavorable reading material (2 groups only), all eight groups received posttest. A chi-square, ANOVA, t-test, and MANCOVA were used to analyze the data.

Variables: Dependent variable - racial attitudes. Treatment variable - favorable and unfavorable reading materials on Eskimos.

Findings: Unfavorable reading materials about Eskimos led to unfavorable attitudes toward Eskimos. Favorable reading materials led to favorable attitudes toward Eskimos. Once students have read favorable materials, their attitudes did not become unfavorable after reading unfavorable materials.

Effect Sizes to be Calculated: One, using the definitional formula: the responses to the Likert-type attitude scale by the 3 groups that received pretest, treatment, and posttest; and by the control group that received

pretest and posttest. Both groups' standard deviations were reported.

Terri, P. (1981). An evaluation of the effects of multicultural education on the attitudes of ethnic minority and majority students at Cortez Elementary School (Doctoral dissertation, University of San Francisco, 1981). Dissertation Abstracts International, 42, 3860 A.

Sample: 100 (control group) and 100 (experimental group) equals 200 4th - 6th grade predominantly Hispanic students.

Location: Cortez Elementary School in the Los Angeles Unified School District.

Method: A pretest/posttest control group design was used to evaluate the students' responses to the Cultural Attitude Inventory after one term's exposure to the multicultural instruction program in ten class meetings by the experimental group. T-tests, and ANOVA were used to analyze the data at .05 significance level.

Variables: Dependent variable - racial attitudes. Treatment variable - multicultural instruction program.

Findings: The experimental group's attitudes toward other ethnic groups were significantly more favorable than the control group's.

Effect Sizes to be Calculated: One, using the Holmes (1984) method: the responses to the Cultural Attitude Inventory.

Verma, G. K. (1977). Some effects of curriculum innovation on the racial attitudes of adolescents. International Journal of Intercultural Relations, 1, 67-77.

Sample: 1504 14-16 year old secondary students divided into both control and experimental groups.

Location: 39 British schools of various multiracial composition representative of rural and urban areas in Britain.

Method: The 39 schools were divided amongst three strategies: Strategy A (the Humanities Curriculum Project was designed to improve race relations) had 13 schools; Strategy B (the Combating Prejudice Strategy was designed to use education to eliminate racial tension and ill-feeling) had 16 schools; and Strategy C (the Use of Drama Strategy used drama to teach about race relations) had 10 schools. A pretest/posttest control group design was used to assess students' responses to the Bagley-Verma Scale after the experimental groups' four months exposure to the three strategies. A t-test was used to analyze the data.

Variables: Dependent variable - racial attitudes. Treatment variables - Strategy A (the Humanities Curriculum Project), Strategy B (the Combating Prejudice Strategy), and Strategy C (the Use of Drama Strategy).

Findings: Participation in the three strategies produced an improvement in racial relations and tolerance.

Effect Sizes to be Calculated: Three, using the definitional formula:

the General Racism responses to the Bagley-Verma Scale for Strategies A, B, and C.

Walker, P. A. (1971). The effects of hearing selected children's stories that portray blacks in a favorable manner on the racial attitudes of groups of black and white kindergarten children. (Unpublished doctoral dissertation, University of Kentucky).

Sample: 20 (experimental group 1), 25 (control group 1), 20 (experimental group 2), and 20 (control group 2) equals 85 black and white kindergartners.

Location: Four kindergartens within the the Commonwealth of Kentucky.

Method: A pretest/posttest control group design was used to assess students' responses to the Preschool Racial Attitude Measure (PRAM) after the experimental groups read children's books with multi-racial characters and situations for six weeks. A chi-square, and ANCOVA were used to analyze the data at the .05 significance level.

Variables: Dependent variable - racial attitudes. Treatment variable - reading children's books with multi-racial characters and situations.

Findings: There was a strong anti-black bias amongst both the white and black kindergartners. No significant differences were found in the attitudes of the experimental groups after reading the multi-racial stories.

Effect Sizes to be Calculated: One, using the Holmes (1984) method:

the responses to the PRAM.

White, D. A. (1972). Effectiveness of Afro-American studies on the racial attitudes of young white children (Doctoral dissertation, University of Illinois, 1972). Dissertation Abstracts International, 32, 5402A.

Sample: 85 white students in three primary classes.

Location: A well kept school in a suburban neighborhood in US.

Method: A pretest/posttest design was used to assess students' responses to the attitude measures - the Social Distance Scales I and II, the Semantic Differential Scale, the Knowledge Component Test, the Piers-Harris Children's Self Concept Scale, and the Social Occupational Scale - after six months exposure to the Black Curriculum. ANOVA was used to analyze the data at .05 significance level.

Variables: Dependent variable - racial attitudes. Treatment variable - the Black Curriculum.

Findings: The white students' attitudes toward blacks became more positive.

Effect Sizes to be Calculated: Three, using the Holmes (1984) method: responses to the Social Distance Scales I and II, and the Semantic Differential Scale.

Williams, J. E., & Edwards, C. D. (1969). An exploratory study of the

modification of color and racial concept attitudes in preschool children.

Child Development, 40, 737-750.

Sample: 84 white kindergarten children.

Location: Two church affiliated kindergartens in Winston-Salem, North Carolina.

Method: The students were divided into four groups - PR (positive reinforcement only), NR (negative reinforcement only), PR-NR (positive and negative reinforcement, and C (control, no reinforcement). The students' were shown pictures and told stories about those pictures using the Revised Color Meaning Picture Series, and the Racial Attitude-Sex-Role Picture Series. ANOVA was used to analyze the data at .05 significance level.

Variables: Dependent variable - racial attitudes. Treatment variable - Revised Color Meaning Picture Series, and the Racial Attitude-Sex-Role Picture Series.

Findings: Students' attitudes toward blacks did not significantly improve.

Effect Sizes to be Calculated: One, using the definitional formula: responses to the Racial Attitude-Sex-Role Picture Series.

Williams, J. E., & Roberson, J. K. (1967). A method of assessing racial attitudes in preschool children. Educational and Psychological Measurement, 27, 671-689.

Sample: 111 white preschool children.

Location: A preschool in Winston-Salem, North Carolina.

Method: The students' were shown pictures and told stories about those pictures using the Revised Color Meaning Picture Series, and the Racial Attitude-Sex-Role Picture Series after being divided into three groups. The treatment lasted about 14 days.

Variables: Dependent variable - racial attitudes. Treatment variable - Revised Color Meaning Picture Series, and the Racial Attitude-Sex-Role Picture Series.

Findings: Students' attitudes toward blacks improved.

Effect Sizes to be Calculated: One, using the Holmes (1984) method: responses to the the Racial Attitude-Sex-Role Picture Series.

Yawkey, T. D. (1973). Attitudes toward Black Americans held by rural and urban white early childhood subjects based upon multiethnic social studies materials. The Journal of Negro Education, 42, 164-169.

Sample: 104 white early childhood children (7-7 1/2 years) divided into 2 experimental groups and 2 control groups.

Location: An urban school and a rural school in US.

Method: A pretest/posttest control group design was used to assess the students' responses to the Attitude Questionnaire Concerning Black Americans in Early Childhood Education, in both the urban and rural

schools, after 4 weeks of reading and discussing six social studies multi-ethnic texts. T-tests were used to analyze the data.

Variables: Dependent variable - racial attitudes. Treatment variable - reading and discussing six social studies multi-ethnic texts.

Findings: Students' attitudes toward blacks improved.

Effect Sizes to be Calculated: Two, using the t -value formula transformation: the responses to the Attitude Questionnaire Concerning Black Americans in Early Childhood Education in the urban school, and in the rural school.

Yawkey, T. D., and Blackwell, J. (1974). Attitudes of 4-year old urban Black children toward themselves and Whites based upon multi-ethnic social studies materials and experiences. Journal of Educational Research, 67, 373-377.

Sample: 54 4-year old urban low SES children.

Location: Urban Baltimore, Maryland.

Method: The children were divided into 3 groups - Group 1 (reading and discussion - experimental I), Group 2 (reading, discussion, and field experiences - experimental II), and Group 3 (traditional preschool experience). A pretest/posttest control group design was used to assess the children's responses to the Attitudes of Young Black Children Toward Themselves and Whites attitude inventory after 30 days exposure by

groups 1 and 2 to social studies multi-ethnic picture books. A t-test and ANCOVA were used to analyze the data.

Variables: Dependent variable - racial attitudes. Treatment variable - reading and discussing social studies multi-ethnic picture books, and participating in field experiences.

Findings: Using social studies multi-ethnic picture books, and participating in field experiences brings about a positive significant difference in the attitudes of urban black children toward themselves and whites.

Effect Sizes to be Calculated: One, using the Holmes (1984) method: the responses to the Attitudes of Young Black Children Toward Themselves and Whites attitude inventory.

This chapter has provided a description of the criteria that were used in selecting studies, an explanation of meta-analysis, how to calculate effect sizes, and brief summaries of studies to be included in the meta-analysis using the design that comprised of the sample, location, method, variables, findings, and effect sizes to be calculated.

A detailed analysis of the selected studies was done in chapter four by calculating each study's effect size(s). Tables and graphs were used to illustrate the findings of the meta-analysis.

In chapter five, there was a discussion of the findings, the

implications of the findings for practice and research, and the author's recommendations for further research.

CHAPTER 4

ANALYSIS OF DATA

Each of the thirty studies reviewed in chapter three using the design that comprised of the sample, location, method, variables, findings, and effect size to be calculated, had enough information to calculate an effect size. Using the appropriate formula for each study, effect sizes for each of the 30 studies were calculated. Then the mean effect size for each study was calculated by dividing the total effect sizes by the number of effect size calculations using the formula below:

$$ES_x = \frac{\sum ES}{n}$$

$\sum ES_x$ is the total effect sizes, and n is the number of times effect size was calculated. Using Cohen (1977) method of effect size classification, the comparative statistical significance of each study was ascertained.

According to Cohen (1977), the ranges for interpreting effect size are: the small effect range is when $ES = 0.200$ to 0.499 , the medium effect range is when $ES = 0.500$ to 0.799 , and the large effect range is when $ES = 0.800$ and above.

The results of the effect size calculations, the mean effect size, and the effect size classification for each study were as follows:

Asan, G. T. (1991). The two effect sizes calculated using the t -value formula transformation were respectively for the responses to:

1. The adapted Bogardus Social Distance Scale (attitude) $t = -1.51$.

$$ES = \frac{2(-1.51)}{\sqrt{238}} = -0.196.$$

Cohen (1977) classifies this effect size as a negative effect.

2. Ethnic Awareness Survey (knowledge) $t = 1.04$. $ES = \frac{2(1.04)}{\sqrt{238}} = 0.135$.

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = -0.196 + 0.135 / 2$
 $= -0.031$. Cohen (1977) classifies this effect size as a negative effect.

Best, D. L., Smith, S. C., Graves, D. J., & Williams, J. E. (1975). The two effect sizes calculated using the Holmes (1984) method were respectively for the responses to:

1. The PRAM II A & B series in Experiment I $ES = \sqrt{\frac{29.19 \left[\frac{1}{39} + \frac{1}{39} \right]}{2}} = 1.223$.

Cohen (1977) classifies this effect size as a large effect.

2. The PRAM II A & B series in Experiment II $ES = \sqrt{\frac{.80 \left[\frac{1}{30} + \frac{1}{30} \right]}{2}} = .231$.

Cohen (1977) classifies this effect size as a small effect.

3. The third effect size for the Color Meaning Test was calculated using the definitional formula. $ES = \frac{19.00 - 18.33}{1.835} = .18$.

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = 1.223 + .231 + .18 / 3 = 0.545$.

Cohen (1977) classifies this effect size as a medium effect.

Collins, J. L. (1972). The two effect sizes calculated using the f -value formula transformation were respectively for the responses to:

$$1. \text{ CMT II scores - } ES = \frac{2\sqrt{.45}}{\sqrt{50}} = 0.19.$$

Cohen (1977) classifies this effect size as a small effect.

$$2. \text{ PRAM II scores - } ES = \frac{2\sqrt{.39}}{\sqrt{50}} = 0.18.$$

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = 0.18 + 0.191 / 2 = 0.185$.

Cohen (1977) classifies this effect size as a small effect.

Dunbar, L. H. (1980). One effect size was calculated using the t -value formula transformation for the responses from:

$$\text{Multicultural Student Survey } t = .95. \quad ES = \frac{2(.95)}{\sqrt{22}} = 0.405.$$

Cohen (1977) classifies this effect size as a small effect.

Fisher, F. L. (1965). The two effect sizes calculated using the definitional formula were respectively for the responses to:

$$1. \text{ Group A attitude-information tests } ES = \frac{2.66 - 1.43}{.39} = 3.15.$$

Cohen (1977) classifies this effect size as a large effect.

$$2. \text{ Group B attitude-information tests } ES = \frac{3.76 - 1.43}{.39} = 5.97.$$

Cohen (1977) classifies this effect size as a large effect.

3. The third effect size for the Group C attitude-information tests was calculated using the f -value formula transformation. $ES = \frac{2(.10)}{\sqrt{1-(.10)}} = 0.67$. Cohen (1977) classifies this effect size as a medium effect. The mean effect size for this study is $\Sigma ES = 3.15 + 5.97 + .67 / 3 = 3.263$. Cohen (1977) classifies this effect size as a large effect.

Howell, M. (1973). One effect size calculated using the Holmes (1984) method was for the responses from:

The Semantic Differential, Social Distance, Social Attitude, and Purdue Master Attitude scales of the experimental and control groups.

$$ES = \sqrt{\frac{4.382 \left[\frac{1}{94} + \frac{1}{43} \right]}{1}} = 0.385.$$

Cohen (1977) classifies this effect size as a small effect.

Jha, R. (1995). One effect size calculated using the Holmes (1984) method was for the responses from:

The pre and post tests of the experimental and control groups.

$$ES = \sqrt{\frac{10.97 \left[\frac{1}{35} + \frac{1}{31} \right]}{1}} = 0.817.$$

Cohen (1977) classifies this effect size as a large effect.

Katz, P. A., & Zalk, S. R. (1978). The three effect sizes calculated using the f -value formula transformation were respectively for the responses to:

1. The K-Z test $\bar{f} = 8.04$. $ES = \frac{2\sqrt{8.04}}{\sqrt{128}} = 0.501$.

Cohen (1977) classifies this effect size as a medium effect.

2. The Koslin Social Distance Scale $\bar{f} = 4.57$. $ES = \frac{2\sqrt{4.57}}{\sqrt{128}} = 0.378$.

Cohen (1977) classifies this effect size as a small effect.

3. The Friendship Questionnaire $\bar{f} = 7.46$. $ES = \frac{2\sqrt{7.46}}{\sqrt{128}} = 0.483$.

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = .501 + .378 + .483 / 3 = 0.454$.

Cohen (1977) classifies this effect size as a small effect.

Kimoto, C. K. (1974). One effect size calculated using the Holmes (1984) method was for the responses from:

The Likert Score on the three attitude measures. $ES = \frac{3.45 \left[\frac{1}{68} + \frac{1}{69} \right]}{\sqrt{128}} = 0.317$.

Cohen (1977) classifies this effect size as a small effect.

Koeller, S. (1977). One effect size calculated using the \bar{f} -value formula transformation was from:

The scores on the Koeller attitude measure $\bar{f} = 2.04$. $ES = \frac{2\sqrt{2.04}}{\sqrt{204}} = 0.20$.

Cohen (1977) classifies this effect size as a small effect.

Lancaster, J. W. (1971). Two effect sizes calculated using the Holmes (1984) method were from the:

1. Scores of the Bias/No Preference Group. $ES = \sqrt{\frac{5.59 \left[\frac{1}{145} + \frac{1}{21} \right]}{1}} = 0.532.$

Cohen (1977) classifies this effect size as a medium effect.

2. Scores Prejudiced Group. $ES = \sqrt{\frac{4.68 \left[\frac{1}{145} + \frac{1}{21} \right]}{1}} = 0.505.$

Cohen (1977) classifies this effect size as a medium effect.

The mean effect size for this study is $\Sigma ES = 0.532 + 0.505 / 2 = 0.523.$

Cohen (1977) classifies this effect size as a medium effect.

Leslie, L. L., & Leslie, J. W. (1972). Four effect sizes were calculated using the z -value formula transformation from the scores to:

1. Purdue Test. $ES = \frac{4.17}{\sqrt{76}} = 0.478.$

Cohen (1977) classifies this effect size as a small effect.

2. Direct Comparison Test. $ES = \frac{3.28}{\sqrt{84}} = 0.358.$

Cohen (1977) classifies this effect size as a small effect.

3. Show Me Test. $ES = \frac{3.68}{\sqrt{63}} = 0.464.$

Cohen (1977) classifies this effect size as a small effect.

4. Own Assessment Test. $ES = \frac{5.88}{\sqrt{63}} = 0.741.$

Cohen (1977) classifies this effect size as a medium effect. The mean effect size for this study is $\Sigma ES = 0.478 + 0.358 + 0.464 + 0.741 / 4 = 0.510.$

Cohen (1977) classifies this effect size as a medium effect.

Litcher, J. H., & Johnson, D. W. (1969). Four effect sizes were

calculated using the Holmes (1984) method from the scores to:

$$1. \text{ Clark Doll Test. } ES = \sqrt{\frac{15.90 \left[\frac{1}{31} + \frac{1}{34} \right]}{}} = 0.990$$

Cohen (1977) classifies this effect size as a large effect.

$$2. \text{ Show Me Test. } ES = \sqrt{\frac{8.71 \left[\frac{1}{31} + \frac{1}{34} \right]}{}} = 0.733$$

Cohen (1977) classifies this effect size as a medium effect.

$$3. \text{ Categories Test. } ES = \sqrt{\frac{4.38 \left[\frac{1}{31} + \frac{1}{34} \right]}{}} = 0.520$$

Cohen (1977) classifies this effect size as a medium effect.

$$4. \text{ Direct Comparison Test. } ES = \sqrt{\frac{14.94 \left[\frac{1}{31} + \frac{1}{34} \right]}{}} = 0.960$$

Cohen (1977) classifies this effect size as a large effect.

The mean effect size for this study is $\Sigma ES = 0.990 + 0.733 + 0.520 + .960 / 4 = 0.801$. Cohen (1977) classifies this effect size as a medium effect.

Litcher, J. H., Johnson, D. W., & Ryan, F. L. (1973). Five effect sizes calculated using the Holmes (1984) method were from the:

$$1. \text{ Direct Comparison Test. } ES = \sqrt{\frac{.04 \left[\frac{1}{48} + \frac{1}{52} \right]}{}} = 0.040.$$

Cohen (1977) classifies this effect size as a small effect.

$$2. \text{ Clark Doll Test. } ES = \sqrt{\frac{.04 \left[\frac{1}{48} + \frac{1}{52} \right]}{}} = 0.040.$$

Cohen (1977) classifies this effect size as a small effect.

$$3. \text{ Peer Evaluation and Preference Test. } ES = \sqrt{\frac{1.60 \left[\frac{1}{48} + \frac{1}{52} \right]}{}} = 0.253.$$

Cohen (1977) classifies this effect size as a small effect.

$$4. \text{ Categories Test. } ES = \sqrt{\frac{.07 \left[\frac{1}{48} + \frac{1}{52} \right]}{}} = 0.053.$$

Cohen (1977) classifies this effect size as a small effect.

$$5. \text{ Show Me Test. } ES = \sqrt{\frac{.17 \left[\frac{1}{48} + \frac{1}{52} \right]}{1}} = .083.$$

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = 0.040 + 0.040 + 0.253 + 0.053 + 0.083 / 5 = 0.094$. Cohen (1977) classifies this effect size as a small effect.

McAdoo, J. L. (1970). Two effect sizes calculated using the Holmes (1984) method were from the:

$$1. \text{ Racial-Attitude-Sex-Role Picture Series. } ES = \sqrt{\frac{6.37 \left[\frac{1}{65} + \frac{1}{65} \right]}{1}} = 0.443.$$

Cohen (1977) classifies this effect size as a small effect.

$$2. \text{ Racial Preference Test. } ES = \sqrt{\frac{.26 \left[\frac{1}{65} + \frac{1}{65} \right]}{1}} = 0.089.$$

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = 0.443 + 0.089 / 2 = 0.266$.

Cohen (1977) classifies this effect size as a small effect.

Parish, T. S., Shirazi, A., & Lambert, F. (1976). Two effect sizes were calculated using the Holmes (1984) method from responses to:

1. The Semantic Differential attitude scale on African Americans.

$$ES = \sqrt{\frac{1.34 \left[\frac{1}{58} + \frac{1}{33} \right]}{1}} = 0.256.$$

Cohen (1977) classifies this effect size as a small effect.

2. The Semantic Differential attitude scale on Vietnamese people.

$$ES = \sqrt{4.64 \left[\frac{1}{58} + \frac{1}{33} \right]} = 0.470.$$

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = 0.256 + 0.470 / 2 = 0.363$.

Cohen (1977) classifies this effect size as a small effect.

Ramirez, V. R. M. (1980). Two effect sizes were calculated using the definitional formula from the responses to:

$$1. \text{ St. Lambert Experiment Attitude Scale. } ES = \frac{66.67 - 64.11}{10.21} = 0.251.$$

Cohen (1977) classifies this effect size as a small effect.

$$2. \text{ The Attitude of Mexican American Student Scale.}$$

$$ES = \frac{46.68 - 44.86}{6.84} = 0.266.$$

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = 0.251 + 0.266 / 2 = 0.259$.

Cohen (1977) classifies this effect size as a small effect.

Santos, S. L. (1980). Two effect sizes were calculated using the definitional formula from the responses to:

$$1. \text{ Personal Attribute Inventory for Children. } ES = \frac{24.89 - 27.52}{14.02} = -0.188.$$

Cohen (1977) classifies this effect size as a negative effect. However, the low mean score obtained by the experimental group indicates that the experimental group's attitude improved. This could be considered a small effect.

2. The inter-cultural knowledge measure. $ES = \frac{29.56 - 13.36}{4.14} = 3.913.$

Cohen (1977) classifies this effect size as a large effect.

The mean effect size for this study is $\Sigma ES = -0.188 + 3.913 / 2 = 1.863.$

Cohen (1977) classifies this effect size as a large effect. However, the effect size could be 2.059 if all positive ES were used in calculating the effect size.

Shanahan, J. K. (1972). Two effect sizes were calculated using the definitional formula from the responses to:

1. CMT II. $ES = \frac{9.75 - 17.39}{3.68} = -2.076.$

Cohen (1977) classifies this effect size as a negative effect. However, the low mean score obtained by the experimental group indicates that the experimental group's attitude improved. This could be considered a large effect.

2. PRAM II. $ES = \frac{11.29 - 13.36}{7.09} = -0.292.$

Cohen (1977) classifies this effect size as a negative effect. However, the low mean score obtained by the experimental group indicates that the experimental group's attitude improved. This could be considered a small effect.

3. One effect size was calculated using the Holmes (1984) method from the responses to:

$$\text{P-A-C Test. ES} = \sqrt{\frac{.74[1 + 1]}{[28 \ 28]}} = .134$$

Cohen (1977) classifies this effect size as a small effect. The mean effect size for this study is $\Sigma \text{ES} = -2.076 + -0.292 + 0.134 / 3 = -0.745$.

Cohen (1977) classifies this effect size as a negative effect. However, it could be considered a large effect of 0.834 if all positive ES were used in calculating the effect size.

Shirley, O. L. B. (1988). One effect size was calculated using the definitional formula from the responses to:

$$\text{Stephan-Rosenfield Racial Attitude Scales. ES} = \frac{91.75 - 88.25}{1.50} = 2.333.$$

Cohen (1977) classifies this effect size as a large effect.

Singh, J. M. and Yancey, A. V. (1974). One effect size was calculated using the definitional formula from the responses to:

$$\text{Series A and B of the PRAM II. ES} = \frac{8.19 - 6.15}{3.40} = 0.60$$

Cohen (1977) classifies this effect size as a medium effect.

Tauran, R. H. (1967). One effect size was calculated using the definitional formula from the responses to:

The Likert-type attitude scale by the three groups that received pretest, treatment, and posttest; and by the only control group that received

pretest and posttest. $ES = \frac{23.87 - 23.43}{6.3} = 0.069.$

Cohen (1977) classifies this effect size as a small effect.

Terri, P. (1981). One effect size was calculated using the Holmes (1984) method from the responses to:

The Cultural Attitude Inventory. $ES = \sqrt{\frac{4.12[\frac{1}{100} + \frac{1}{100}]}{100}} = 0.226.$

Cohen (1977) classifies this effect size as a small effect.

Verma, G. K. (1977). Three effect sizes were calculated using the definitional formula from the responses to the Bagley-Verma Scale for:

1. Strategy A's General Racism. $ES = \frac{15.91 - 16.86}{10.5} = -0.089.$

Cohen (1977) classifies this effect size as a negative effect. However, the low mean score obtained by the experimental group indicates that the experimental group's attitude improved. This could be considered a small effect.

2. Strategy B's General Racism. $ES = \frac{15.69 - 17.71}{10.61} = -0.190.$

Cohen (1977) classifies this effect size as a negative effect. However, the low mean score obtained by the experimental group indicates that the experimental group's attitude improved. This could be considered a small effect.

3. Strategy C's General Racism. $ES = \frac{13.94 - 16.12}{9.73} = -0.224.$

Cohen (1977) classifies this effect size as a negative effect. However, the low mean score obtained by the experimental group indicates that the experimental group's attitude improved. This could be considered a small effect. The mean effect size for this study is $\Sigma ES = -0.089 + -0.190 + -0.224 / 3 = -0.168$. Cohen (1977) classifies this effect size as a negative effect.

However, it could be considered a small effect of 0.168 if all positive ES were used in calculating the effect size.

Walker, P. A. (1971). One effect size was calculated using the Holmes (1984) method from the responses to:

The PRAM. $ES = \sqrt{\frac{2.08 \left[\frac{1}{40} + \frac{1}{45} \right]}{1}} = 0.313$.

Cohen (1977) classifies this effect size as a small effect.

White, D. A. (1972). Three effect sizes were calculated using the Holmes (1984) method from the responses to:

1. The Social Distance Scale I. $ES = \sqrt{\frac{15.19 \left[\frac{1}{85} + \frac{1}{85} \right]}{1}} = 0.598$.

Cohen (1977) classifies this effect size as a medium effect.

2. The Social Distance Scale II. $ES = \sqrt{\frac{9.12 \left[\frac{1}{85} + \frac{1}{85} \right]}{1}} = 0.463$.

Cohen (1977) classifies this effect size as a small effect.

3. The Semantic Differential Scale. $ES = \sqrt{\frac{3.20 \left[\frac{1}{85} + \frac{1}{85} \right]}{1}} = 0.274$.

Cohen (1977) classifies this effect size as a small effect.

The mean effect size for this study is $\Sigma ES = .598 + .463 + 0.274 / 3 = 0.445$.

Cohen (1977) classifies this effect size as a small effect.

Williams, J. E., & Edwards, C. D.(1969). One effect size was calculated using the definitional formula from the responses to:

The racial attitude portion of the Racial Attitude-Sex-Role Picture

Series. $ES = \frac{7.98 - 9.60}{2.88} = -0.563.$

Cohen (1977) classifies this effect size as a negative effect.

Williams, J. E., & Roberson, J. K.(1967). One effect size was calculated using the Holmes (1984) method from the responses to:

The racial attitude portion of the Racial Attitude-Sex-Role Picture

Series. $ES = \sqrt{4.23 \left[\frac{1}{111} + \frac{1}{111} \right]} = 0.276.$

Cohen (1977) classifies this effect size as a small effect.

Yawkey, T. D. (1973). Two effect sizes calculated using the t -value formula transformation were for the responses to:

1. The Attitude Questionnaire Concerning Black Americans in Early Childhood Education in the urban school $t = -2.012$

$$ES = \frac{2(-2.012)}{25} = -0.805.$$

Cohen (1977) classifies this effect size as a negative effect. However, it could be considered a large effect because the negative t value was due to the rejection of the null hypothesis indicating that students' attitudes

improved.

2. The Attitude Questionnaire Concerning Black Americans in Early Childhood Education in the rural school $t = -4.18$

$$ES = \frac{2(-4.18)}{\sqrt{25}} = -1.672.$$

Cohen (1977) classifies this effect size as a negative effect. However, it could be considered a large effect because the negative t value was due to the rejection of the null hypothesis indicating that students' attitudes improved. The mean effect size for this study is $\Sigma ES = -0.805 + -1.672 / 2 = -1.24$. Cohen (1977) classifies this effect size as a negative effect. However, it could be considered a large effect of 1.24 if all positive ES were used in calculating the effect size.

Yawkey, T. D., and Blackwell, J. (1974). One effect size was calculated using the Holmes (1984) method from the responses to:

The Attitudes of Young Black Children Toward Themselves and Whites

attitude inventory. $ES = \sqrt{41.8 \left[\frac{1}{18} + \frac{1}{36} \right]} = 1.867.$

Cohen (1977) classifies this effect size as a large effect.

A total of 60 effect sizes were calculated in this meta-analysis. The total sample size for all the thirty studies was 5,916 students. The sample size ranged from 41 to 1,504, with a mean sample size of 197 students. The age of the participants ranged from 3 to 16.

Out of the thirty studies selected for this meta-analysis, 21 were curricular intervention studies, 8 were reinforcement studies, and 1 was a perceptual differentiation study. The sites of the studies were as follows : 8 of the studies were located in urban areas, 15 in suburban areas, 2 in rural areas, 2 in a combination of urban and suburban areas, 2 in a combination of rural and urban areas, and 1 in a combination of an urban, suburban, and rural areas.

The type of study, year of study, approximate age of sample, the location, and the effect size or mean effect size of each of the 30 studies are presented in table 4 below.

Table 4

Mean Effect Sizes of the Studies Included in the Meta-Analysis

		Study	Approx.		Effect
Author (s)	Year	Type	Age	Location	Size
Asan, G. T.	1991	C. I.	13	Urban, Suburban, & Rural, WA	-.031
Best, et al.	1975	R.	4-6	Suburban, NC	.545
Collins, J. L.	1972	R.	4	Suburban, TN	.185
Dunbar, L. H.	1980	C. I.	13	Suburban, CA	.405
Fisher, F. L.	1965	C. I.	10	Suburban, CA	3.263
Howell, M.	1973	C. I.	10	Rural, IL	.385

Table 4 (continued)

Mean Effect Sizes of the Studies Included in the Meta-Analysis

Author (s)	Year	Study	Approx.	Location	Effect
		Type	Age		Size
Jha, R.	1993	C. I.	10-12	Montreal, Canada	.817
Katz & Zalk	1978	P. D.	7-10	Urban/Suburban, NY	.454
Kimoto, C. K.	1974	C. I.	10-11	Suburban, WA	.317
Koeller, S.	1977	C. I.	11	Urban, CO	.20
Lancaster, J.	1971	C. I.	10	Suburban, MA	.523
Leslie, et al.	1972	C. I.	11	Suburban, UT	.510
Litcher/Johnson	1969	C. I.	7	Urban, US	.801
Litcher, et al.	1973	C. I.	7	Suburban, MN	.094
McAdoo, J.	1970	R.	3-5	Suburban, MI	.266
Parish, et al.	1976	R.	11	Rural, Midwest US	.363
Ramirez	1980	C. I.	10	Urban, TX	.259
Santos, S. L.	1979	C. I.	9-13	Suburban, US	1.863
Shanahan	1972	R.	6	Urban, Northwest, US	-.745
Shirley, O. B.	1988	C. I.	10-12	Urban, MS	2.333
Singh/Yancey	1974	C. I.	6	Suburban, PA	.60
Tauran, R. H.	1967	C. I.	8	Suburban, MD	.069
Terri, P.	1981	C. I.	9-12	Urban, CA	.226

Table 4 (continued)

Mean Effect Sizes of the Studies Included in the Meta-Analysis

Author (s)	Year	Study		Approx.		Effect
		Type	Age	Location		Size
Verma, G. K.	1977	C. I.	14-16	Urban & Rural, Britain		-.168
Walker, P. A.	1971	R.	5	Urban/Suburban, KY		.313
White, D. A.	1971	C. I.	6-8	Suburban, US		.445
Williams/Edwards	1969	R.	5	Suburban, NC		-.563
Williams/Roberson	1967	R.	4-7	Suburban, NC		.276
Yawkey, T. D.	1973	C. I.	7	Urban & Rural, US		-1.24
Yawkey/Blackwell	1974	C. I.	4	Urban, MD		1.867

Note. "C. I." symbolizes curricular intervention studies. "P. D." symbolizes perceptual differentiation studies. "R." symbolizes reinforcement studies.

Mean Effect Sizes

Using the formula for calculating a mean effect size, the overall mean effect size of all the 30 studies was found to be

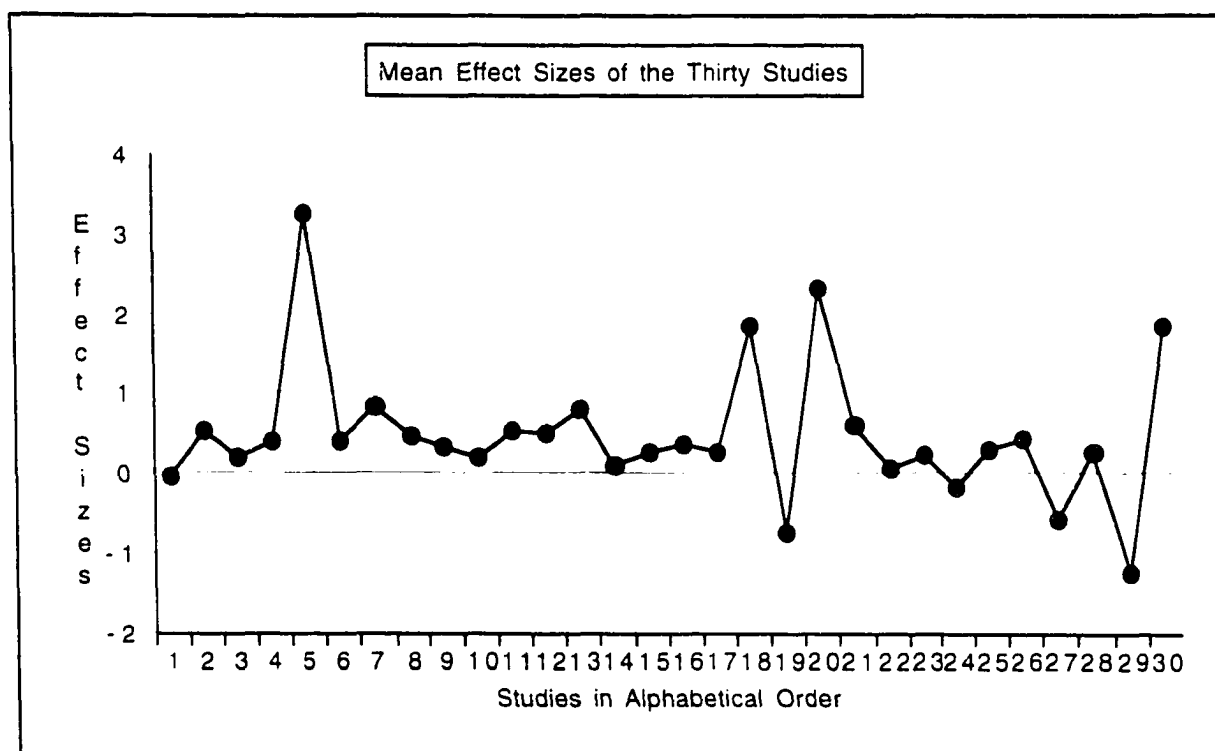
$$ES_x = \frac{14.632}{30} = 0.488$$

Cohen (1977) classifies this effect size as a small effect, which is very close to medium effect. The effect size of 0.488 is positive because the students

who received multicultural education had better racial attitudes than the students who did not. Figure 1 below illustrates the mean effect sizes of all the studies. This figure illustrates the variability in effect sizes of the 30 studies. Six studies yielded large effect sizes, four yielded medium effect sizes, fifteen yielded small effect sizes, and five yielded negative effect sizes.

Figure 1

Mean Effect Sizes of the Thirty Studies



Mean Effect Sizes of Different Types of Study

The mean effect size of the 21 curricular intervention studies was calculated using the formula for calculating a mean effect size.

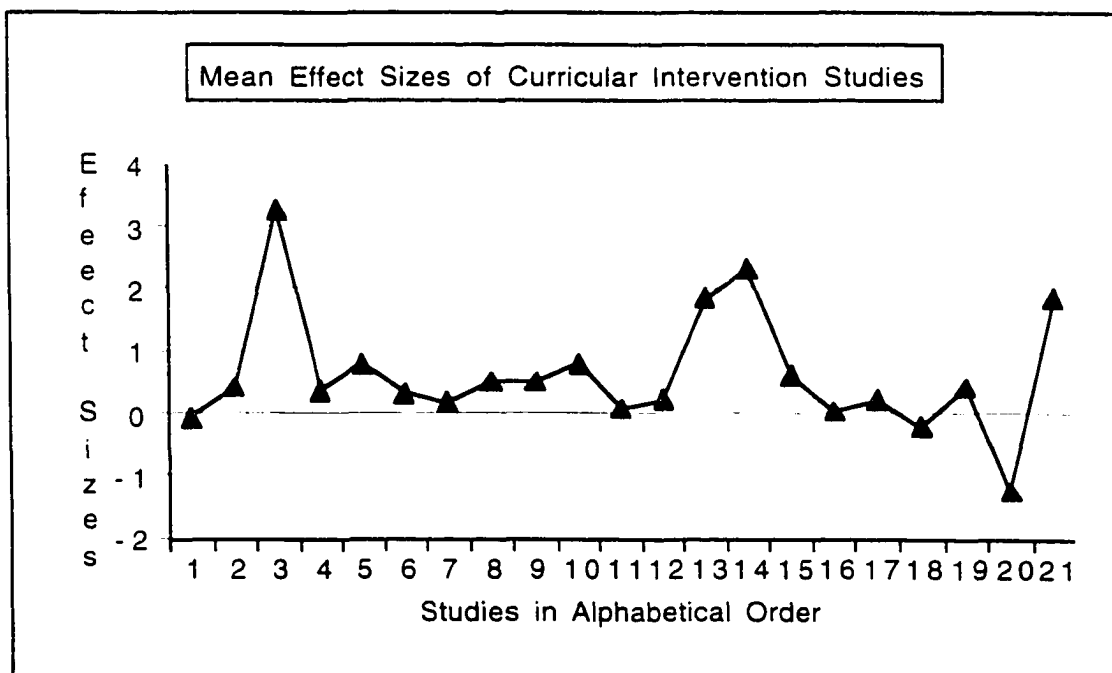
$$ES_x = \frac{13.538}{21} = 0.645$$

Cohen (1977) classifies this effect size as a medium effect. The effect size of 0.645 is positive because the students who received the curricular intervention dimension of multicultural education had better racial attitudes than the students who received traditional instruction.

Figure 2 below illustrates the mean effect sizes of the curricular intervention studies. This figure illustrates the variability in the effect sizes of the 21 curricular intervention studies because it shows that six studies had large effect sizes, three had medium effect sizes, nine had small effect sizes, and three had negative effect sizes.

Figure 2

Mean Effect Sizes of Curricular Intervention Studies



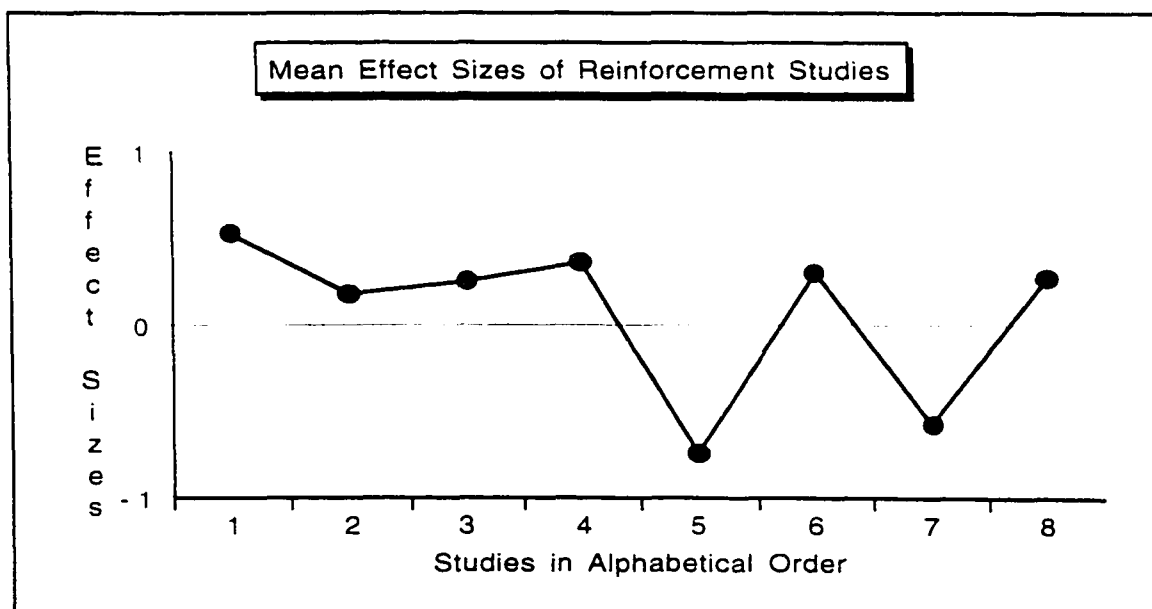
The mean effect size of the 8 reinforcement studies was calculated using the formula for calculating a mean effect size.

$$ES_x = \frac{0.64}{8} = 0.08$$

Cohen (1977) classifies this effect size as a small effect or less. The effect size of 0.08 is positive because the students who received the reinforcement dimension of multicultural education had better racial attitudes than the students who received traditional instruction. Figure 3 below illustrates the mean effect sizes of the 8 reinforcement studies. This figure illustrates the variability in the effect sizes of the 8 reinforcement studies because it shows that one study had a medium effect size, five had small effect sizes, and two had negative effect sizes.

Figure 3

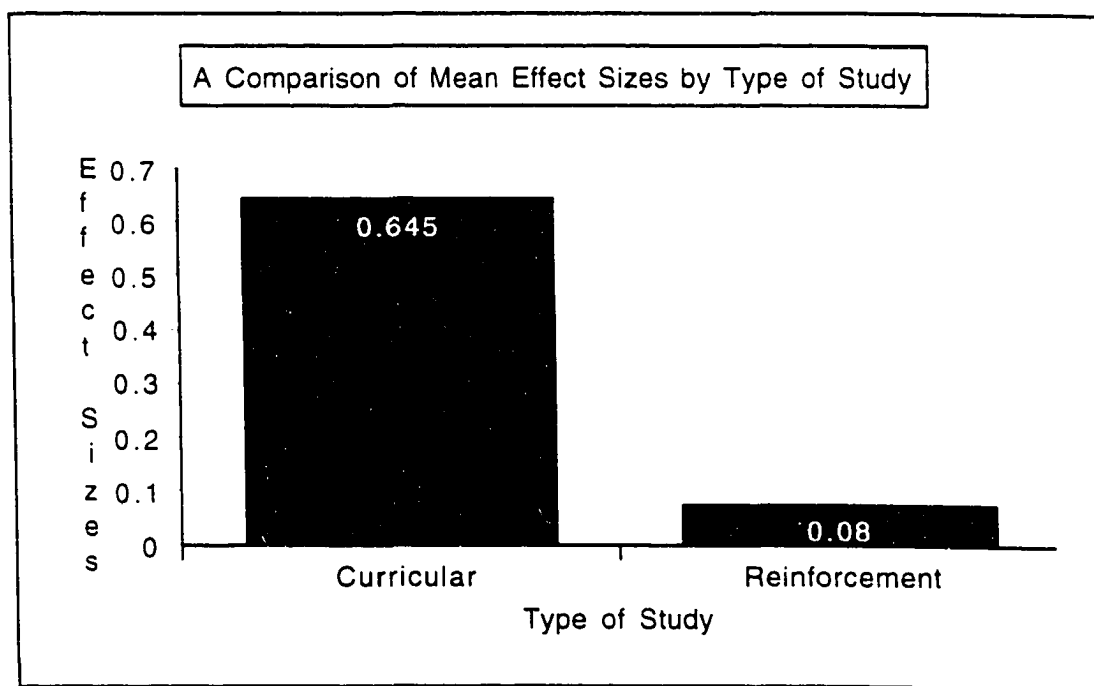
Mean Effect Sizes of Reinforcement Studies



A comparison of the mean effect sizes of the curricular intervention and the reinforcement studies in figure 4 below show that multicultural education was more effective in bringing about change in attitudes in students who received the curricular intervention dimension of multicultural education than in those students who received the reinforcement dimension of ME. The only perceptual differentiation study used in the meta-analysis was not included in the comparison because it was the only one in that category.

Figure 4

A Comparison of Mean Effect Sizes by Type of Study



Mean Effect Sizes of Different Locations

The mean effect size of the 8 urban studies was calculated using the

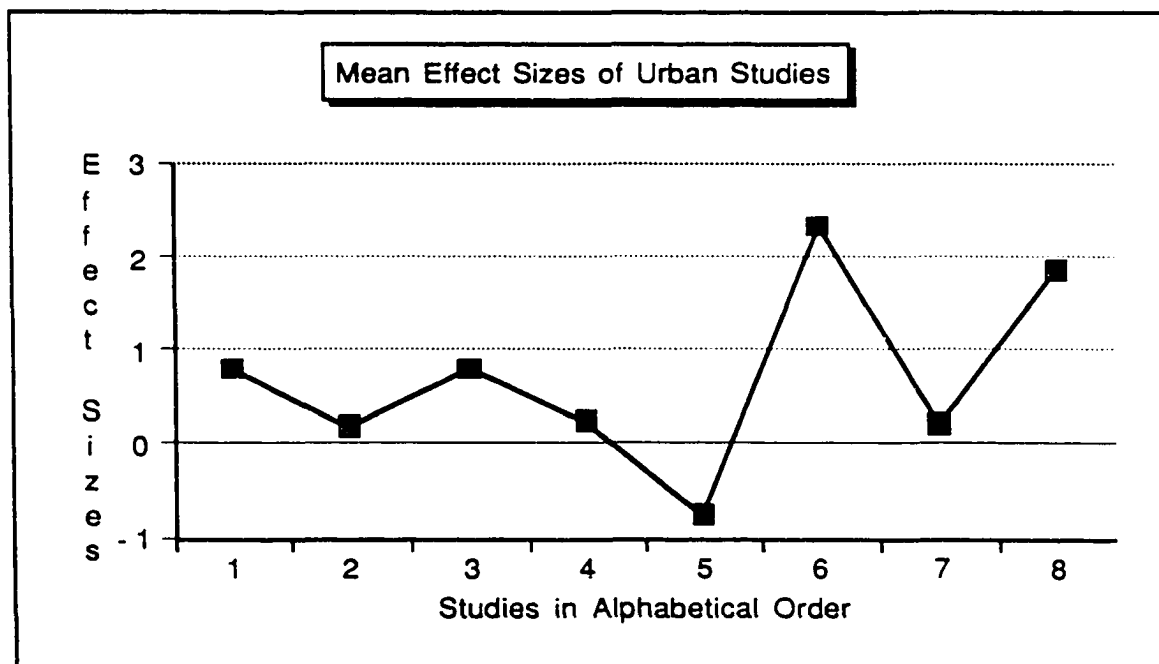
formula for calculating a mean effect size.

$$ES_x = \frac{5.758}{8} = 0.72$$

Cohen (1977) classifies this effect size as a medium effect. The effect size of 0.72 is positive because the students who received multicultural education in the urban areas had better racial attitudes than the students who did not. Figure 5 below illustrates the mean effect sizes of the 8 urban studies. This figure illustrates the variability in the effect sizes of the 8 urban studies because it shows that four studies had large effect sizes, three had small effect sizes, and one study had a negative effect size.

Figure 5

Mean Effect Sizes of Urban Studies



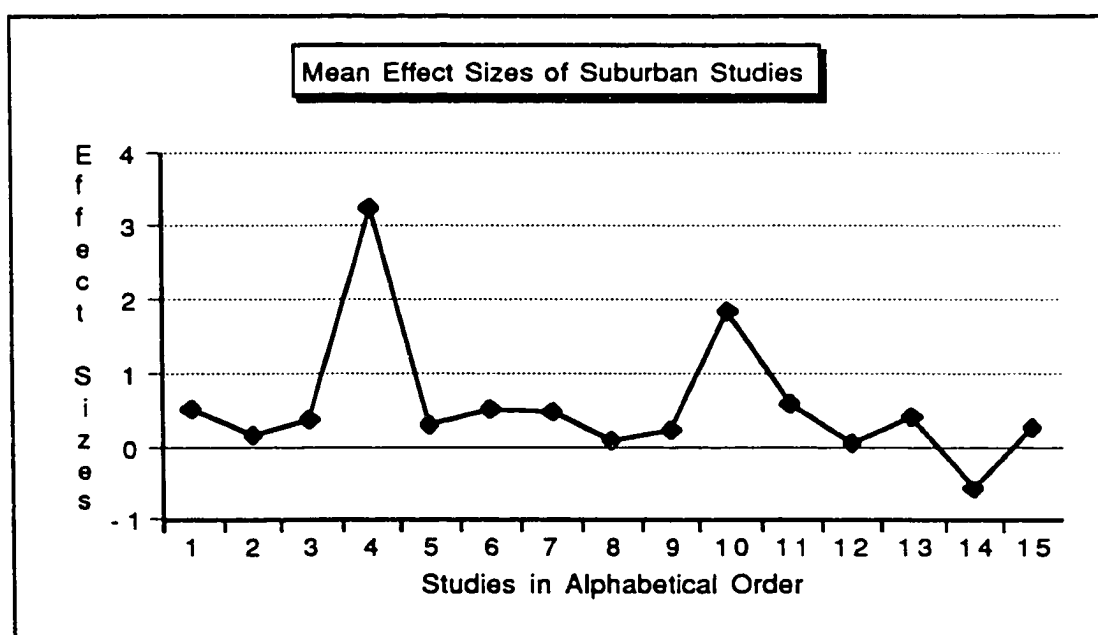
The mean effect size of the 15 suburban studies was calculated using the formula for calculating a mean effect size.

$$ES_x = \frac{8.798}{15} = 0.587$$

Cohen (1977) classifies this effect size as a medium effect. The effect size of 0.587 is positive because the students who received multicultural education in suburban areas had better racial attitudes than the students who did not. Figure 6 below illustrates the mean effect sizes of the 15 suburban studies. This figure illustrates the variability in the effect sizes of the 15 suburban studies because it shows that two studies had large effect sizes, four had medium effect sizes, eight had small effect sizes, and one had a negative effect size.

Figure 6

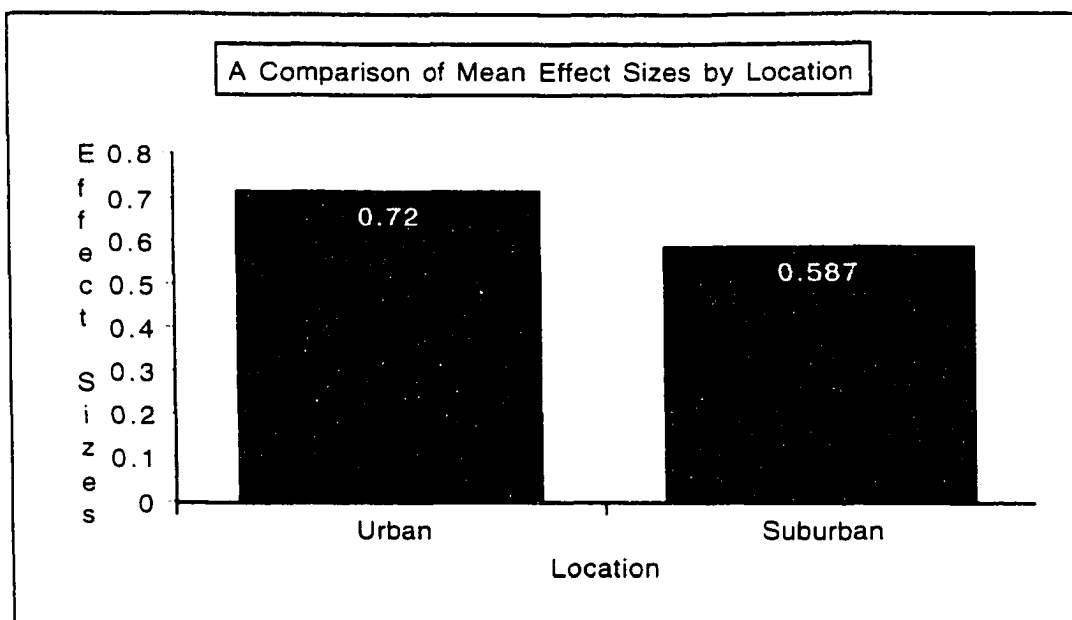
Mean Effect Sizes of Suburban Studies



A comparison of the mean effect sizes of the studies done in the different locations in figure 7 below show that multicultural education was more effective in bringing about change in attitudes in the urban areas than in the suburban areas.

Figure 7

A Comparison of Mean Effect Sizes by Location



Mean Effect Sizes of Different Age Groups

The mean effect size of the 14 studies involving ages 3-8 participants was calculated using the formula for calculating a mean effect size.

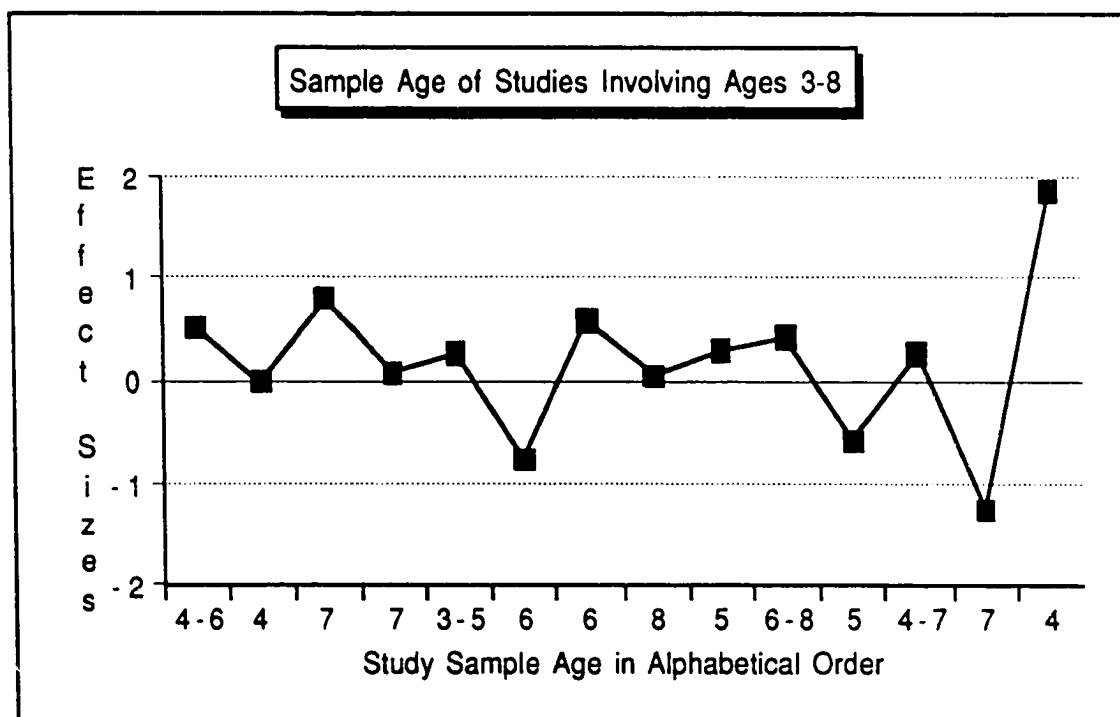
$$ES_x = \frac{2.913}{14} = 0.208$$

Cohen (1977) classifies this effect size as a small effect. The effect size of 0.208 is positive because ages 1-8 students who received multicultural

education had better racial attitudes than same age students who did not. Figure 8 below illustrates the mean effect sizes of the 14 studies involving ages 3-8 participants. This figure illustrates the variability in the effect sizes of the 14 studies because it shows that two studies had large effect sizes, two had medium effect sizes, seven had small effect sizes, and three had negative effect sizes.

Figure 8

Mean Effect Sizes of Studies Involving Ages 3-8



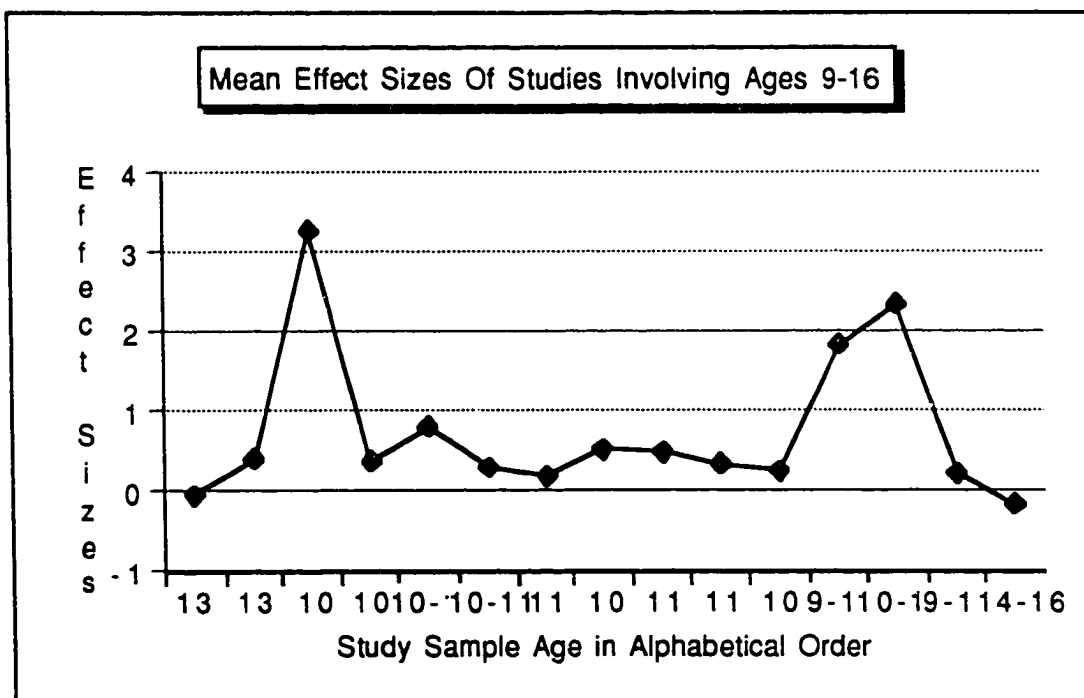
The mean effect size of the 15 studies involving ages 9-16 participants was calculated using the formula for calculating a mean effect size.

$$ES_x = \frac{11.265}{15} = 0.751$$

Cohen (1977) classifies this effect size as a medium effect. The effect size of 0.751 is positive because ages 9-16 students who received multicultural education had better racial attitudes than same age students who did not. Figure 9 below illustrates the mean effect sizes of the 15 studies involving ages 9-16 participants. This figure illustrates the variability in the effect sizes of the 15 studies because it shows that four studies had large effect sizes, two had medium effect sizes, seven had small effect sizes, and two had negative effect sizes.

Figure 9

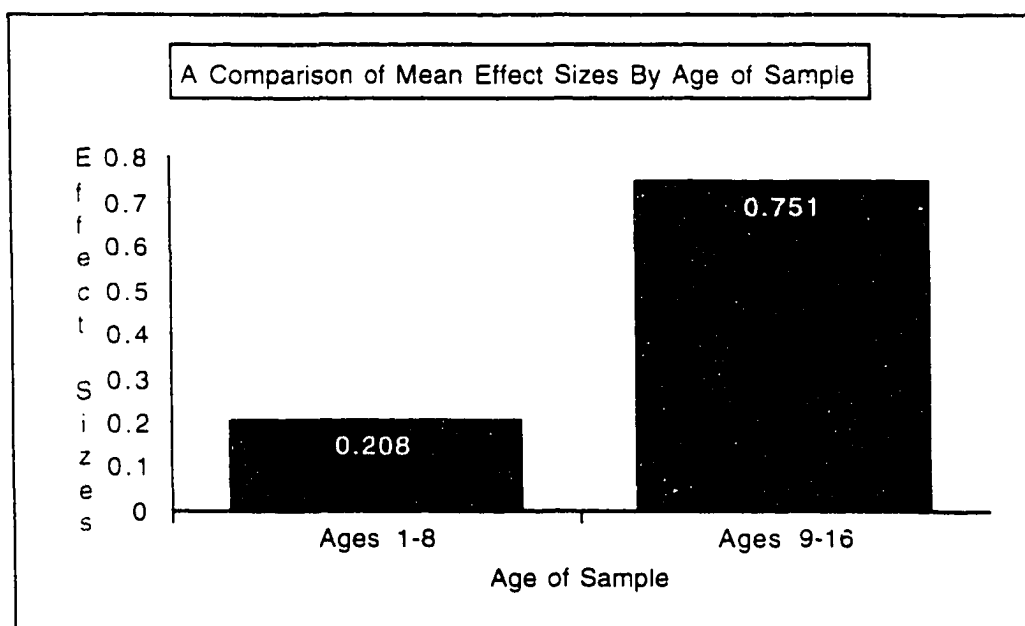
Mean Effect Sizes of Studies Involving Ages 9-16



A comparison of the mean effect sizes of the studies involving ages 3-8, and ages 9-16 participants in figure 10 below show that multicultural education was more effective in bringing about change in attitudes in ages 9-16 students. One study that used ages 7-10 participants was not included in the comparison because it cut across the two age groups being compared.

Figure 10

A Comparison of Mean Effect Sizes by Age of Sample



The comparison of the studies according to the age of the sample was done in two groups (3-8, and 9-16) because: 1) the highest age of sample was 16 years, and 2) the combination of age groups used across the 30 studies fit within the two groups. It would be easier, therefore, to statistically compare the 30 studies according to these two age groups.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to examine the effects of multicultural education on the racial attitudes of students in prekindergarten through twelfth grade. The specific objectives of this study were to: (a) select studies that examined the impact of different dimensions of multicultural education, curricular intervention studies, reinforcement studies, and perceptual differentiation studies, on the racial attitudes of prekindergarten through twelfth grade students, (b) use meta-analysis procedures to statistically analyze these studies, and (c) reach conclusions that will influence educational policies by determining if multicultural education was significantly effective in changing students' racial attitudes.

Educational specialists and intellectuals in an ongoing controversy do not agree on what should be included in the curriculum of schools. The Western Traditionalists and proponents of 'Core Knowledge' curriculum on one end of the spectrum (Hirsch, Jr., 1987; Ravitch, 1992; Schlesinger, Jr., 1991; and Shanker, 1991), believe that the Eurocentric male-dominated curriculum should be the focus of school curriculum. The Afrocentrists (Asante, 1990), on the other end, want Africa to be the focus of the curriculum especially for descendants of Africans. In the middle per se are the proponents of multicultural education (Grant, 1977; Gay, 1988;

Sleeter and Grant, 1988; Bennett, 1990; Nieto, 1992; Banks, 1994; Coelho, 1994; and Davidman and Davidman, 1994) who believe that the curriculum should reflect the various cultures that exist in the nation. However, there is no consensus on what specifically multicultural education entails. Multicultural education is operationalized in this study as programs and curricula dealing with racial and cultural diversity.

Research has shown that children's attitudes are malleable if subjected to interventions and activities designed to change attitudes (Williams and Edwards, 1969; and Williams and Morland, 1976). A number of studies have shown that multicultural education can bring about change in students' attitudes (Jackson, 1944; Agnes, 1947; Hayes and Conklin, 1953; Fisher, 1965; Litcher and Johnson, 1969; Leslie and Leslie, 1972; Yawkey, 1973; Katz and Zalk, 1978; and Shirley, 1988). A few others have shown that multicultural education did not significantly change students' attitudes (Lessing and Clarke, 1973; and Litcher, Johnson, and Ryan, 1973). The variations in these findings could be a result of the type of multicultural education used, the location of the study, and the age group of the sample.

Research Questions

This meta-analysis attempted to answer the following questions.

1. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to

multicultural education, operationalized as programs and curricula dealing with diversity issues, and same grade students who were exposed to the traditional methods of instruction?

2. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to curricular intervention dimension of ME and same grade students exposed to reinforcement dimension of ME?

3. What were the differences in the racial attitudes of students in prekindergarten through twelfth grade who were exposed to multicultural education in suburban settings and same grade students exposed to ME in urban settings?

4. What were the differences in the racial attitudes of ages 3-8 students, and ages 9-16 students who were exposed to multicultural education?

Discussion of Meta-Analysis Results

According to Cohen (1977), the ranges for interpreting effect size are: the small effect range is when $ES = 0.200$ to 0.499 , the medium effect range is when $ES = 0.500$ to 0.799 , and the large effect range is when $ES = 0.800$ and above. Tallmadge (1977) states that to be deemed educationally significant, an effect size difference of 0.250 or more should be obtained.

Mean Effect Size

The mean effect size calculation of the thirty original studies was 0.488. Cohen (1977) interprets this effect size as a small effect. However, 0.488 is close to the top of the small effect range. According to Tallmadge (1977), the mean effect size of 0.488 would be considered educationally significant since it is more than 0.250. It can be concluded, therefore, that exposure to multicultural education brought about positive changes in students' racial attitude. This result provides an answer to research question one by showing that multicultural education is more effective than traditional instruction in bringing about positive racial attitudes in students.

Since there is no available meta-analysis to compare this finding with, the result will be compared with theories and reviews of scholars in the field of multicultural education. This finding supports the narrative review done by Banks (1991) in which he found that multicultural education brings about change in racial attitudes. This finding also supports the theories of multicultural education scholars (Grant, 1977; Gay, 1988; Sleeter and Grant, 1988; Bennett, 1990; Nieto, 1992; Banks, 1994; Coelho, 1994; and Davidman and Davidman, 1994) who believe that the inclusion of multicultural education in the curriculum of schools creates an atmosphere where racial attitudes are improved.

A Comparison of Mean Effect Sizes by Type of Study

The mean effect size of the twenty-one curricular intervention studies was 0.645. Cohen (1977) interprets this effect size as a medium effect. According to Tallmadge (1977), the mean effect size of 0.645 would be considered educationally significant since it is more than 0.250. It can be concluded, therefore, that exposure to the curricular intervention dimension of multicultural education brought about more positive changes in students' racial attitudes than exposure to traditional instruction.

The mean effect size of the eight reinforcement studies was 0.08. Cohen (1977) interprets this effect size as a minimal effect. It can be concluded, therefore, that exposure to the reinforcement dimension of multicultural education brought about minimal positive changes in students' racial attitudes than exposure to traditional instruction.

These results provide an answer to research question two by showing that both curricular intervention and reinforcement dimensions of multicultural education are effective in bringing about positive racial attitudes in students. However, the curricular intervention dimension of multicultural education seemed to be more effective in reducing students' negative racial attitudes (See figure 8).

The curricular intervention dimension of multicultural education might have been more effective in reducing the students' racial attitudes because the students saw the multicultural curriculum as an integral part

of their curriculum, and not as an additional activity that is not part of the curriculum. The students probably felt that they were accountable for the ME information in the form of tests and questionnaires and, therefore, needed to internalize as well as practice the ME information. The ideas, objectives, and standards specified within the ME curriculum would more likely change attitudes than reinforcement activities.

Curricular intervention dimension of ME also generally lasted for a longer duration than the reinforcement dimension because reinforcement dimensions of ME are designed as an additional activity that reinforces students positively for selecting black objects and negatively for selecting white objects in response to questions asked.

Banks (1995) stated that reinforcement studies are more theoretically grounded than curricular intervention studies and have produced richer and consistently positive results. However, the findings of the meta-analysis discussed above showed that curricular intervention studies brought about more positive changes in students' racial attitudes than reinforcement studies.

A Comparison of Mean Effect Sizes by Location

The mean effect size of the eight studies carried out in urban locations was 0.72. Cohen (1977) interprets this effect size as a medium effect. According to Tallmadge (1977), the mean effect size of 0.72 would

be considered educationally significant since it is more than 0.250. It can be concluded, therefore, that exposure to multicultural education brought about more positive changes in urban students' racial attitudes than exposure to traditional instruction.

The mean effect size of the fifteen studies carried out in suburban locations was 0.587. Cohen (1977) interprets this effect size as a medium effect. According to Tallmadge (1977), the mean effect size of 0.587 would be considered educationally significant since it is more than 0.250. It can be concluded, therefore, that exposure to multicultural education brought about more positive changes in suburban students' racial attitudes than exposure to traditional instruction.

These results provide an answer to research question three by showing that multicultural education is effective in bringing about positive racial attitudes in students in urban and suburban areas. However, multicultural education seemed to be slightly more effective in reducing negative racial attitudes in urban locations than in suburban locations (See figure 5).

Multicultural education might have been more effective in reducing racial attitudes in urban areas because urban areas have a more diverse population than suburbs. Students in urban areas, therefore, having been exposed to a variety of cultures were more willing to accept the differences, and recognize the similarities among the various ethnic groups.

Students in the suburbs, on the other hand, tended to live in homogeneous neighborhoods with minimal contact with different ethnic groups. However, the fact that the effect size of the studies done in urban areas was only slightly more than the effect size of the suburban studies could be the result of the increase in the minority population in suburbs discussed earlier in chapter one. As the suburbs become more diverse, the residents become more exposed to, and accepting of different cultures.

A Comparison of Mean Effect Sizes by Age of Sample

The mean effect size of the fourteen studies involving ages three through eight students was 0.208. Cohen (1977) interprets this effect size as a small effect. It can be concluded, therefore, that exposure to multicultural education brought about more positive changes in ages one through eight students' racial attitudes than exposure to traditional instruction in same age students. According to Tallmadge's interpretation, the mean effect size of 0.208 would not be considered educationally significant because it is less than 0.250.

The mean effect size of the fifteen studies involving ages nine through sixteen students was 0.751. Cohen (1977) interprets this effect size as a medium effect. According to Tallmadge (1977), the mean effect size of 0.751 would be considered educationally significant since it is more than 0.250. It can be concluded, therefore, that exposure to multicultural

education brought about more positive changes in ages nine through sixteen students' racial attitudes than exposure to traditional instruction in same age students.

These results provide an answer to research question four by showing that multicultural education is effective in bringing about positive racial attitudes in ages three through eight students, and ages nine through sixteen students. However, multicultural education seemed to be much more effective in producing positive racial attitudes among the nine through sixteen students' age group (See figure 11). This result does not support Banks (1991) narrative review findings that multicultural education is more effective with preschoolers and kindergartners.

Multicultural education might have been more effective in bringing about more positive attitudes in the 9-16 age group because these students are older, and are more cognitively discerning of their world than the younger age group of 3-8. These older students (9-16) due to the fact that they have lived longer, might have had more contact with members of other ethnic groups. This contact might have taught these students that despite the differences found among different ethnic groups, there are also basic similarities shared by all ethnic groups. Adolescents are also very cognizant of their peers. The opinions of their peers, rather than their race seem to be more important to adolescents.

On the other hand, the older students by the sheer fact of having

lived longer might have developed deep-seated negative racial attitudes that exposure to ME would cause to yield a large positive effect between the pretest and posttest results.

The studies with the younger students (3-8) might not have yielded many medium to large effect sizes because these children's racial attitudes were not as deep seated as that of the older students. Exposure to ME, therefore, would not yield a considerable difference or positive effect between the pretest and posttest results because their racial attitudes were not very negative to start with.

The overall result of this meta-analysis supports the theories of Gabelko and Michaelis (1981), and Lynch, (1987) who contend that the reduction of prejudice dimension of multicultural education will help students cultivate democratic attitudes and values. Having positive racial attitudes and a good understanding of other cultures, certainly should help students develop democratic attitudes and values. The findings also support the theories of the proponents of multicultural education (Grant, 1977; Gay, 1988; Sleeter and Grant, 1988; Bennett, 1990; Nieto, 1992; Banks, 1994; Coelho, 1994; and Davidman and Davidman, 1994) who believe that the inclusion of multicultural education in the curriculum of schools creates an atmosphere where racial attitudes are improved.

Limitations

One of the limitations of the meta-analysis is the paucity of perceptual differentiation studies. Only one of such studies was identified and used in this meta-analysis. The availability and use of more perceptual differentiation studies will add another dimension to the comparison of mean effect sizes by type of study.

Also, there was only one reinforcement study with older children (ages 9-11) that was identified for this meta-analysis. All the other reinforcement studies were done with younger children. Reinforcement studies conducted with older children will enrich the understanding of the impact of reinforcement dimension of multicultural education across age groups.

No other meta-analysis has been identified in the area of multicultural education and racial attitudes which could be used to compare the results of this meta-analysis.

The two specific reasons for conducting a meta-analysis identified by Kulick, Kulick, and Bangert-Drowns (1985) are: 1) to examine the current research literature, and 2) to try to find the "true" effect sizes of a treatment. This meta-analysis concentrated on examining available research literature to date. Determining the "true" or the most accurate effect size involves using the definitional formula for calculating effect size. Most of the studies used in this meta-analysis did not report the means

and standard deviations of the sample which are necessary in order to use the definitional formula. However, using the effect size formula transformation for the various studies helped in the attempt to find the “true” effect sizes of the studies.

There was considerable variability in the effect sizes yielded by the studies in this meta-analysis. While some studies yielded large effect sizes, some yielded medium effect sizes, and some others yielded small or minimal effect sizes. There was little consistency in the results of the studies. The variability in effect sizes could be the result of the different attitude instruments used by the studies, the age of the students, the locations of the studies, and the type of ME carried out in the studies.

Implications for Research

This meta-analysis has shown that multicultural education (ME) in general is effective in reducing prejudicial attitudes in prekindergarten through twelfth grade students. It also showed that the different dimensions of ME are also effective among same age students.

Multicultural education was also found to be effective in suburban and urban settings amongst same age students. However, the effects of ME varied in each situation as discussed above. Further research is needed, therefore, in these areas.

It would be useful to conduct further research on why the studies

using younger children yielded a minimal effect size by researching how deep-seated young children's racial attitudes are. Most of the research in this area shows that young children develop racial and democratic attitudes, as previously discussed in the literature review, and that these attitudes could be modified with planned interventions. However, there was no indication of how deep-seated these attitudes were.

Further research should be conducted on the effects of the perceptual differentiation dimension of multicultural education on students' racial attitudes. The only study utilizing this dimension that was used in this meta-analysis yielded a positive effect size. However, this study was not used to compare the relative effectiveness of the dimensions of ME because it would create an inadequate comparison.

More reinforcement studies utilizing older children should be conducted to see if they will yield positive effect sizes as the one used in this meta-analysis. This will strengthen the results of the effects of the reinforcement dimension across all age groups and grade levels.

More meta-analysis should be conducted on this topic in order to compare the results of the studies. A consistent finding of positive mean effect sizes will bolster the fact that ME is effective in reducing students' racial attitudes.

Additionally, five of the studies used in this meta-analysis were conducted in the 1960s, nineteen in the 1970s, four in the 1980s, and two

in the 1990s. Current and continuous studies on the effects on multicultural education on students' racial attitudes should also be conducted to determine if ME is still effective.

Most of the studies included in the research did not look at the impact of the teacher's beliefs and attitudes on the students attitudes. Research pertaining to the influence of teacher beliefs and attitudes would be an interesting dimension to study in this field.

In general, researchers should be encouraged to report the means and standard deviations of both the experimental and control groups used in their studies as that would greatly assist people who would like to conduct meta-analyses in calculating "true" effect sizes.

Implications for Practice

Multicultural education was found to be effective in improving racial attitudes of students in prekindergarten through twelfth grade from the results of this meta-analysis. Policy makers and educators, therefore should look at the content of schools curricula to ensure that ME is an integral part of the curricula. This is essential since the curricular intervention dimension of ME was found to be much more effective than the reinforcement dimension in reducing prejudicial attitudes (see figure 4). Funds would be usefully allocated to revise or rewrite the curriculum of schools, as well as to provide training and support for teachers who

are responsible for implementing the multicultural curriculum.

This meta-analysis shows that ME brings about positive change in racial attitude across all age groups and grade levels. However, ME was more effective among older students. It is important, therefore, for ME interventions to be started early and continued through all the grade levels. This consistency will increase the effect of ME, and make the students see ME as an ongoing learning experience.

Multicultural education was also found to be most effective in urban areas and moderately effective in suburban areas. Since urban areas, and increasingly more suburban areas have the highest concentration of various ethnic groups, and thus are likely to have more racially motivated rivalries, this finding could be interpreted as good news because ME could be considered a tool that can be used to improve communication among the various cultures. Improvement in communication is especially important since current census reports indicate that the minority population in general, and specifically that of school age children (Snyder and Wirt, 1998), is increasing and will continue to increase especially in urban and suburban areas (see table 1, and appendix).

The researcher notes that since most of the studies used in this meta-analysis were conducted before the 1990s, and only two of the studies were conducted in the 1990s, implications for practice in the 21st

century should be cognizant of the current needs and practices in education necessary for preparing our children for the global world they will inherit.

It is evident, however, that multicultural education improved prekindergarten through twelfth grade students' racial attitudes. Consequently, multicultural education, which emphasizes the diversity of our society, is a powerful tool for presenting an accurate picture of the diverse cultures existent in our world. Multicultural education, therefore, is a vital educational tool and should be emphasized.

BIBLIOGRAPHY

* Asterisk denotes studies included in the meta-analysis.

Agnes, M. (1947). Influences of reading on the racial attitudes of adolescent girls. Catholic Educational Review, 45, 415-420.

Allport, G. W. (1954). The nature of prejudice. Cambridge, MA: Addison-Wesley.

Allport, G. W. (1979). The nature of prejudice. (25th anniv. ed.). Reading, MA: Addison-Wesley.

American Association of Colleges for Teacher Education. (1973). No one model American. Washington, DC: Author.

American Psychological Association. (1994). Publication manual of the American Psychological Association (4th ed.). Washington, DC: Author.

Aronson, E., & Bridgeman, D. (1979). Jigsaw groups and the desegregated classroom: In pursuit of common goals. Personality and Social Psychology Bulletin, 5, 438-446.

Ary, D., Jacobs, L. C., & Razavieh, A. (1990). Introduction to research in education. Fort Worth, TX: Harcourt Brace.

*Asan, G. T. (1991). The affective and cognitive effects on eighth-grade students of the Project REACH multicultural program. (Unpublished doctoral dissertation, Seattle University).

Asante, M. K. (1992). Afrocentricity. Trenton, NJ: Africa World Press.

Banks, J. A. (1984). Black youths in predominantly White suburbs: An exploratory study of their attitudes and self-concepts. Journal of Negro Education, 53, 3-17.

Banks, J. A. (1991). Multicultural education: Its effects on students' racial and gender role attitudes. In J. A. Banks & C. A. M. Banks (Eds.), Handbook of research on multicultural education (pp. 617-627). New York: Macmillan.

Banks, J. A. (1993a). Approaches to multicultural curriculum reform. In J. A. Banks & C. A. M. Banks (Eds.), Multicultural education: Issues and perspectives (2nd ed., pp. 195-214). Boston: Allyn and Bacon.

Banks, J. A. (1993b). Multicultural education: Characteristics and goals. In J. A. Banks & C. A. M. Banks (Eds.), Multicultural education: Issues and perspectives (2nd ed., pp. 2-26). Boston: Allyn and Bacon.

Banks, J. A. (1993c). The canon debate, knowledge construction, and multicultural education. Educational Researcher, 22(5), 4-14.

Banks, J. A. (1994). Multiethnic education: Theory and practice. Needham Heights, MA: Allyn and Bacon.

Banks, J. A. (1995). Multicultural education: Historical development, dimensions, and practice. In J. A. Banks & C. A. M. Banks (Eds.), Handbook of research on multicultural education (pp. 3-24). New York: Macmillan.

Banks, J. A., & Banks, C. A. M. (Eds.). (1993). Multicultural education: Issues and perspectives (2nd ed.). Boston: Allyn and Bacon.

Banks, J. A., & Banks, C. A. M. (Eds.). (1995). Handbook of research on multicultural education. New York: Macmillan.

Banks, W. C. (1976). White preference in Blacks: A paradigm in search of a phenomenon. Psychological Bulletin, 83, 1170-1186.

Bennett, C. I. (1990). Comprehensive multicultural education: Theory and practice (2nd ed.). Boston: Allyn and Bacon.

Berube, M. R. (1994). American school reform: Progressive, equity and excellence movements 1883 - 1993. Westport, CT: Praeger.

*Best, D. L., Smith, S. C., Graves, D. J., & Williams, J. E. (1975). The modification of racial bias in preschool children. Journal of Experimental Child Psychology, 20, 193-205.

California State Department of Education. (1979). Planning for multicultural education as a part of school improvement. Sacramento: Office of Intergroup Relations.

Carnoy, M. (1962). Education as cultural imperialism. New York: David McKay.

Christmann, E. D. (1995). A meta-analysis of the effects of computer-assisted instruction on the academic achievement of students in grades 6 through 12: A comparison of urban, suburban, and rural educational settings. (Unpublished doctoral dissertation, Old Dominion University).

Clark, K. B., & Clark, M. P. (1939a). The development of consciousness of self and the emergence of racial identification in Negro preschool

children. Journal of Social Psychology, 10, 591-599.

Clark, K. B., & Clark, M. P. (1939b). Segregation as a factor in the racial identification of Negro preschool children. Journal of Experimental Education, 8, 161-163.

Clark, K. B., & Clark, M. P. (1940). Skin color as a factor in racial identification and preference of Negro children. Journal of Negro Education, 19, 341-358.

Clark, K. B., & Clark, M. P. (1947). Racial identification and preference of Negro children. In T. M. Newcomb & E. L. Hartley (Eds.), Readings in social psychology (pp. 169-178). New York: Holt, Rinehart & Winston.

Clark, K. B., & Clark, M. P. (1950). Emotional factors in racial identification and preference of Negro children. Journal of Negro Education, 19, 341-350.

Coelho, E. (1994). Learning together in the multicultural classroom. Markham, Ontario: Pippin Publishing Limited.

Cohen, E. G. (1972). Interracial interaction disability. Human Relations, 25, 9-24.

Cohen, J. (1977). Statistical power analysis for the behavioral sciences. New York: Academic Press.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum Associates.

*Collins, J. L. (1972). The effect of differential frequency of color

adjective pairings on the subsequent rating of color meaning and racial attitude in preschool children. (Unpublished master's thesis, East Tennessee State University).

Cook, L. A. (Ed.). (1952). Toward better human relations. Detroit: Wayne State University Press.

Cooper, H., & Dorr, N. (1995a). Race comparisons on need for achievement: A meta-analytic alternative to Graham's narrative review. Review of Educational Research, 65, 483-508.

Cooper, H., & Dorr, N. (1995b). Narrative versus meta-analytic reviews: A rejoinder to Graham's comment. Review of Educational Research, 65, 515-517.

Creswell, J. W. (1994). Research design: Qualitative & quantitative approaches. Thousand Oaks, CA: Sage.

Cross, W. E., Jr. (1985). Black identity: Recovering the distinction between personal identity and reference group orientation. In M. B. Spencer, G. K. Brookins, & W. R. Allen (Eds.), Beginnings: The social and affective development of Black children (pp. 155-171). Hillsdale, NJ: Erlbaum.

Cross, W. E., Jr. (1991). Shades of Black: Diversity in African American identity. Philadelphia: Temple University Press.

Davidman, L., & Davidman, P. T. (1994). Teaching with a multicultural perspective: A practical guide. New York: Longman.

DuBois, W. E. B. (1935). Black reconstruction. New York: Harcourt, Brace.

DuBois, W. E. B. (1973). The education of Black people: Ten critiques, 1906-1960. New York: Monthly Review Press.

*Dunbar, L. H. (1980). The utilization of values clarification in multicultural education as a strategy to reduce prejudicial attitudes of eighth grade students (Doctoral dissertation, Northern Arizona University, 1980). Dissertation Abstracts International, 41 (3), AYE.

Everhart, R. (1983). Reading, writing, and resistance. Boston: Routledge & Kegan Paul.

*Fisher, F. L. (1965). The influences of reading and discussion on the attitudes of fifth graders toward American Indians. (Unpublished doctoral dissertation, University of California, Berkeley).

Frazier, L. (1977). Multicultural facet of education. Journal of Research and Development in Education, 11, 10-16.

Gabelko, N. H., & Michaelis, J. U. (1981). Reducing adolescent prejudice: A handbook. New York: Teachers College Press.

Gaskell, J. (1985). Course enrollment in the high school: The perspective of working-class females. Sociology of Education, 58, 48-59.

Gay, G. (1988). Designing relevant curricula for diverse learners. Education and Urban Society, 20, 327-340.

Gay, G. (1995). Curriculum theory and multicultural education. In J.

A. Banks & C. A. M. Banks (Eds.), Handbook of research on multicultural education (pp. 25-43). New York: Macmillan.

Glass, G. V., McGaw, B., & Smith, M. L. (1981). Meta-analysis in social research. Beverly Hills, CA: Sage.

Glock, C. Y., Wuthnow, R., Piliavin, J. A., & Spencer, M. (1975). Adolescent prejudice. New York: Harper and Row.

Graham, S. (1995). Narrative versus meta-analytic reviews of race differences in motivation: A comment on Cooper and Dorr. Review of Educational Research, 65, 509-514.

Grant, C. A. (1977). Multicultural education: Commitments, issues, and applications. Washington, DC: Association for Supervision and Curriculum Development.

Grant, C. A. (1978). Education that is multicultural-Isn't that what we mean? Journal of Teacher Education, 29, 45-49.

Grant, C. A., & Sleeter, C. E. (1986). Race, class, and gender in education research: An argument for integrative analysis. Review of Educational Research, 56, 195-211.

Grimm, L. G., & Yarnold, P. R. (1996). Reading and understanding multivariate statistics. Washington, DC: American Psychological Association.

Gollnick, D. M. (1995). National and state initiatives for multicultural education. In J. A. Banks & C. A. M. Banks (Eds.), Handbook of research on multicultural education (pp. 44-64). New York: Macmillan.

Hattie, J., & Marsh, H. W. (1996). The relationship between research and teaching: A meta-analysis. Review of Educational Research, 66, 507-542.

Hayes, M. L., & Conklin, M. E. (1953). Intergroup attitudes and experimental change. Journal of Experimental Education, 22, 19-36.

Hedges, L. V., & Olkin, I. (1980). Vote-counting methods in research synthesis. Psychological Bulletin, 88, 359-369.

Hedges, L. V., & Olkin, I. (1985). Statistical methods for meta-analysis. Orlando, FL: Academic Press.

Hernandez, H. (1989). Multicultural education: A teacher's guide to instruction. Columbus, OH: Merrill.

Hilliard, A. G., III, Payton-Stewart, L., & Williams, L. O. (Eds.). (1990). Infusion of African and African American content in the school curriculum. Morristown, NJ: Aaron Press.

Hirsch, Jr., E. D. (1987). Cultural literacy: What every American needs to know. New York: Houghton Mifflin.

Hodgkinson, H. (1985). All one system...Demographics of education...Kindergarten through school. Washington, DC: Institute for Educational Leadership.

Holmes, C. T. (1984). Effect size estimation in meta-analysis. The Journal of Experimental Education, 52, 106-109.

Horowitz, E. L. (1936). The development of attitude toward the Negro.

Archives of Psychology, 104, New York: Columbia University.

Horowitz, R. E. (1939). Racial aspects of self-identification in nursery school children. Journal of Psychology, 7, 91-99.

*Howell, M. (1973). A study of the effects of reading upon the attitudes of fifth graders toward Mexican Americans. (Unpublished doctoral dissertation, Southern Illinois University).

Hunter, J. E., Schmidt, F. L., & Jackson, G. B. (1982). Meta-analysis: cumulating research findings across studies. Beverly Hills, CA: Sage.

Iowa Department of Education. (1989). A guide to developing multicultural, nonsexist education across the curriculum. Des Moines: Author.

Jackson, E. P. (1944). Effects of reading upon the attitudes toward the Negro race. The Library Quarterly, 14, 47-54.

James, W. (1890). Principles of psychology. New York: Holt.

*Jha, R. (1995). The study on the effect of multicultural education on attitude change. (Unpublished master's thesis, McGill University, Montreal, Canada).

Johnson, R. A., & Wichern, D. W. (1992). Applied multivariate statistical analysis. Englewood Cliffs, NJ: Prentice Hall.

Katz, P. A. (1973). Perception of racial cues in preschool children: A new look. Developmental Psychology, 8, 295-299.

Katz, M. B. (1975). Class, bureaucracy, and schools: The illusion of

educational change in America. (expanded ed.). New York: Praeger.

*Katz, P. A., & Zalk, S. R. (1978). Modification of children's racial attitudes. Developmental Psychology, 14, 447-461.

*Kimoto, C. K. (1974). The effects of a juvenile literature based program on majority group attitudes toward black Americans. (Unpublished doctoral dissertation, Washington State University).

*Koeller, S. (1977). The effect of listening to excerpts from children's stories about Mexican-Americans on the attitudes of sixth graders. Journal of Educational Research, 70, 329-334.

Kozol, J. (1991). Savage inequalities: Children in America's schools. New York: Crown.

Kromkowski, J. A. (Ed.). (1994). Race and ethnic relations. Guilford, CT: Dushkin Publishing Group.

Kulick, C., Kulick, J., & Bangert-Drowns (1985). Computer-based education in secondary schools. Journal of Computer-Based Instruction, 12(3), 59-60.

*Lancaster, J. W. (1971). An investigation of the effect of books with black characters on the racial preferences of white children. (Unpublished doctoral dissertation, Boston University).

*Leslie, L. L., & Leslie, J. W. (1972). The effects of a student centered special curriculum upon the racial attitudes of sixth graders. Journal of Experimental Education, 41, 63-67.

Lessing, E. E., & Clarke, C. (1976). An attempt to reduce ethnic prejudice and assess its correlates. Educational Research Quarterly, 1, 3-16.

*Litcher, J. H., & Johnson, D. W. (1969). Changes in attitudes toward negroes of white elementary school students after use of multiethnic readers. Journal of Educational Psychology, 60, 148-152.

*Litcher, J. H., Johnson, D. W., & Ryan, F. L. (1973). Use of pictures of multiethnic interaction to change attitudes of white elementary school students toward blacks. Psychological Reports, 33, 367-372.

Lou, Y., Abrami, P. C., Spence, J. C., Poulsen, C., Chambers, B., & d'Apollonia, S. (1996). Within-class grouping: A meta-analysis. Review of Educational Research, 66, 423-458.

Lynch, J. (1987). Prejudice reduction and the schools. New York: Nichols.

Marshall, C. S. (1998). Using children's storybooks to encourage discussions among diverse populations. Childhood Education, Summer, 194-200.

*McAdoo, J. L. (1970). An experimental study of racial attitude change in black preschool children. (Unpublished doctoral dissertation, University of Michigan).

McMillan, J., H. & Schumacher, S. (1989). Research in education. A conceptual introduction. USA: Scott, Foresman and Company.

McMillen, M., & Kaufman, P. (1997). Dropout rates in the United

States: 1996. (National Center for Education Statistics). Washington, DC: United States Government Printing Office.

Minard, R. D. (1931). Race attitudes of Iowa children. University of Iowa, Studies in Character, 4,(2).

Morland, J. K. (1966). A comparison of race awareness in northern and southern children. American Journal of Orthopsychiatry, 36, 22-31.

Myrdal, G. (1962). An American dilemma: The Negro problem and modern democracy (Vols. 1-2). New York: Harper and Row.

National Association of Secondary School Principals. (1996). Breaking Ranks: Changing an American Institution. Reston, VA: Author.

National Center for Education Statistics. (1987). The condition of education. Washington, DC: United States Government Printing Office.

Nieto, S. (1992). Affirming diversity: The sociopolitical context of multicultural education. New York: Longman.

Novak, M. (1971). The rise of the unmeltable ethnics. New York: Macmillan.

*Parish, T. S., Shirazi, A., & Lambert, F. (1976). Conditioning away prejudicial attitudes in children. Perceptual and Motor Skills, 43, 907-912.

Phinney, J. S., & Rotheram, M. J. (Eds.). (1987). Children's ethnic socialization: Pluralism and development. Beverly Hills, CA: Sage.

Porter, J. D. R. (1971). Black child, White child: The development of racial attitudes. Cambridge, MA: Harvard University Press.

Radke, M. J., & Trager, H. G. (1950). Children's perceptions of the social roles of Negroes and Whites. Journal of Psychology, 29, 3-33.

*Ramirez, V. R. M. (1980). The effect of culturally relevant units of instruction on the attitude of fifth grade social studies students (Doctoral dissertation, University of Texas, 1980). Dissertation Abstracts International, 41, 04A, 1370.

Ravitch, D. (1992). Multiculturalism: E pluribus plures. In P. L. Berman (Ed.), Debating P. C. (p. 278). New York: Laurel.

Sacks, S. (1972). City schools / suburban schools: A history of fiscal conflict. Syracuse, NY: Syracuse University Press.

*Santos, S. L. (1980). The effects of the inclusion of bilingual/multicultural content into the daily curriculum of elementary school children (Doctoral dissertation, Kansas State University, 1980). Dissertation Abstracts International, 40, 4460-61A.

Sardo-Brown, D., & Hershey, M. (1995). A study of teachers' and students' multi-cultural attitudes before and after the use of an integrated multi-cultural lesson plan. Journal of Instructional Psychology, 22, 259-276.

Schlesinger, Jr., A. M. (1991). The disuniting of America: Reflections on a multicultural society. New York: W. W. Norton.

Shade, B. J. R. (Ed.) (1989). Culture, style and the educative process. Springfield, IL: Charles C. Thomas.

*Shanahan, J. K. (1972). The effects of modifying black-white attitudes of black and white first grade subjects upon two measures of racial attitudes. (Unpublished doctoral dissertation, University of Washington).

Shanker, A. (1991, December 16). Core knowledge. New York Times, p. E7.

*Shirley, O. L. B. (1988). The impact of multicultural education on self-concept, racial attitude, and student achievement of black and white fifth and sixth graders. (Unpublished doctoral dissertation, University of Mississippi).

*Singh, J. M. & Yancey, A. V. (1974). Racial attitudes in white first grade children. The Journal of Educational Research, 67, 370-372.

Sizemore, B. A. (1981). The politics of multicultural education. Urban Education, 5, 4-11.

Slavin, R. E. (1979a). Effects of biracial of learning teams on cross-racial friendships. Journal of Educational Psychology, 71, 381-387.

Slavin, R. E. (1979b). Cooperative learning: Applying contact theory in desegregated schools. Journal of Social Issues, 41, 45-62.

Sleeter, C. E., & Grant, C. A. (1988). Making choices for multicultural education: Five approaches to race, class, and gender. Columbus, OH: Macmillan.

Sleeter, C. E., & Grant, C. A. (1994). Making choices for multicultural

education: Five approaches to race, class, and gender (2nd ed.). Columbus, OH: Macmillan.

Smith, M. L. & Glass, G. V. (1980). Meta-analysis of research on class size and its relationship to attitudes and instruction. American Educational Research Journal, 17,(4), 419-433.

Snyder, T., & Wirt, J. (1998). The condition of education (National Center for Education Statistics). Washington, DC: United States Government Printing Office.

Spencer, M. B. (1982). Personal and group identity of Black children: An alternative synthesis. Genetic Psychology Monographs, 106, 59-84.

Spencer, M. B. (1985). Cultural cognition and social cognition as identity correlates of Black children's personal-social development. In M. B. Spencer, G. K. Brookins, & W. R. Allen (Eds.), Beginnings: The social and affective development of Black children (pp. 215-234). Hillsdale, NJ: Erlbaum.

Spencer, M. B. (1987). Black children's ethnic identity formation: Risk and resilience of caste-like minorities. In J. S. Phinney & M. J. Rotheram (Eds.), Children's ethnic socialization: Pluralism and development (pp. 103-116). Beverly Hills, CA: Sage.

Spuler, F. (1993). A meta-analysis of the relative effectiveness of two cooperative learning models in increasing mathematics achievement. (Unpublished doctoral dissertation, Old Dominion University).

Suzuki, B. H. (1984). Curriculum transformation for multicultural education. Education and Urban Society, 16, 294-322.

Swick, K., & Blackwell, J. (1972). The use of pictures to stimulate social learning and language development in preschool children. Education, 90, 176-179.

Tallmadge, G. (1977). The Joint Dissemination Review Panel Ideabook. Washington, DC: National Institute of Education and the U.S. Office of Education.

*Tauran, R. H. (1967). The influences of reading on the attitudes of third graders toward Eskimos. (Unpublished doctoral dissertation, University of Maryland).

*Terri, P. (1981). An evaluation of the effects of multicultural education on the attitudes of ethnic minority and majority students at Cortez Elementary School (Doctoral dissertation, University of San Francisco, 1981). Dissertation Abstracts International, 42, 3860 A.

Trager, H. G., & Yarrow, M. R. (1952). They learn what they live: Prejudice in young children. New York: Harper & Brothers.

Trubowitz, J. (1969). Changing the racial attitudes of children: The effects of an activity group program in New York schools. New York: Praeger.

*Verma, G. K. (1977). Some effects of curriculum innovation on the racial attitudes of adolescents. International Journal of Intercultural

Relations, 1, 67-77.

*Walker, P. A. (1971). The effects of hearing selected children's stories that portray blacks in a favorable manner on the racial attitudes of groups of black and white kindergarten children. (Unpublished doctoral dissertation, University of Kentucky).

*White, D. A. (1972). Effectiveness of Afro-American studies on the racial attitudes of young white children (Doctoral dissertation, University of Illinois, 1972). Dissertation Abstracts International, 32, 5402A.

Williams, G. W. (1882-1883). History of the Negro race in America from 1619 to 1880: Negroes as slaves, as soldiers, and as citizens (2 vols.). New York: G. P. Putnam's Sons.

Williams, J. E., Best, D. L., Wood, F. B., & Filler, I. W. (1973). Changes in the connotations of racial concepts and color names: 1963-1970. Psychological Reports, 33, 983-996.

*Williams, J. E., & Edwards, C. D. (1969). An exploratory study of the modification of color and racial concept attitudes in preschool children. Child Development, 40, 737-750.

Williams, J. E., & Morland, J. K. (1976). Race, color, and the young child. Chapel Hill: University of North Carolina Press.

*Williams, J. E., & Roberson, J. K. (1967). A method of assessing racial attitudes in preschool children. Educational and Psychological Measurement, 27, 671-689.

Wirth, L. (1928). The ghetto. Chicago: University of Chicago Press.

Wolf, F. M. (1986). Meta-analysis: Quantitative methods for research synthesis. Beverly Hills, CA: Sage.

Woodson, C. G., & Wesley, C. H. (1922). The Negro in our history. Washington, DC: The Associated Publishers.

Wynne, E. A. (1977). Growing up suburban. Austin: University of Texas Press.

Yawkey, T. D. (1971). Alternative response measures for mathematical behaviors on numerical tasks in preschool subjects. Journal of Experimental Education, 40, 88-96.

*Yawkey, T. D. (1973). Attitudes toward Black Americans held by rural and urban white early childhood subjects based upon multiethnic social studies materials. The Journal of Negro Education, 42, 164-169.

*Yawkey, T. D., and Blackwell, J. (1974). Attitudes of 4-year old urban Black children toward themselves and Whites based upon multi-ethnic social studies materials and experiences. Journal of Educational Research, 67, 373-377.

Yawkey, T. D., and Gelekta, J. (1973). Political socialization of the preschool child. College Park, MD: University of Maryland.

Young, B. (1998). Characteristics of the 100 largest public elementary and secondary school districts in the United States: 1995-96. (National Center for Education Statistics). Washington, DC: United States Government Printing Office.

APPENDIX

Table 1

Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and State: Fall 1995

Region and State	Total	White	Black	Hispanic	Asian/Pacific Islander
United States	100.0	64.8	16.8	13.5	3.7
Northeast					
Connecticut	100.0	72.0	13.5	11.8	2.4
Delaware	100.0	64.7	29.4	4.0	1.7
District of Columbia	100.0	4.0	87.6	7.0	1.4
Maine	100.0	97.3	0.8	0.4	0.9
Maryland	100.0	57.5	35.0	3.3	3.8
Massachusetts	100.0	78.5	8.2	9.3	3.8
New Hampshire	100.0	96.7	0.9	1.2	1.1
New Jersey	100.0	62.5	18.5	13.5	5.4
New York	100.0	56.9	20.2	17.4	5.0
Pennsylvania	100.0	80.6	14.0	3.5	1.8
Rhode Island	100.0	78.9	7.0	10.3	3.3
Vermont	100.0	97.3	0.7	0.4	1.0

Table 1 (Continued)

Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and State: Fall 1995

Region and State	Total	White	Black	Hispanic	Asian/Pacific Islander
United States	100.0	64.8	16.8	13.5	3.7
Southeast					
Alabama	100.0	62.1	36.0	0.5	0.6
Arkansas	100.0	73.9	23.6	1.5	0.7
Florida	100.0	57.5	25.3	15.3	1.8
Georgia	100.0	58.2	37.8	2.2	1.6
Kentucky	100.0	89.1	9.8	0.4	0.6
Louisiana	100.0	51.0	46.0	1.1	1.3
Mississippi	100.0	47.7	51.0	0.3	0.6
North Carolina	100.0	64.6	30.7	1.9	1.3
South Carolina	100.0	56.3	42.1	0.7	0.8
Tennessee	100.0	75.3	23.1	0.7	0.8
Virginia	100.0	66.6	26.5	3.2	3.5
West Virginia	100.0	95.2	4.0	0.3	0.4
Central					
Illinois	100.0	63.6	21.1	12.2	3.0
Indiana	100.0	85.6	11.1	2.3	0.8

Table 1 (Continued)

Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and State: Fall 1995

Region and State		Total	White	Black	Hispanic	Asian/Pacific Islander
United States		100.0	64.8	16.8	13.5	3.7
Iowa		100.0	92.7	3.3	2.1	1.5
Kansas		100.0	82.6	8.5	6.0	1.8
Michigan		100.0	76.4	18.4	2.7	1.5
Minnesota		100.0	87.4	4.8	2.0	3.9
Missouri		100.0	81.7	16.1	1.0	1.0
Nebraska		100.0	87.2	5.9	4.4	1.3
North Dakota		100.0	90.8	0.8	1.1	0.8
Ohio		100.0	82.2	15.3	1.4	1.0
South Dakota		100.0	83.7	0.9	0.7	0.7
Wisconsin		100.0	83.2	9.4	3.3	2.8
West						
Alaska		100.0	63.7	4.6	2.7	4.4
Arizona		100.0	56.9	4.3	30.0	1.7
California		100.0	40.4	8.8	38.7	11.2
Colorado		100.0	72.5	5.5	18.4	2.5
Hawaii		100.0	22.9	2.6	4.9	69.3

Table 1 (Continued)

Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and State: Fall 1995

Region and State	Total	White	Black	Hispanic	Asian/Pacific Islander
United States	100.0	64.8	16.8	13.5	3.7
Idaho	100.0	88.4	0.6	8.4	1.2
Montana	100.0	87.5	0.5	1.4	0.8
Nevada	100.0	66.5	9.8	17.2	4.5
New Mexico	100.0	39.5	2.4	46.8	1.0
Oklahoma	100.0	69.4	10.5	3.9	1.3
Oregon	100.0	85.3	2.6	6.8	3.4
Texas	100.0	46.4	14.3	36.7	2.3
Utah	100.0	90.4	0.7	5.3	2.2
Washington	100.0	78.3	4.7	7.8	6.5
Wyoming	100.0	89.3	1.0	6.1	0.8

Source: U. S. Department of Education, and National Center for Education Statistics (NCES) 1998.

Table 2

Percentage of Students in Grades 1-12 Who are Black or Hispanic by Type of School and by Metropolitan Status: 1970-95

Year	Total	Black				Hispanic				
		Public Schools				Public Schools				
		Central Cities	Other Metropolitan	Non-Metropolitan	Private Schools	Total	Central Cities	Other Metropolitan	Non-Metropolitan	Private Schools
1970	14.8	32.5	6.2	12.0	4.7	—	—	—	—	—
1971	15.2	34.4	6.5	11.6	4.6	—	—	—	—	—
1972	14.9	31.7	6.3	11.3	5.2	5.8	10.8	4.4	3.6	4.7
1973	14.8	32.1	5.8	11.0	5.7	5.7	10.2	4.4	3.7	5.0
1974	15.4	33.2	6.6	11.8	4.3	6.2	11.4	4.4	4.4	7.3
1975	15.6	33.0	7.0	11.8	5.0	6.6	12.0	5.1	4.1	5.9
1976	16.0	34.0	7.6	11.7	5.8	6.6	11.4	5.9	3.7	5.4

Table 2 (Continued)

Percentage of Students in Grades 1-12 Who are Black or Hispanic by Type of School and by Metropolitan Status: 1970-95

Year	Total	Black				Hispanic				
		Public Schools				Public Schools				
		Central Cities	Other Metro-politan	Non-Metro-politan	Private Schools	Total	Central Cities	Other Metro-politan	Non-Metro-politan	Private Schools
1977	15.9	35.5	7.1	12.6	6.2	6.2	11.8	5.6	2.9	6.9
1978	16.1	35.9	7.4	12.3	6.0	6.4	11.9	6.1	3.0	5.2
1979	16.1	35.8	8.8	10.9	7.5	6.8	14.0	5.3	3.5	5.5
1980	-	-	-	-	-	-	-	-	-	-
1981	16.2	35.2	8.1	11.8	6.5	8.6	16.7	7.4	4.2	7.4
1982	16.2	34.0	8.6	11.9	6.6	8.7	17.7	7.0	4.3	7.3
1983	16.3	33.9	9.1	11.5	6.5	9.1	18.1	7.5	4.1	7.2
1984	16.1	-	-	-	6.3	8.5	-	-	-	5.9

Table 2 (Continued)

Percentage of Students in Grades 1-12 Who are Black or Hispanic by Type of School and by Metropolitan Status: 1970-95

Year	Total	Black				Hispanic				
		Public Schools				Public Schools				
		Central Cities	Other Metro- politan	Non- Metro- politan	Private Schools	Total	Central Cities	Other Metro- politan	Non- Metro- politan	Private
1985	17.0	36.0	9.5	12.7	5.6	10.1	21.5	8.6	4.2	6.1
1986	16.7	32.9	8.3	14.1	6.9	10.6	20.2	8.3	4.1	7.0
1987	16.7	32.9	8.8	12.8	7.4	10.7	19.6	9.0	3.9	7.0
1988	16.8	32.4	9.8	12.2	8.2	10.8	19.2	9.0	4.7	6.7
1989	16.7	32.8	10.0	11.5	7.7	11.4	20.2	10.2	4.0	6.7
1990	16.5	33.1	8.8	12.5	7.2	11.6	19.8	10.8	4.0	7.2
1991	16.7	33.0	9.2	12.4	7.3	11.7	20.6	10.5	3.5	7.1
1992	16.7	32.5	9.5	11.9	7.4	11.9	20.8	10.9	3.6	7.7

Table 2 (Continued)

Percentage of Students in Grades 1-12 Who are Black or Hispanic by Type of School and by Metropolitan Status: 1970-95

Year	Total	Black				Hispanic				
		Public Schools				Public Schools				
		Central Cities	Other Metropolitan	Non-Metropolitan	Private Schools	Total	Central Cities	Other Metropolitan	Non-Metropolitan	Private
1993	16.7	32.9	10.4	10.9	9.8	11.9	21.6	9.9	5.1	7.1
1994	16.8	33.0	9.6	12.9	11.1	13.4	24.7	11.1	5.8	9.1
1995	17.1	31.8	10.7	12.8	9.7	14.0	24.3	11.6	6.5	7.4

Source: U. S. Department of Commerce, Bureau of the Census (June 1998).

VITA

Ogochukwu Nkeiruka N. Okoye-Johnson was born in Port-Harcourt, Nigeria to Michael Angelo Onuora Okoye and Paulina Nwamaka Ukadike on January 3, 1965. She earned her Bachelor of Arts in Education (B.A.Ed.) degree in English Education from the University of Nigeria, Nsukka in 1985. She graduated from the University of Lagos, Nigeria with a Master of Education (M.Ed.) degree in Educational Administration in 1988.

Mrs. Okoye-Johnson is currently teaching English at Larkspur Middle School, Virginia Beach, Virginia. She was one of the teachers that rewrote the current seventh grade English curriculum for the Virginia Beach City Public Schools.

She owns a "productions" business under which umbrella she wrote a children's book, illustrated by her husband. The book Oma: The Faithful Daughter is due for publication in October of 1999.

Mrs. Okoye-Johnson will be married to Desing Bentley Johnson for ten years in September of 1999. They have three daughters, Paulina Ogonna Uzoma Johnson, Chinyelu Chioma Johnson, Chinonso Ihuoma Johnson, and a son, Chike Chiazam Johnson.