

2008
THINK TANK
FOR AFRICAN
AMERICAN
PROGRESS



Conference Proceedings
October 1 – 4, 2008
Cook Convention Center
Memphis, TN

CO-SPONSORED BY:

Brothers of the Academy Institute
&

Center for African American Research &
Policy (CAARP)

**2008
THINK TANK
FOR AFRICAN AMERICAN PROGRESS**

CONFERENCE PROCEEDINGS

Center for African American Research and Policy (CAARP) - Advisory Board

Barbara J. Johnson, Ph.D. - *Northern Illinois University*
Darnell G. Cole, Ph.D. - *University of Southern California*
Juan E. Gilbert, Ph.D. - *Clemson University*
Bryant T. Marks, Ph.D. - *Morehouse College*
James T. Minor, Ph.D. - *Michigan State University*
Lynette L. Danley, Ph.D. - *University of Illinois-Chicago*

CAARP Staff

Jerlando F. L. Jackson, Ph.D. - *Executive Director*
Chance W. Lewis, Ph.D. - *Deputy Director*
Brandon D. Daniels, Ph.D. - *Associate Director for Administration*
LaVar J. Charleston - *Assistant Director for Development and Marketing*
Antonio M. Daniels - *Assistant Director for Publications*
Renaldo C. Blocker - *Assistant Director for Information Technology*
John Igwebuike, JD/Ph.D. - *General Counsel*
Jesse Watson - *CAARP Research Intern*
Jessica Long - *CAARP Research Intern*
Bettie Ray Butler - *CAARP Research Intern*
Melanie Woods - *CAARP Research Intern*
Marcus Joubert - *CAARP Research Intern*
Lisa Hubbard - *CAARP Research Intern*

2008 Think Tank for African American Progress – Program Committee

Leon D. Caldwell, Ph.D. - *President*
Jerlando F. L. Jackson, Ph.D. – *Program Chair*
Chance W. Lewis, Ph.D. – *Program Co-Chair*

2008

**THINK TANK
FOR AFRICAN AMERICAN PROGRESS**

CONFERENCE PROCEEDINGS

Published and Produced by:
The Center for African American Research and Policy

CONTENTS

From the Culture of Underachievement to the Culture of Learning

Page – 7

Erica L. Bumpers – California University of Pennsylvania

An Analysis of One State’s Use of Race Neutral Policies to Achieve Diversity

Page – 28

Adriel A. Hilton – Greater Baltimore Committee
Patricia Green-Powell – Florida A&M University
Robert T. Palmer – Binghamton University

Using a Tenet of Critical Theory to Explain the African American Male Achievement Disparity

Page – 89

Robert T. Palmer – Binghamton University
Adriel A. Hilton – Greater Baltimore Committee
Patricia Green-Powell – Florida A&M University

The Use if Community-Owned and Managed Research (COMR) to Address Public Health Issues and Empower and Revitalize Disadvantaged Communities

Page – 117

Sacoby M. Wilson – University of South Carolina
Omega Wilson – West End Revitalization Association
Christopher D. Heaney – University of Carolina, Chapel Hill
John Cooper – MDC, Inc.

Community Action research for Capacity Building Through Historically Black Colleges and Universities (HBCU’s): A Collaborative Model

Page – 151

Bobbie J. Shaw-Hunter – LeMoyne-Owen College

A Web-Based Portal for Estimating the Prevalence of Chronic Disease by Race on the County Level using Small-Area Analysis Techniques

Page – 187

Melody S. Goodman – Stony Brook University Medical Center

Toxic Waste Facilities and Birth Outcomes in South Carolina: An Ecological Perspective
Page – 202

Muhammad M. Salaam – University of South Carolina
Sacoby Wilson – University of South Carolina

Life Styles, Stressors and Health Status: Differences among On-Campus and Off-Campus African-American College Students –

Page – 233

Terence Hicks – Fayetteville State University
Liwei Tang – Fayetteville State University

“A Formula for the Cure”: Does Arkansas’ revamped education funding formula provide for an “Adequate and Equitable” resource allocation system that is efficient?

Page – 255

Russell M. Frazier – University of Arkansas

The Affectivity of Financial Illiteracy in Urban Communities

Page – 289

Katherine W. Causey – LeMoyne-Owen College
Michael O. Minor – University of Memphis



THE CENTER FOR AFRICAN AMERICAN RESEARCH & POLICY

"answering one question at a time"



Center Staff

Jerlando F. L. Jackson, Ph.D
jjackson@caarpweb.org
University of Wisconsin - Madison
Executive Director

Chance W. Lewis, Ph.D.
clewis@caarpweb.org
Texas A&M University
Associate Director

Brandon D. Daniels
bdaniels@caarpweb.org
University of Wisconsin - Madison
Assistant Director

www.caarpweb.org

The Center for African American Research and Policy's mission is to engage in scholarly research in order to advance critical discourse and promote informed decisions as it pertains to policy issues confronting African Americans in both the academy and the society at-large. The breadth and depth of research and policy-oriented projects encompasses the full tapestry of the "African American Predicament" and reflects the wide diversity of academic backgrounds of the affiliated researchers at the Center and Brothers of the Academy Institute members.

CAARP Publications

Policy Briefs

The Center's Policy Briefs are documents which outline the rationale for choosing a particular policy alternative or course of action in a current policy debate. The purpose of the policy briefs is to provide empirical data to inform policy makers at all levels (e.g., institutional, state, and federal) of urgent and current problems that affect the African American community. Ultimately, these policy briefs will lead to the adoption of the preferred alternative or course of action outlined, and therefore serve as an impetus for action.

Occasional Paper Series

The Center's Occasional Paper series addresses topics that are timely and intimately connected to the Center's research agenda. Papers in this series include conceptual work, empirical data, research syntheses, discussions of community-based issues, and reports that are intended to act a catalyst for information exchange among educators, researchers, practitioners, and concerned citizens.

Annuals of the Next Generation

The Annuals of the Next Generation is a refereed, scholarly journal that seeks to provide a venue to showcase the next generation of African American scholars, by publishing the research of graduate students. This publication will highlight research from multiple disciplines and areas, and allow these young scholars to present their work to an international audience.

From the Culture of Underachievement to the Culture of Learning
Erica L. Bumpers, Ph.D.
California University of Pennsylvania
Department of Secondary Education
250 University Avenue
California, Pennsylvania 15419-1394
bumpers@cup.edu

Abstract

The culture of underachievement is evident in the African American community, as well as in most urban areas across the United States of America. The need for a culture of learning is apparent among our African American students. African American students are a unique race and have the ability to learn if they are given the opportunity. The expectation must be clear in that all students can learn and will learn as long as there is a commitment to the education of African American students. High standards must be set in the classroom with the end in mind so that each student will know what is expected of them. According to Hilliard (1991) to begin solving the problem of underachievement within our African American community, we must begin to look at the goals we have set for these students. Once the goals have been identified, a commitment to helping these students achieve academic success must be defined so that the goals can be obtainable. Many factors play into the underachievement of African Americans. It is important to understand that a culture of learning was evident during segregation, but somehow became lost once schools became desegregated. African American students lag significantly behind their white counterparts in reading and math. They are at a disadvantage and in most cases do not receive a quality education, resulting in a culture of underachievement among African American students.

From the Culture of Underachievement to a Culture of Learning

For many years, African American students have been plagued with this notion of underachieving academically throughout their educational experiences. The problem of underachievement among African Americans has been attributed to societal conditions that contribute to this dilemma. The underachievement of African American student's has been evident in schools across the nation. Many African American students have been relegated to special education courses, tracked in non-academic courses, differential exposure, and instructional policies (Myrdal, 1944; Hale-Benson, 1986; Lee & Slaughter- Defoe, 1995). In addition, test scores, high school graduation rates, drop-rates, and suspension rates give some explanation as to why these students are underachieving academically (Lee & Slaughter, 1995). According to Hilliard (1978) the mis-education of African Americans has gone through several phases from the education to re-education, to the utility "vocational" education, to the segregated education, to the defacto segregated educated, and finally to "body mixing" education. These phases have shaped the educational outcomes for African American students both positive and negative, but mostly negative resulting in the culture of underachievement.

For instance, Gay (1990) suggests that African American students fail to reach their full potential in the traditional American school because the educational environment is not only unresponsive to their needs, but also opposes their learning styles. The problem clearly stems from disparities in the educational system including teacher quality, expectations of teachers, and the quality of education African Americans receive compared to their white counterparts. In most cases, the education African American students receive is considered inferior resulting once again in the underachievement of these students. Haycock (2001) posits the notion that all students are educated the same is a misconception and that minority students specifically,

African Americans have no opportunity to receive a quality education because there is less time put into instruction, well trained teachers, and a higher order curriculum (p.53). Nonetheless, African American communities have lost the will to sustain the support needed for African American students to achieve academic success. Instead, African American students have been underachieving in schools because of the lack there of. To understand the culture of underachievement, it is necessary to recognize the change in the value of education among African American students.

The relevance of this paper as it relates to the Think Tank for African American Progress is the problem of African American students underachieving. This conference gives educators the opportunity to not only discuss the issues, but resolve the issues with strategies that will improve this state of underachievement for African American students. Many times as educators we give explanations to the problem and why this problem of underachievement among African Americans continues to exist. The Think Tank for African American progress will assist in facilitating an alternative model for scholarly engagement to analyze and begin to strategize in order to narrow the gap of African American underachievement when compared to their white counterparts. The time has come for African American students to progress, instead of regressing and to receive a quality education.

The culture of achievement for African Americans extends back to decades ago. Achievement for African Americans was important and the need for them to receive a quality education became a necessity. Historically, education has always been seen as a tool of freedom to uplift the African American race. African Americans had to struggle and sacrifice for the right to receive an education that was comparable to their white counterparts. During segregation, the culture of achievement was enforced in the communities, churches, and schools

because of the support of parents, teachers, and administrators. The culture of learning was made possible for African American students to succeed academically in school through this network of support. Sowell (1986) recalls schools were remembered as having atmospheres where support, encouragement and rigid standards were combined to enhance students' self-worth and to increase their aspirations to achieve. African American students had limited educational opportunities that came with many disadvantages during this time (Anderson, 1988). Through this supportive network, the community of learning was made possible for African American students to achieve academically.

During segregation, inferior schools were characterized by many disparities, such as inadequately trained teachers, inadequate funding, poor facilities and materials, compared to those of their white counterparts. Morgan (1995) posits that schools attended by African Americans during segregation were purposely organized by Whites with inequities and opposition to the ideology of Black intellect. For African American students to obtain a quality education under segregated school policy, Black teachers, administrators, Black parents and the community worked collaboratively to support how African American students would learn (Morgan, 1995). Segregation came with many disadvantages for the African American race, but because the teachers who taught these students, they made a significant impact on the achievement of these students. In addition, facilities were very limited and far beyond repair, it was through the personal sacrifices and financial contributions of the parents in this community who searched for other alternatives for their children to acquire educational opportunities. For instance, parents went beyond the call of duty to ensure their children would receive a quality education and did whatever was necessary to provide them with the proper tools to succeed academically.

More importantly, the teachers played an integral role in the education students receive during segregation. Teachers were the facilitators in the organization of instruction and the most crucial in assisting all students from the culture of underachievement to the culture of learning (Levine, Cooper & Hilliard, 2000). According to Hilliard (1991) teachers are the mediators who provide the essential knowledge that allow students to achieve their potential. Because teachers play such a vital role in the education that students receive, the culture of achievement was evident during this time. The advocacy and support of parents, the teachers ability to teach, and the principals willingness to connect the resources to the students provide evidence that this community of self-help actively played a role in the academic achievement of these students.

As a result of the collaborative efforts of educators, parents, and the community pursuing a primary goal of quality education, students reached their highest potential. Throughout history, African American communities have shown evidence of effective traits through the support of the community, principals, teachers and parents toward the educational outcome of African Americans students. Years ago, teachers, administrators, parents, and the black community fought for their children to receive a quality education. African American students were taught, nurtured, supported and encouraged and the failure to learn was unacceptable. There was no choice between learning and not learning for students. Nonetheless, African American communities have lost the will to sustain the support needed for African American students to achieve academic success. It was an unselfish willingness of the entire community to provide what was necessary for African American students to receive a quality education and to become successful. The culture of achievement was obtainable and evident for African American students to achieve academically throughout segregation.

However, it was not until the collaborative network of educators, parents, and the community recognized their African American children were receiving an inferior education when compared to their white counterparts. The history of education for African Americans in the United States has been plagued with a struggle to become educated that extends at least to the beginning of the 17th century. The history of public schooling for African Americans began to develop under legalized segregation. This type of education based solely on the notion of “separate but equal” proved to provide African American students an inferior education. Although this supportive network contributed significantly to the education of African American students they still had to fight for what they believed was right which was a quality education. Across the nation African American children had insufficient facilities, used books, and a lack of resources and funding. As a result, a group of parents in Topeka, Kansas became upset and filed a complaint to the court requesting that “racially segregated elementary schools be declared unconstitutional and void and that Topeka’s separate schools be found unlawful and that the board and its officers be enjoined from operating separate elementary schools for Black and White children” (Wilson, 1996, p.173). However, the court was not concerned that segregation deprived African American children of substantial learning, but rather, that such a policy deprived them of quality learning (Bitensky, 1996, p.131). As a result, the court found issues with segregation and announced its historic findings:

“Segregation of White and colored children in public schools has a detrimental effect upon the colored children. The impact is greater when it has the sanction of the law, for the policy of separating the races is usually interpreted as denoting the inferiority of the Negro group. A sense of the inferiority affects the motivation of a child to learn. Segregation with the sanction of law, therefore has a tendency to retard the education and mental development of Negro children and to deprive them of some of the benefits they would receive in a racially integrated school system (p. 180).”

The court case *Brown vs. the Board of Education of Topeka, Kansas* ended “separate but equal.” This case set a new standard for the education African Americans were receiving. During this time many schools were not receiving a quality education, and parents began to become upset because the education students were receiving was not parallel to those of their white counterparts. The court was concerned that a policy of separate but equal deprived African American students of a quality education. This decision was a turning point in American public education and had a great impact on the learning opportunities for African American students. While the *Brown* decision sought to make public schools more equitable, inequality of educational opportunity has continued to be a problem for African American students.

Today, education has no racial boundaries, yet many African American students continue to struggle academically and lag significantly behind their white counterparts. After desegregation, the gaps seem to widen drastically between African American students and white students. The National Center for Education Statistics (NCES, 2003) data has shown African American students across the country show evidence of the achievement gap between African American students and white students. For instance, in 2007 African American fourth grade students scored twenty-seven points lower than whites on the reading assessment and significantly lower on the mathematics assessment (NCES, 2008). In addition, African American students are more likely to attend high poverty schools and drop out of school when compared to their white counterparts. Many researchers give explanation to this gap by focusing on teacher expectations (Ferguson, 1998), parenting practices (Bloom, 1982), culture synchronization (Ogbu, 2003) and the structural characteristics of schools and the school system (Hallinan, 2001). Darling-Hammond (2000) points out that due to the structural inequalities in access to knowledge and resources, African American students will continue to face persistent

and profound barriers to educational opportunity. Consequently, Dempsey & Noblit (1993), Ladson-Billings (1994) assert that educators who teach African American students are disconnected culturally, and psychologically, as well as from the communities where these children live. In most cases, teachers do not understand African American student's experiences or how to relate to them. The struggle continues as a problem why African American students are not achieving to the rate of their White counterparts.

The underachievement of African American students have impacted this society in many different facets of the American life. For instance, African Americans have lower levels of educational achievement, educational attainment, and earnings than compared to their white counterparts (NCES, 2008). The Joint Center for Political Studies (1989) denotes that African Americans have affirmed the role of education as the most prominent factor for improving the life circumstances of African Americans and promoting social change. Education has always been a source of a better quality of life for advanced opportunities for employment, as well as increased career mobility and economic development (Fuller, 1981; Orfield, 1992). In addition, economic and social progress in the United States has long been rooted in access to a quality education (JCPS, 1989, p. ix). These social barriers can be linked to the education one has received (Hale-Benson, 1986; Bennett & Lecompte, 1990; Alexander, Entwisle, & Olson, 2001). Additionally, the achievement an individual receives can also impact the drop-out rate, college enrollment, and college completion rate. In this case, African Americans are the individuals who are affected by the quality of education they have obtained. For example, African Americans may have received an education that was not comparable to their white counterparts causing them to fall behind significantly due to the curriculum. Furthermore, African Americans are sometimes deprived of a quality education because of the funding restraints in the district. As a

result, students are not prepared for the workforce, college, or improving their socioeconomic status in society. The quality of education African Americans receive impacts their life in many aspects.

The problem has continued and many explanations have been accounted for this condition. Schools must be structured to benefit all students, particularly African American students because they will continue to underachieve at a faster rate than ever before. There have been many explanations about the predicament of African American students underachieving and why these students continue to lag significantly behind their white counterparts. To begin addressing this problem of underachievement for African Americans, first we must look into teacher education programs. As previously stated, teachers play a vital role in the education of students, particularly African Americans. More importantly, it is even more crucial as to how teachers are prepared in their teacher education programs. Teacher education programs must focus on the content they are preparing future teacher candidates to teach. It is important to ensure teacher education programs are preparing teacher candidates to teach all students equally regardless of race, class, and gender. Teacher education programs must make certain they are implementing diversity, multiculturalism, and urban education courses in to the curriculum. These programs must expose teacher candidates to urban areas consisting of predominantly African Americans during their field experiences.

Teacher education programs should prepare teachers to deal with minority students specifically, African Americans that may underachieve. Some teacher education programs prepare teacher candidates to deal with high achievers and the dominant culture resulting in teachers not being prepared for underachievers. These programs fail to instruct their future teachers on the importance of the difference of cultures in the classroom causing cultural conflict

between the student and the teacher. Teacher education programs must stress the importance of having culturally relevant and responsive classrooms. Also, teacher education programs should require teacher candidates to complete a field experience in an urban area and be required to take three classes of their choice that consist of how to relate to minorities, particularly African American students. Once teacher education programs begin to take these steps toward improving courses and giving them hands on, a significant change in the culture of underachieving will turn into a culture of learning of African Americans. The most important goal of all teacher education programs should be to develop and prepare quality teachers. Teachers make the difference in the classroom and it must begin with teacher education programs.

The second strategy to obtaining a culture of learning are teacher expectations. Teacher expectations have been cited as one of the most salient and crucial variables for the success of academic achievement of students (Gaziel, 1997). In today's diverse society, teachers and students come from different cultural and ethnic backgrounds that impact how teachers perceive and effectively interact with students. Expectations include inferences that teachers make about the future behavior or academic achievement of their students (Brophy, 1983). The low expectations teachers form based on students race, class, and gender or ethnicity influences how these students perform academically in school (Brophy, 1983, Dusek, 1985). Teachers who hold low expectations for students affect the quality of student's performance in school because of what teachers believe students can or cannot do. In most cases, students are victimized by teacher's low expectations (Gregory & Mueller, 1980) which limit opportunities for higher learning and possibly attending college (Good & Brophy, 2003).

Good and Brophy (1990) contend that teacher low expectations determines how the teacher interacts with students. Many teachers do not have high expectations for African Americans students and form differential expectations for student performance (Brophy & Good, 1974). Brophy and Good (1974) also note that consistent with these differential expectations, teachers behave differently toward different students (1974). Baron, Tom, and Cooper (1985) assert that teachers have more positive expectations for white students than for African Americans. Irvine (1990) agrees that evidence of white teachers have more negative expectations for African American students than for white students.

Moreover, teachers that elicit low expectations for African American students damage the student's motivation to perform well in school and any chance for a college education. Regardless of the student's race, teachers should hold high expectations for all students. Teachers must hold high expectations for all students regardless of race, class, or gender if the educational performance of these students is to improve (Ladson-Billings, 1995). A culture of high expectations for African American students must be acquired in the classroom in order for African American student to achieve academically. Teacher education programs must hold teacher candidates accountable for having high expectations for all students particularly, African Americans.

Another step to achieving a culture of learning consists of learning styles African American students can identify with. Educational excellence and educational opportunity are associated with the instruction experienced in the classroom by African American students. African American students have a unique culture which impacts how they learn in the classroom. Hilliard (1992) asserts that the analytical style of learning is most indicative of the classroom because the traditional American schools are encapsulated in a style that is maligned with the

particular style of most European American children (Hilliard, 1992). African American students value oral experiences, physical activity, and loyalty in interpersonal relationships (Shade, 1989). For instance, instructional strategies should focus on class discussions, interactive activities, and vigorous work and physical movement activities (Hale-Benson, (1994). Many teachers do not take into account the different learning styles and accommodate the dominant learning style. If African Americans are to achieve in the classroom, instruction must be provided for these students to succeed academically.

Consequently, understanding how African American students learn can possibly cause cultural conflict between the student and the teacher. To avoid cultural conflict and to promote active learning in the classroom it is essential that lesson plans implement activities in ways that respond to African American students strengths, instead of them conforming to the school expectations. Hilliard (1989) states “ Children no matter what their style, are failing primarily because of systematic inequities in the delivery of whatever pedagogical approach the teachers claim to master---not because students cannot learn from teachers whose styles do not match their own” (p.66). Nevertheless, this will not solve the entire problem of underachieving, but it will certainly narrow the gap if teachers take into account the learning styles of African American students. Teachers taking into consideration the learning of African Americans will initiate a culture of learning for these students.

Recruiting African American male teachers is also essential to achieving a culture of learning for African American students. The presence of African American male teachers can possibly promote a learning of culture for African American students. African American male teachers are relevant for those African American students who do not see African American male teachers in the classroom. African American male teachers serve as role models for all students

because they demonstrate that African American males do not have to submit to the stereotype of an athlete, entertainer, or inmate. African American male teachers are seen as positive individuals that are making a difference not only in the classroom, but in the community as well. For instance, Kunjufu (2002) asserts that African American male teachers provide examples of how one should discipline students in a firm way and how they establish environments conducive to learning with more time dedicated to teaching and learning. There is evidence for more African American male teachers to teach our African American students. African American male teachers set a presence of dominance in the classroom with the purpose of making a difference for these students. To improve the culture of learning for African American students it is essential to recruit and retain African American male teachers.

The final strategy to acquiring a culture of learning is the relationship between parents, educators, and the community. Somewhere a divide between these entities got lost and the African American community and schools have not been the same. Years ago, teachers, administrators, parents, and the African American community fought for their children to receive a quality education. African American students were taught, nurtured, supported and encouraged and the failure to learn was unacceptable. There was no choice between learning and not learning for students. In order to overcome this dilemma of African American students underachieving to a culture of learning, everyone must be in support of this endeavor. As the old African proverb states, “*It takes a village to raise a child*”. Although it does take a village to raise a child, a collaborative effort must be enforced among all entities to ensure a culture of learning. Education within the African American community emphasizes “education for liberation, citizenship, personal and collective power and advancement (JCPS, 1989, p.12). Schools districts must work with the colleges, communities, parents, and teachers to ensure that a

collaborative effort is enforced. During segregation it was evident that because of the dedication of parents, teachers, administrators, and the community that a culture of learning was established regardless of the inequities that existed in the schools. A culture of learning is possible and evident for African American students to achieve academically. With a supportive network and everyone involved working together to improve this culture of underachievement to a culture of learning is obtainable and achievable.

The culture of underachievement for African American students is evident across the nation, but the culture of learning is evident through the dedication of teachers, parents, administrators, and the community. Somewhere and somehow educating all students has gotten lost and the solution to solving this problem has been forgotten. However, the culture of learning is possible through the strategies suggested. The advocacy of everyone working together in a collaborative effort to create a positive educational outcome is evidence that students will learn in an environment that is conducive to learning. As a result of the collaborative efforts of educators, parents, and the community pursuing a primary goal of a quality education, students will reach their highest potential. In addition, teachers have a more important role in the education of our students' lives because they empower our students on a daily basis in the classroom. As Hillard (1978) states, a quality education for all is possible, if there is a collaborative effort of all entities involved in educating African American students. He also asserts that educators have the influence to reverse the problems of underachievement to a culture of learning. Educators have a responsibility to uphold to these students. From the culture of underachieving to a culture of learning can happen with the support, collaborative efforts, teacher preparation programs, recruitment of African American male teachers, learning styles that promote achievement among African American students, positive teacher expectations, and

a commitment to our African American students makes it possible for them to receive a quality education. A culture of learning is obtainable for African American students.

This paper has some potential policy implications for acquiring a culture of learning. Educators must recognize that all students, particularly, African Americans are not educated the same when compared to their white counterparts. Many African American students attend schools in urban areas with limited available resources. Opportunities must be made available for African American students to succeed academically in the classroom. Teacher education programs must evaluate the content and curriculum used to prepare future teacher candidates. In addition, teacher education programs must expose teacher candidates to urban areas. Teacher education programs must include material that teaches teacher candidates about culturally relevant and culturally responsive teaching strategies in the classroom to be used with a diverse population. The recruitment of African American male teachers is vital and must have opportunities available for them to pursue an education in teaching as well as retain them. The collaborative efforts of school districts and colleges must work together to achieve a culture of learning for African American students. A quality education must be provided for African Americans to succeed academically in the classroom. Nonetheless, empirical studies must be conducted to ensure school systems are equitable in the quality of education African American students are receiving. The studies should foster school districts in rural and urban communities serving predominantly African Americans.

The limitations of this paper of the proposed strategies include approaches for African American students. Also, all African American students do not underachieve, but achieve academically comparable to their white counterparts. Communities do not exist of all African Americans, but other people of color in this diverse society. Teachers cannot teach to

accommodate the learning styles of only African American students. Additionally, teachers are not willing to confront the reality that they do form low expectations of students based on race. African American male teachers are not the only people of color who can make a significant impact on the culture of learning, but other males of color as well. Lastly, teacher education programs require teacher candidates to take one diversity course in which they believe exposes them to the multicultural world.

References

- Alexander, K.L., Entwistle, D., & Olson, L.S. (2001). Schools, Achievement, and Inequity: A seasonal perspective. *Educational Evaluation and Policy Analysis*, 23(2), 85-102.
- Anderson, J. D. (1988). *The education of blacks in the south, 1860-1935*. Chapel Hill: University of North Carolina Press.
- Baron, R., Tom, D., & Cooper, H. (1985). Social class, race, and other teacher expectations. In J. B. Dusek (Ed.), *Teacher expectancies* pp. (254-269). Hillsdale, NJ: Erlbaum.
- Bennett, K. P., & LeCompte, M.D. (1990). *The way schools work*. New York: Longman.
- Bitensky, S. (1996). We had a dream in *Brown v. Board of education*. *The Detroit College of Law Review*, Det. C.L. Rev 1(14), 326
- Bloom, B.S. (1982). *All our children learning: A primer for parents, teachers and other educators*. New York: McGraw-Hill
- Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75(5), 631-661.
- Darling-Hammond, L (2000). Inequality and access to knowledge. In J. A. Banks, & C. A. Banks, C.A. (Eds.), *Handbook of research on multicultural education* (pp. 465-483). Macmillan Publishing.
- Dempsey, V., & Noblit, G. (1993). The demise of caring in an African American community: Once consequence of school desegregation. *Urban Review*, 25(1), 47-61.
- Dusek, J. B. (Eds.)(1985). *Teacher expectancies*. Hilldale, NJ: Lawrence Erlbaum Associates, Publishers.
- Ferguson, R. (1998). Can schools narrow the Black-White test score gap. In Jencks, C., & Phillip, M., (Ed.). *The Black-White test score gap*. Washington, DC: Brookings Institution Press.
- Fuller, B. (1981). Educational evaluation and shifting youth policy. *Evaluation Review*, 5(2), 167-88.
- Gay, G. (1990). Achieving educational equality through curriculum desegregation. *Phi Delta Kappan*, 72(1), 56-62.
- Gaziel, H. (1997). Impact of school culture on effectiveness of secondary schools with disadvantaged students. *The Journal of Educational Research*, 90, 310-318

- Good, T., & Brophy, J. (1990). *Educational Psychology: A realistic approach* (4th ed.). New York: Longman.
- Gregory, K., & Mueller, S.G. (1980). Leif Ericson Elementary School. In W.R.Duckett (Eds.), *Why do some urban schools succeed (pp.60-74)?* Bloomington, IN: Phi Delta Kappa.
- Haycock, K. (2001). Closing the achievement gap. *Educational Leadership*, 58(6), 6-11.
- Hale-Benson, J. (1986). *Black children: Their roots, culture and learning styles*. Baltimore, MA: Johns Hopkins University Press.
- Hale-Benson, J. E. (1994). *Black children: Their roots, culture and learning styles*. Rev.ed Baltimore: Johns Hopkins University Press.
- Hallinan, M. (2001). Sociological perspectives on Black-White inequalities in American schooling. 74: 50-70.
- Hilliard, A.G. (1978). Equal educational opportunity and quality education. *Anthropology & Education Quarterly*, 9(2), 110-126 *New Perspectives on Black Education* summer
- Hilliard, A.G. (1989). *Teachers and Cultural Styles in a Pluralistic Society*. 65-69.
- Hilliard, A.G. (1991). Do we have the will to educate all children? *New Generations, New Challenges* 31-36.
- Hilliard, A.G. (1992). Behavioral style, culture, teaching and learning. *Journal of Negro Education*. 61(3), 370-377.
- Jacobson, J., C. Olsen., J.K. Rice., S. Sweetland., & J. Ralph. (2001). *Educational achievement and black-white inequality disparities*. U.S. Department of Education.
- Joint Center for Political Studies. (1989). *Visions of a better way. A Black appraisal of public schooling*. Washington, DC: Author.
- Irvine, J. J. (1990). *Black students and school failure: Policies, practices, and prescriptions*. Westport, CT: Greenwood Press.
- Kunjufu, J. (2002). *Black students: Middle class teachers*. Chicago: African-American Images
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, 31(3), 159-165.

- Lee, C. D., & Slaughter-Defoe, D.T. (Eds.). (1995). Historical and sociocultural influences on African American education. In J. A. Banks, & C. A. Banks, C.A. (Eds.), *Handbook of research on multicultural education* (pp. 348-71). Macmillan Publishing.
- Levine, D.U., Cooper, E.J., & Hilliard, A.G. (2000). National urban alliance professional development model for improving achievement in the context of effective schools research. *Journal of Negro Education*, 69, (4), 305-322.
- Morgan, H. (1995). *Historical perspectives on the education of black children*. Westport, CT: Praeger Publishers.
- Myrdal, G. (1944). *An American dilemma: The Negro problem and modern democracy*. New York: Harper and Brothers.
- National Center for Education Statistics. (2003). *The condition of education*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2008). *The condition of education*. Washington, DC: U.S. Department of Education.
- Ogbu, J. U. (2003). *Black American students in an affluent suburb: A study of academic disengagement*. New Jersey: Lawrence Erlbaum.
- Orfield, G. (1992). Money, equity, & college access. *Harvard Educational Review*, 62(3), 337-72.
- Shade, B.J. (1989). The influence of perceptual development on cognitive style: Cross ethnic comparisons. *Early Child Development and Care*. 51, 137-155.
- Sowell, T. (1986). *Education: Assumptions versus history*. Stanford, CA: Hoover Institution Press.
- Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York, Knopf.



Mission Statement

The National Center for Institutional Diversity (NCID) represents a strategic commitment by the University of Michigan to address complex diversity issues within higher education and other major social institutions. The Center is inspired by the vision of higher education's critical role in promoting knowledge, justice, and opportunity in a diverse democracy and global economy. NCID aims to prepare people for active engagement in a diverse society and works toward building productive as well as inclusive communities at U-M and beyond.

The Center promotes national exemplars of diversity scholarship, multilevel engagement, and innovation by operating as a catalyst, venture fund, incubator, clearinghouse, publisher, and think tank. Strategic NCID partnerships bridge scholarship with social change through engagement at the campus/institutional, local/state, and national/international levels. Core priorities and activities focus on the challenges and opportunities of diversity in the broadest, richest sense — including considerations of race, ethnicity, gender, class, geography, age, culture, and multiple viewpoints.

Challenges and Opportunities

Core Strategies and Priorities

- Diversity Issues in Scholarship and Multilevel Engagement
- Diversity Issues in Education and Institutional Transformation
- Diversity Issues in Expressive Culture, the Arts, and Media

Other Core Priority Areas

- Diversity Issues in Health Disparities and Human Development
- Diversity Issues in Science, Technology, Engineering, and Mathematics (STEM)
- Diversity, Urban Revitalization, and Community Development
- Diversity Issues in Business, Organizations, and Sustainable Development
- Diversity Issues in Politics, Public Policy, and Social Justice

Core Programs and Initiatives

Faculty and Center Fellows Programs
Conversations, Lectures, and National Meetings
Postdoctoral Scholars Program
Working Groups and Proposal Development
Arts and Social Change Programming

Strategic Campus and External Partnerships
Critical Issues Series and Co-sponsored Ventures
Faculty-Centered Mentoring and Pipeline Initiatives
Exemplary Scholarship and Engagement Awards
National Consortium for Diversity Research and Policy

Sponsored Projects and Affiliated Programs

Promoting Equity in Higher Education
Youth Dialogues on Race and Ethnicity in Metropolitan Detroit
Global Intercultural Experience for Undergraduates (GIEU)

NCID ♦ Promoting National Exemplars ♦ Bridging Research, Engagement, and Innovation

3338 School of Education Building, 610 E. University, Ann Arbor, MI 48109-1259
(734) 764-6497 / ncidinfo@umich.edu

An Analysis of One State's Use of Race Neutral Policies to Achieve Diversity

Adriel A. Hilton
Public Policy Fellow
Greater Baltimore Committee

Patricia Green-Powell
Associate Professor of Educational Leadership
Florida A&M University

Robert T. Palmer
Assistant Professor of Student Affairs
Binghamton University, State University of New York

Abstract

For years, institutions in the United States have talked about diversity – its importance in society and how to achieve it. The debate continues today with but a few exceptions. The value of diversity is a given; how it is achieved is still in doubt. For institutions of higher education, the battle line of the effort to achieve diversity is becoming the new testing ground for what works and what does not. If the experiments do not work, who pays the heaviest price? The evidence examined in this paper clearly suggests it will be America as a whole with a much less educated and prepared citizenry, particularly the minority population. Affirmative action has been America's traditional answer to ending discrimination and produces more diversity both in the work environment and in the classroom. Today, different strategies are being put in place that seek to achieve the same results without the use of race-based policies that have been so objectionable to affirmative action critics. This paper analyzes one state's use of race neutral policies to achieve diversity. The race neutral policies were found to improve minority representation within a specific discipline, law in the state of Florida.

An Analysis of One State's Use of Race Neutral Policies to Achieve Diversity

Introduction

The public face of higher education in the United States continues to change as colleges and universities chase the ever-elusive goal of diversity. Institutions of higher education, including community colleges, that are watching trends in U. S. Census Bureau demographic data, are becoming increasingly more focused on diversity. For schools in the states of California, Texas, Washington, Michigan, Florida, and a few others, the issue of diversity will be vital if they are to remain true to their missions and preparing their students for the workplace.

The U.S. Census Bureau (2005) predicts that minorities, already the fastest growing population in states like Florida, California, and Texas, will grow at an even faster pace for at least the next two to three decades in what might reasonably be called a population explosion. Florida is predicted to surpass New York as the third most populace state by the year 2011 (Bernstein, 2005), with minorities responsible for most of the increase (Hispanics and Blacks).

Florida's institutions of higher education must be prepared for a more diverse society, as will all institutions in the country, in order to adequately equip students for the challenges of the social, political, and economic changes that seem to be inevitable. Despite the data from the 1995-2025 census outlook, a number of states appear to be in a position that causes them to be ill prepared for the new diversity, based on decisions and policies implemented during the early part of this decade.

Florida's efforts to respond to the need for greater diversity in the work place and in its higher education system was to implement a policy called the One Florida Initiative (OFI). The policy, which came about as a result of an Executive Order (EO), sought to prohibit the use of race in the pursuit of improved diversity in higher education and state contracting. At the same, in an unrelated development, state lawmakers in Florida took action to reopen a once-closed Minority Serving Institution (MSI) law school at Florida A&M University, and opened a new MSI law school at Florida International University (FIU). This study examined the effectiveness of the OFI and the opening of two MSI law schools in bringing about more minority representation in Florida's public universities and in the state's law profession.

Background of the Study

This study sought to discover what one aspect of the world of higher education might be like in the absence of traditional affirmative action policies. Minorities are underrepresented in Florida's legal profession as a result of a lack of access, enrollment, and production of minorities from publicly supported law schools (Herbert, 1999). The purpose of this study was to discover the impact of the One Florida Initiative (OFI) and adding two Minority Serving Institution (MSI) law schools on diversity in Florida's legal profession. This research explored the impact of Governor Bush's Executive Order (EO) on diversity within the State University System (SUS) of Florida law schools. Further, this study examined the impact of creating two MSI law schools after implementing the OFI. An examination of law schools for this study is important because they are one of the more notoriously stubborn of all professional schools when it comes to attempts to enroll a more diverse student body.

Law school diversity is also pertinent because researchers and practitioners alike have suggested that the lack of minority attorneys has a far reaching impact that is felt by society as a whole and not just the profession. The American Bar Association (ABA) (2006) estimates that Blacks make up approximately four percent of America's lawyers, with the result being the underpinnings of distrust of the legal system by racial minorities because they aren't able to find lawyers and judges who look like them (Randall, 2004).

Purpose of the Study

The purpose of this study was to discover the impact of the OFI and the creation of two MSI law schools on diversity in Florida's legal profession. This research explored the impact of Governor Bush's Executive Order on diversity within the SUS of Florida law schools. Further, this study examined the impact on diversity of creating two MSI law schools after implementation of the OFI. Florida is significant here because, like California, Washington, Texas, and Michigan, it is part of a growing national trend toward dilution of affirmative action's conventional race-based policies.

Statement of the Problem

Even though minorities have been underrepresented in Florida's legal community, they are at the same time the fastest growing population in that state, according to the U.S. Census Bureau (2005). It is a trend that is projected to continue but at an even faster pace for at least the next two to three decades in what might reasonably be called a population explosion. In fact, Florida is predicted to surpass New York as the third most populace state by the year 2011 (Bernstein, 2005), with minorities responsible for most of the increase (Hispanics and Blacks).

Institutions of higher education in Florida and other states must be prepared for a more diverse society in order to adequately equip its students for the challenges of the social, political, and economic changes that seem to be inevitable. Despite the data from the 1995-2025 census outlook, Florida would appear to be in a position that causes it to be ill-prepared for the new diversity, based on decisions and policies implemented during the early part of this decade. Rather than becoming more diverse, Florida's public law schools, for example, have widened the gap between minorities and the majority population in the make up of their student bodies ("Jeb Bush's One," 2006).

Significance of the Study

This study, which investigated the effects of a public policy change in the state of Florida through implementation of the OFI, is important to higher education in America and to current and future public policy as it relates to affirmative action and diversity. As a result of the OFI in Florida and other ballot initiatives, such as Proposition 209 in California, Initiative 200 in Washington, American colleges and universities have been encouraged to revisit their admission and recruitment practices in order to ensure their commitment to diversity would be maintained. The research presented serves as an initial study for others to report findings in the future as well as provide valuable information to the institutions to effectively diversify their law school.

Affirmative action opponents claim non-minority students are severely disenfranchised by current admission practices. Other critics claim that programs such as affirmative action serve to stigmatize underrepresented groups while lowering academic standards to ensure racial quotas are met. It was, therefore, important that this study be undertaken because there are limited studies on this issue in the literature. This study is

significant because Florida is but a part of a growing national trend toward dilution of affirmative action's race-based policies, as has been the case in states like California, Washington, Texas, and Michigan. It is believed that more states will be targeted for future policy changes, which adds to the importance of this research because it gives policy makers and voters some indication of the likely impact of their actions. This study, therefore, can be very helpful to those interested in developing policies that seek to increase diversity as well as those seeking to make informed decisions about policies affecting the use of conventional affirmative action.

The research presented in this study is meant to give a greater sense of meaning to the scholarly research available to investigators and the public. It is also intended to provide the power of speech to those who are being silenced by the lack of adequate information in the literature on this subject. By advancing the outcomes found by this study in the state of Florida to further research in other states, the wealth of knowledge available about this issue will be improved, which is expected to lead to better policies and practices to achieve diversity in America.

Theoretical Framework

This study utilized Critical Race Theory (CRT) as the theoretical framework. The history of affirmative action is important to CRT because CRT analyzes laws that support the status quo of White authority and Black subordination. Delgado (1995) indicated that CRT originated in the early seventies as a result of the civil rights movement's legal strategy to racial justice. Some consider CRT to be one of the most significant legal developments on issues of race and ethnicity since 1975 (Crenshaw, Gotanda, Peller, & Thomas, 1995).

CRT validates its assertions by examining laws that support the status quo of White authority and Black subordination. The framework for CRT is predicated on historical court decisions and laws such as the *Dred Scott decision*, the *Naturalization Act* 1790, *Ozawa v. United States* 1922, and *Scott v. Sandford* 1856 (Cooper, 2002). With this framework, they have investigated desegregation and housing laws that assisted White flight (Calmore, 1993). Critical race theorists such as Delgado, Crenshaw, and Bell concentrated on legal, constitutional, and civil rights concerns, which also included affirmative action.

Research Questions

Based on the statement of the problem, the purpose of the study, and the theoretical framework, the following research questions were addressed:

- Research Question 1: Has the implementation of the OFI impacted the diversity of student applicants, admissions, enrollment, and Law School Admission Test (LSAT) scores?
- Research Question 2: Has the implementation of the OFI impacted the diversity of Florida's legal profession (graduates and those admitted to the Florida Bar)?
- Research Question 3: Has the creation of MSI law schools impacted the diversity of student applicants, admissions, enrollment, and LSAT scores?
- Research Question 4: Has the creation of MSI law schools impacted the diversity of Florida's legal profession (graduates and those admitted to the Florida Bar)?

Literature Review

The literature review within this study explores the history of higher education, the significance of MSIs, the modern higher education landscape, along with the emergency of affirmative action, and finally, one state's response to growing anti-affirmative action sentiment with implementation of a new policy, the OFI.

Founding of Minority Serving Institutions

One of the important milestones in the history of higher education in the U.S. was the creation of Minority Serving Institutions (MSIs) (Brown, 2001). These schools consist of historically Black colleges and universities (HBCUs), Hispanic Serving Institutions (HSIs), and Tribal Colleges and Universities (TCUs). The creation of MSIs was important in the history of the United States because it represented recognition of the country's commitment to providing educational opportunities for the underrepresented population (Brown, Donahoo, & Bertrando, 2001). This has not always been the case and, in fact, was contrary to the early years of higher education in America.

Prior to the Civil War, White slaveholders resisted efforts by Blacks to educate themselves (Swygert, 2004). Even in the North, where slavery was almost non-existent, White inaction toward the education of Blacks had much the same outcome (Freeman, 2005). As a result, the first of many HBCUs were born in the years before the Civil War. Cheyney State was founded in 1837, followed by Lincoln University of Pennsylvania and Wilberforce University in Ohio, specifically to provide for the educational needs of Blacks (Brown, 2001; Fleming, 1976; Williams & Ashley, 2004). The number of such institutions expanded substantially after the Civil War, with more than 200 being founded in the South in the five years immediately following 1865 (Brown, 2001). The

Freedman's Bureau, established in 1865 by the federal government to improve the plight of former slaves, refugees, and poor Whites, was involved in the creation of many of these institutions (Fleming, Gill, & Swinton, 1978). Private Black churches, Northern missionaries, and private philanthropic organizations and individuals also played major roles in the birth of HBCUs (Brown, Donahoo, & Bertrando, 2001).

Whether out of the spirit of philanthropy, necessity, or fairness, the reason MSIs were created in America and have survived for, in many cases, more than 140 years, is that they filled a void in this country (Swygert, 2004). Historically, minorities were denied access to White institutions because of segregation laws that were prevalent at the time most MSIs were created (*Sweatt v. Painter*, 1950; *Hawkins v. Board of Control*, 1950). Less than 3,000 Black students in the United States were enrolled in higher education by 1915, and most of them were men (Allen & Jewell, 2002).

Executive Order (EO) 12900, signed by President William Jefferson Clinton in 1994, is known as Educational Excellence for Hispanic Americans and established HSIs as a part of the fabric of American higher education. HSIs are public or private educational institutions with Hispanic populations of 25% or more at the undergraduate level. Title V of the EO describes HSIs as, "institutions of higher education, which have a high enrollment of needy students, low educational and general expenditures, and 25 percent or more undergraduate Hispanic full-time equivalent enrollment, where 50 percent of Hispanic students are low-income" (Executive Order 12900, 1994).

Native Americans began considering colleges and universities as a means to improve their culture. Native American scholars were largely responsible for the birth of tribal colleges at the start of the 20th century, according to the *Tribal College Journal*.

Recognizing that other educational institutions wanted Indian students to assimilate, the Indian scholars wanted colleges that would emphasize Indian culture. The map in the first issue of the journal showed 25 colleges that were members of the American Indian Higher Education (IHE) Consortium. (Crum, 1989, p. 2)

Colleges and universities began emerging in remote areas with large Native American populations, and on reservations such as the Navajo Nation (E.O. 13096, 2002). "From 1976 to 1994, the number of Native Americans enrolled in institutions of higher education jumped from 76,000 to 127,000, an increase of 67 percent. During the same period, overall enrollment in the IHE Consortium increased 30 percent" (E.O. 13096, 2002, p. 1). It is evident today that the significance of college continues to grow among the Native American culture.

Still, enrollment of minorities in colleges and universities in America has historically been a problem for a number of reasons and the same can be said about Blacks in graduate and professional schools. Access and equal opportunity are the *raison d'être* for many of this country's MSIs (Rivers, 2000; Swygert, 2004). The mission of these institutions did not change when some of them began opening graduate and professional schools.

MSI Graduate and Professional Schools

Howard University was the first to open a law school specifically to educate Black lawyers in 1869 (Howard University, 2006). The Howard University School of Law stated as its mission providing a legal education to those "who had been excluded from the profession of law" (Howard University, 2006). Similarly, the law school at

North Carolina Central University (NCCU), established in 1940, was given a mission by North Carolina lawmakers of providing legal education opportunities for Blacks (North Carolina Central University, 2007).

There was a proliferation of MSI graduate and professional schools in the 1940s as a result of court cases by Blacks who had been turned away from graduate programs at all-White public universities (Rivers, 2000; Gannon, 1996). Some of these decisions (*Sweatt v. Painter, 1950; Hawkins v. Board of Control, 1950*) had a profound effect on opportunities for Blacks to obtain a graduate and professional education, legal and otherwise. For example, the case of Herman M. Sweatt, a Black male who was refused admission into the University of Texas School of Law. When he sued to gain entry into the all White law school, the Texas legislature established a university to offer programs in law, pharmacy, dentistry and other professions in 1946 (Senate Bill 140, 1946). The Texas Supreme Court ruled against Sweatt, because his education at the alternative school for Negroes was largely equal to the education he would receive at the University of Texas. The U.S. Supreme Court disagreed and ordered him admitted but it led to the establishment of what is today Texas Southern University's Thurgood Marshall School of Law.

Florida was one of the states where such opportunities were made available when, a few years later, a similar case was filed. "In April 1949, Virgil Darnell Hawkins, a Black school teacher from Daytona Beach, Florida, applied for admission to the Whites-only University of Florida (UF) College of Law in Gainesville" (Rivers, 2000, p. 15). Hawkins was denied admission and later sued, claiming his civil rights were being violated. In an effort to maintain a segregated UF College of Law, the Florida governing

board on December 21, 1949, established graduate level schools of law, mechanical engineering, agriculture, and pharmacy at Florida Agricultural and Mechanical College for Negroes (*Hawkins v. Board of Control*, 1950), later renamed Florida Agricultural and Mechanical University (FAMU). The UF Law School was not integrated until 1958 (Klink, 2003).

Emergence of Affirmative Action

Efforts to reduce the disparate treatment of minorities led many to adopt a model that has come to be referred to as affirmative action, which was designed to overcome the remnants of discrimination that occurred in the past by giving women and minorities certain preferences in employment and college admissions. The policy was initiated after implementation of the 1964 *Civil Rights Act* and remains a part of practice in some institutions (*Civil Rights Act* of 1964). The policy exists in many different forms as a result of an almost constant legal attack by opponents who argue that it amounts to reverse discrimination against Whites (Connor, 1985).

Connor (1985) posited that affirmative action was established to address problems in higher education. Affirmative action is a program designed to provide access for minorities who often were overlooked for employment and educational opportunities in the past (Connor, 1985). Those who utilize affirmative action practices will, for example, set goals for the employment of minorities and then establish timetables for achieving those goals, as part of a concerted effort to promote equal opportunity (Milakovich & Gordon, 2001). Delgado (1995) argued that affirmative action creates a better climate for justice and equality when it comes to jobs and educational opportunity for all people. Conservatives view affirmative action as a policy that encourages complacency among

minorities, promotes a sense of low self-esteem in those who participate, and amounts to reverse discrimination (Delgado, 1995). Proponents of the conservative viewpoint argue for a meritorious system of employment practices, one that they believe relies more heavily on an applicant's job skills and knowledge. A merit system is the process that promotes the hiring of employees based on their knowledge, skills, and abilities rather than political connections, race, or social policies. According to the conservative argument, affirmative action, which has been the basis for much criticism, conflicts with the merit system. The position of affirmative action proponents is that the best way to remedy past practices of exclusion is to take affirmative action and practice inclusion (Delgado, 1995).

Court challenges to minority set-asides, commonly found in many affirmative action programs, were started in several states by citizens ranging from business owners bidding on government contracts to medical and law school applicants. These court challenges were somewhat successful. Supreme Court decisions during the 1970s through the 1990s significantly diluted affirmative action programs (Milakovich & Gordon, 2001). One of the more notable cases involved a White man who had applied to medical school at the University of California at Davis. Allan Bakke had been rejected for admission twice, even though he considered himself better qualified than some of the minorities who had been admitted. In 1978, Bakke argued successfully that the medical school's quota for admitting minorities amounted to reverse discrimination. The U. S. Supreme Court agreed and ordered Bakke to be admitted (*University of California Regents v. Bakke*, 1978).

Florida Introduces OFI

Florida joined with a few other states in 1999 to begin efforts to ban the use of quotas to help minorities overcome past discrimination. In Florida, the OFI, which was conceived by the state's Republican Governor, John Ellis "Jeb" Bush, was implemented to transcend what had been the traditional notions of affirmative action. The OFI is an Executive Order established by Governor Bush to redefine affirmative action programs in the state of Florida. The OFI seeks to increase diversity in education and contracting within the state by revising race-based admissions practices and contract set-asides. Governor Bush and Frank Brogan created the initiative on November 9, 1999 (Office of the Governor, 1999).

The initiative was established with the intent to amalgamate Floridians with a shared vision. Its purpose is to increase opportunities and diversity in the State University System (SUS) of Florida as well as in state contracting; however, the use of race is not permissible. "The OFI is diversity without quotas, preferences, or set-asides and it was designated not to abandon affirmative action, but to substantively redefine it" (Bush, 2000, p. 1).

The debate over the OFI had an unexpected result. It preceded a legislative reversal of an earlier action that had resulted in the closing of one MSI law school and the birth of another school of law. More than 30 years after it was closed, in the heat of debate over implementation of the OFI, political forces in Florida successfully reopened the FAMU College of Law and established a second MSI law school at Florida International University (FIU), a Hispanic Serving Institution (HSI) in 2000. It was argued by some state lawmakers that the addition of these two MSI law schools and

implementation of the OFI in Florida was going to result in more access by minorities to a legal education and better minority representation in Florida's legal profession (Bush, 2000; Klink, 2003). At the same time, however, other factors such as shifting public sentiment against race-based employment and admissions programs, ballot initiatives, and more court cases were combining nationally to challenge the earlier gains in minority representation in law and other professions.

Design of the Study

This quantitative study used a secondary data set provided by the SUS of Florida (enrollment data from 1998-2006) and the Florida Bar Association (FBA) (membership data from 1998-2006) to gather descriptive statistics and to analyze the research questions. The enrollment data employed within the study was compiled by race or ethnic make up and by institution. Quantitative data lends itself to analyses using both descriptive and inferential statistics. Descriptive data are used to describe the fundamental features of the data in this research (Glass & Hopkins, 1996) and describes the nature of what is taking place in the state of Florida. The types of statistics that were assembled include frequencies and percents.

Instrumentation

This study used as its main data collection tool secondary quantitative data.

Secondary Quantitative Data

Secondary data from the SUS of Florida, Florida Board of Governors was used to determine the impact of the OFI. The secondary data set for the quantitative portion compiled by the SUS of Florida consisted of enrollment data by race and institution from

1998-2006. In addition, the research utilized data from the FBA, which included the percentage of minority attorneys in Florida's legal profession from 1998-2006.

Procedure

Institutional Review Board (IRB) approval from Morgan State University was granted in the fall of 2006, prior to the pilot study being conducted. Following the IRB approval, the SUS of Florida law schools' IRB committees were contacted with a letter indicating the particulars about the research being examined. IRB approval was requested and granted by those institutions.

Data Analysis

The secondary data sets compiled within the study were received from the SUS of Florida and the FBA office. These offices assisted with the compilation of the data needed for this study as well as the dissemination of the data to the researchers. The central office of the SUS of Florida is located in that state's capital city, Tallahassee. The office was contacted by mail, email, and follow up telephone calls to request any and all data in their possession that included statistics on the number of applicants for law school in Florida's public colleges and universities between 1998 and 2006; the number of students admitted to these schools during those years; the number of students that enrolled; as well as the number of students that graduated. The SUS of Florida was also asked to provide its data in aggregate form, broken down by racial and ethnic background and by individual school.

The headquarters for the FBA is situated in Tallahassee, Florida. This office was contacted by mail, email, and by follow up telephone calls by the researchers to request data in their possession related to this study. The requested data included statistics on the

number of bar certified attorneys in Florida between 1998 and 2006. This was done in an effort to determine, as accurately as possible, the number of lawyers practicing in the state of Florida. All data was requested in aggregate form, broken down by racial and ethnic background. The quantitative data was gathered in Microsoft Excel and later analyzed using an Excel spreadsheet and the quantitative data analysis software, SPSS.

The independent variable distinguished within this research was the time frame before and after the OFI and the time frame before and after the addition of the MSI law schools. The dependent variables were: a) percentage of minority applicants; b) percentage of minorities admitted; c) percentage of minorities enrolled; d) LSAT scores; e) percentage of minority graduates; and f) percentage of minority law school graduates sitting for the bar. This research was conducted using a Z-test of proportion for hypotheses one through three, five, seven through nine, and eleven. The researcher employed the Z-test of proportion for hypotheses one through three, five, seven through nine, and eleven because the independent variable is categorical and the dependent variable is a proportion. Hypotheses six and twelve could not be tested due to lack of data. Hypotheses four and ten were evaluated using one-way analysis of variance (ANOVA). A one-way ANOVA was used for hypotheses four and ten because the independent variable was categorical (year) and the dependent variable was interval (LSAT score). The level of significance for rejecting the hypotheses was $\alpha = 0.05$.

Findings

In exploring the effects of Governor Bush's EO on diversity in the SUS of Florida and the creation of two MSI law schools, the study proposed four research questions. Associated with Research Questions 1, 2, 3, and 4, which are quantitative in nature, are

12 null and alternative hypotheses. The findings for the study and the results of testing the hypotheses follow and are grouped under each of the research questions.

Impact of OFI on Law Schools' Student Diversity

Research question one focused on the impact of the implementation of the OFI on the diversity of student applicants, admissions, enrollment, and Law School Admission Test (LSAT) scores. Given the quantitative nature of this question, four hypotheses were proposed and tested. Hypotheses 1, 2, and 3 were tested using the *Z*-test of proportion. The fourth hypothesis involved the comparison of mean LSAT scores and was tested using a one-way analysis of variance (ANOVA). The following discussion summarizes the findings for each of these four hypotheses.

H_{01} : There is no significant difference in the percentage of minority applicants to the public law schools prior to (1998) and following implementation of the OFI (1999).

H_{a1} : There is a significant difference in the percentage of minority applicants to the public law schools prior to and following implementation of the OFI.

There was a significant change in the percentage of minority applicants to the public law schools in Florida prior to and following the implementation of the OFI (See Table 1). An examination of the data indicated an increase in the percentage of minority applicants for the comparisons between 1998-1999 (25.53%) and the academic years 1999-2000 (29.26%), $z = 3.73$, $p < .01$; 2000-2001 (29.85%), $z = 4.32$, $p < .01$. The only exceptions were in the change in percentages between academic years 1998-1999 and 2001-2002 when there was a non-significant decline in the percentage of minority applicants (1.79 percentage points), 1999-2000 to 2000-2001 and 1999-2000 to 2001-

2002. Thus, hypothesis one was rejected, and it was concluded that there was a significant difference in the percentage of minority applicants to the public law schools prior to and following implementation of the OFI. This increase in the percentage of minority applicants has been maintained through the 2005-2006 academic year.

Table 1

Comparison of the Percentage of Minority Applicants to the Public Law Schools Prior to and Following Implementation of OFI

Academic Year	Percent Minority Applicants	1998-1999 (Percentage Points Difference)	1999-2000 (Percentage Points Difference)	2000-2001 (Percentage Points Difference)
1998-1999	25.53%	---	---	---
1999-2000	29.26%	3.73**	---	---
2000-2001	29.85%	4.32**	.59	---
2001-2002	27.32%	1.79	-1.94	-2.53*
2002-2003	34.51%	8.98**	5.25**	4.65**
2003-2004	35.98%	10.45**	6.72**	6.13**
2004-2005	34.46%	8.93**	4.76**	3.60**
2005-2006	36.02%	10.49**	6.76**	6.17**

*p < .05, **p < .01

H₀₂: There is no significant difference in the percentage of minorities admitted to the public law schools prior to and following implementation of the OFI.

H_{a2}: There is a significant difference in the percentage of minorities admitted to the public law schools prior to and following implementation of the OFI.

There was a significant change in the percentage of minority applicants accepted to the public law schools in Florida prior to and following the implementation of the OFI (See Table 2).

Table 2

Comparison of the Percentage of Minority Applicants Accepted to the Public Law Schools Prior to and Following Implementation of OFI

Academic Year	Percent Minority Accepted	1998-1999 (Percentage Points Difference)	1999-2000 (Percentage Points Difference)	2000-2001 (Percentage Points Difference)
1998-1999	23.14%	---	---	---
1999-2000	27.76%	4.62**	---	---
2000-2001	27.72%	4.58**	-.04	---
2001-2002	25.32%	2.17	-2.44	-2.40
2002-2003	27.43%	4.28**	-.33	-.29
2003-2004	30.24%	7.10**	2.48	2.50
2004-2005	29.56%	6.42**	.38	.42
2005-2006	31.22%	8.07**	3.46**	3.50**

*p < .05, **p < .01

An examination of the data indicated an increase in the percentage of minority applicants admitted to the law schools for the comparisons between the 1998-1999 (23.14%) and the academic years 1999-2000 (27.76%), $z = 4.62$, $p < .01$. For example, 23.14% of the students admitted to the law schools in 1998-1999 were from racial and ethnic minorities. The OFI was signed by Governor Bush in 1999. However, the

percentage of minorities admitted jumped to 27.76% in 1999-2000 and 27.72% in 2000-2001. With a slight non-significant decrease (-2.44) in 2001-2002, the numbers continued to increase and reached 31.22% by 2005-2006. The only exception to the significant increases were in the change in percentages between academic years 1998-1999 and 2001-2002 when there was a non-significant decline in the percentage of minority applicants (2.17 percentage points). Thus, hypothesis two was rejected, and it was concluded that there was a significant difference in the percentage of minority students admitted to the public law schools prior to and following implementation of the OFI. This increase in percentage of minority students admitted to the law schools has been maintained through the 2005-2006 academic year.

H₀₃: There is no significant difference in the percentage of minorities enrolled at the public law schools prior to and following implementation of the OFI.

H_{a3}: There is a significant difference in the percentage of minorities enrolled at the public law schools prior to and following implementation of the OFI.

There was a significant change in the percentage of minority students who enrolled in the public law schools in Florida prior to and following the implementation of the OFI (See Table 3). An examination of the data indicated an increase in the percentage of minority students enrolled at the public law schools for the comparisons between the 1998-1999 (23.91%) and the academic years 1999-2000 (28.08%), $z = 4.17$, $p < .01$.

Table 3

Comparison of the Percentage of Minority Students Enrolled at Public Law School Prior to and Following Implementation of OFI

Academic Year	Percent Minority Enrolled	1998-1999 (Percentage Points Difference)	1999-2000 (Percentage Points Difference)	2000-2001 (Percentage Points Difference)
1998-1999	23.91%	---	---	---
1999-2000	28.08%	4.17**	---	---
2000-2001	26.49%	2.58**	-1.59	---
2001-2002	24.64%	.73	-3.44	-1.85
2002-2003	27.18%	3.27**	-.90	.69
2003-2004	32.43%	8.52**	4.35	5.94
2004-2005	31.12%	7.21**	282	4.41
2005-2006	34.02%	10.11**	5.94**	7.53**

*p < .05, **p < .01

For example, 23.91% of the students enrolled in 1998-1999 were from racial and ethnic minorities. After Governor Bush signed the OFI in 1999, the percentage of minorities enrolled increased to 28.08% in 1999-2000 and 26.49% in 2000-2001. With a slight decrease in 2001-2002 to 24.64%, the numbers rebounded to 27.18% in 2002-2003 and have remained at about 31% since 2002-2004. Thus, hypothesis three was rejected, and it was concluded that there was a significant difference in the percentage of minority students enrolled at Florida's public law schools prior to and following implementation of the OFI.

H₀₄: There is no significant difference in the average LSAT scores of the public law schools prior to and following implementation of the OFI.

H_{a4}: There is a significant difference in the average LSAT scores of the public law schools prior to and following implementation of the OFI.

A non-significant difference was found in the mean LSAT scores of law school students attending the public law schools prior to and following implementation of the OFI, $F(4, 58) = .843, p > .05$ (See Table 4). The mean LSAT scores remained relatively unchanged during this period.

Table 4

ANOVA Results for Impact of OFI on LSAT Scores

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Year	79.407	4	19.852	.843	.504
Error	1365.672	58	23.546		
Total	1464607.000	63			
Corrected Total	1445.079	62			

R Squared = .055 (Adjusted R Squared = -.010)

Impact of OFI on the Diversity of Florida's Legal Profession

(Graduates and Those Admitted to the Bar)

Research question two focused on the impact of implementation of the OFI on the diversity of Florida's legal profession (graduates and those admitted to the Florida Bar).

Given the quantitative nature of this question, two hypotheses were proposed and tested.

The following discussion summarizes the findings for each of these two hypotheses.

H₀₅: There is no significant difference in the percentage of minority graduates at the public law schools prior to and following implementation of the OFI.

H_{a5}: There is a significant difference in the percentage of minority graduates at the public law schools prior to and following implementation of the OFI.

There was a non-significant change in the percentage of minority graduates of the public law schools in Florida prior to and following implementation of the OFI (See Table 5). An examination of the data indicated that the percentage of minority graduates has fluctuated between 22.000% and 29.09% since the signing of the OFI. The comparison between the percentage of minority graduates in the 1998-1999 graduating class (25.90% minority graduates) and the percentage of minority graduates in the 2001-2002 graduating class (27.73%), the graduating first class to be potentially impacted by OFI, was not significant. The first significant change in the percentage of minority graduates did not occur until 2005-2006, the second year in which there were also graduates from the MSI law schools. Thus, hypothesis five was not rejected, and it was concluded that there was not a significant difference in the percentage of minority graduates of Florida's public law schools prior to and following implementation of the OFI.

Table 5

Comparison of the Percentage of Minority Graduates of Public Law Schools Prior to and Following Implementation of OFI

Academic Year	Percent Minority Graduates	1998-1999 (Percentage Points Difference)	1999-2000 (Percentage Points Difference)	2000-2001 (Percentage Points Difference)
1997-1998	23.34%	---	---	---
1998-1999	25.90%	2.56	---	---
1999-2000	22.00%	-1.34	---	---
2000-2001	23.84%	.05	-1.59	---
2001-2002	27.73%	4.39	-3.44	-1.85
2002-2003	26.27%	2.93	-.90	.69
2003-2004	27.29%	3.95	4.35	5.94
2004-2005	22.29%	-.03	2.82	4.41
2005-2006	29.09%	5.75**	5.94**	7.53**

*p < .05, **p < .01

H₀₆: There is no significant difference in the percentage of minority law school graduates sitting for the Florida Bar Examination prior to and following implementation of the OFI.

H_{a6}: There is a significant difference in the percentage of minority law school graduates sitting for the Florida Bar Examination prior to and following implementation of the OFI.

This hypothesis could not be tested because the Florida Bar Association (FBA) indicated that they could not release this information. The data received from the FBA was the percentage of practicing attorneys who are members of the Florida Bar, which is below in Table 6.

Table 6

Percentage of Attorneys by Race Certified by the Florida Bar Association

Year	White	Hispanic	African American	Other
1996	92	5	2	1
1998	91	6	2	1
2000	91	6	2	1
2002	90	7	2	1
2004	89	7	2	2
2006	89	7	2	2
Current	85	9	3	3

Source: The Florida Bar 2006 Economics and Law Office Management Survey

The percentage increase of minorities ranged from 8% to 15% from 1998 to 2006. There was a five to nine percentage point increase for Hispanics, a two to three percentage point increase for African Americans, and an increase of one to three percentage points for Native Americans and Asians.

Impact of the Creation of MSI Law Schools on Student Diversity

Research question three focused on the impact of the creation of MSI law schools and their impact on the diversity of student applicants, admissions, enrollment, and LSAT scores. Given the quantitative nature of this question, four hypotheses were proposed and tested. The following discussion summarizes the findings for each of these four hypotheses.

H₀₇: There is no significant difference in the percentage of minority applicants to the public law schools prior to (2001) and following the creation of MSI law schools (2002).

H_{a7}: There is a significant difference in the percentage of minority applicants to the public law schools prior to and following the creation of MSI law schools.

There was a significant change in the percentage of minority applicants to the public law schools in Florida prior to and following the creation of the MSIs (See Table 7).

Table 7

Comparison of the Percentage of Minority Applicants to the Public Law Schools Prior to and Following the Creation of the Minority Serving Institutions

Academic Year	Percent Minority Applicants	2002-2003 (Percentage Points Difference)	2003-2004 (Percentage Points Difference)	2004-2005 (Percentage Points Difference)
---------------	-----------------------------	--	--	--

1998-1999	25.53%	---	---	---
1999-2000	29.26%	---	---	---
2000-2001	29.85%	---	---	---
2001-2002	27.32%	---	---	---
2002-2003	34.51%	7.19**	---	---
2003-2004	35.98%	8.66**	1.47	---
2004-2005	34.46%	7.14**	-.05	-1.52
2005-2006	36.02%	8.70**	1.51	.04

*p < .05, **p < .01

An examination of the data indicated an increase in the percentage of minority applicants for the comparisons between the academic years 2001-2002 (27.32%), 2002-2003 (34.51%), $z = 7.19$, $p < .01$; and 2003-2004 (35.98%), $z = 8.66$, $p < .01$. The only exceptions were the non-significant change in percentages between academic years 2002-2003, which was 34.51%, and 34.42% in 2004-2005. Thus, hypothesis seven was rejected, and it was concluded that there was a significant difference in the percentage of minority applicants to the public law schools prior to and following the creation of MSIs. This increase in the percentage of minority applicants has been maintained through the 2005-2006 academic year with 36.02% minorities and a significant change of 8.70.

H₀₈: There is no significant difference in the percentage of minorities admitted to the public law schools prior to and following the creation of MSI law schools.

H_{a8}: There is a significant difference in the percentage of minorities admitted to the public law schools prior to and following the creation of MSI law schools.

There was a significant change in the percentage of minorities admitted to the public law schools in Florida prior to and following the creation of MSIs (See Table 8). An examination of the data indicated an increase in the percentage of minorities admitted to the law schools for the comparisons between the 2001-2002 (25.32%) and the academic years 2002-2003 (27.43%); and 2003-2004 (30.24%), $z = 4.92$, $p < .01$. For example, 27.43% of the students admitted to the law schools in 2002-2003 were from racial and ethnic minorities following the creation of MSIs in 2002. The percentage of minorities accepted rose to 30.24% in 2003-2004 and decreased slightly in 2004-2005 (29.56%). However, the percentage of minorities accepted continued to increase to 31.22% in 2005-2006. Thus, hypothesis eight was rejected, and it was concluded that there was a significant difference in the percentage of minority students accepted to the public law schools prior to and following the creation of MSIs. The creation of the MSI institutions did increase the percentage of minority students admitted to Florida's public law schools. The increase in the percentage of minority students admitted to the law schools has been maintained through the 2005-2006 academic year. Given the missions of the MSI institutions and the expanded number of slots in the public law schools, this finding is not surprising.

Table 8

Comparison of the Percentage of Minority Applicants Accepted to the Public Law Schools Prior to and Following the Creation of the Minority Serving Institutions

Academic Year	Percent Minority Accepted	2002-2003 (Percentage Points Difference)	2003-2004 (Percentage Points Difference)	2004-2005 (Percentage Points Difference)
1998-1999	23.14%	---	---	---
1999-2000	27.76%	---	---	---
2000-2001	27.72%	---	---	---
2001-2002	25.32%	---	---	---
2002-2003	27.43%	2.11	---	---
2003-2004	30.24%	4.92**	2.91	---
2004-2005	29.56%	4.24**	2.13	-.68
2005-2006	31.22%	5.90**	3.79*	.98

*p < .05, **p < .01

H₀: There is no significant difference in the percentage of minorities enrolled at the public law schools prior to and following the creation of MSI law schools.

H_a: There is a significant difference in the percentage of minorities enrolled at the public law schools prior to and following the creation of MSI law schools.

There was a significant change in the percentage of minority students who enrolled in the public law schools in Florida prior to and following the creation of MSIs (See Table 9). An examination of the data indicated an increase in the percentage of

minority students enrolled at the public law schools for the comparisons between the academic years 2001-2002 (24.64%), 2002-2003 (27.18%); and 2003-2004 (32.43%), $z = 5.79$, $p < .01$. For example, 27.18% of the students enrolled in 2002-2003 were from racial and ethnic minorities. Following the creation of MSI law schools, the percentage of minorities enrolled increased to 32.43% in 2003-2004, with a slight decrease in 2004-2005 to 31.12%, and an increase to 34.02% in 2005-2006. Thus, hypothesis nine was rejected, and it was concluded that there was a significant difference in the percentage of minority students enrolled at Florida's public law schools prior to and following the creation of MSIs. Again, this finding supports the intent and mission of the MSI institutions. It is possible that the percentage of minority students enrolled in the public laws schools could be higher if a greater percentage of the minority students admitted to the public law schools actually enrolled.

H_{o10} : There is no significant difference in the average LSAT scores of the public law schools prior to and following the creation of MSI law schools.

H_{a10} : There is a significant difference in the average LSAT scores of the public law schools prior to and following the creation of MSI law schools.

Table 9

*Comparison of the Percentage of Minority Students Enrolled at Public Law Schools
Prior to and Following the Creation of the Minority Serving Institutions*

Academic Year	Percent Minority Enrolled	2002-2003 (Percentage Points Difference)	2003-2004 (Percentage Points Difference)	2004-2005 (Percentage Points Difference)
1998-1999	23.91%	---	---	---
1999-2000	28.08%	---	---	---
2000-2001	26.49%	---	---	---
2001-2002	24.64%	---	---	---
2002-2003	27.18%	2.54	---	---
2003-2004	32.43%	5.79**	5.25	---
2004-2005	31.12%	6.48**	3.94	-1.31
2005-2006	34.02%	9.38**	6.87**	1.59

*p < .05, **p < .01

Consistent with the findings from hypothesis four, concerning comparison of the mean LSAT scores prior to and following the implementation of the OFI, a non-significant difference was found in the mean LSAT scores of law school students attending the public law schools prior to and following the creation of MSI law schools, $F(5, 106) = 1.065, p > .05$ (See Table 10). The mean LSAT scores remained relatively unchanged during this period.

Table 10

ANOVA Results for the Creation of MSI Law Schools on LSAT Scores

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Year	104.30	5	20.861	.1065	.384
Error	2077.13	106	19.596		
Corrected Total	2181.43	111			

R Squared = .055 (Adjusted R Squared = -.010)

Impact of the Creation of MSI Law Schools on the Diversity of Florida's Legal Profession (Graduates and Those Admitted to the Bar)

Research question four focused on the impact of the creation of MSI law schools and their impact on the diversity of Florida's legal profession (graduates and those admitted to the Florida Bar). Given the quantitative nature of this question, two hypotheses were proposed and tested. The following discussion summarizes the findings for each of these two hypotheses.

H₀₁₁: There is no significant difference in the percentage of minority graduates at the public law schools prior to and following the creation of MSI law schools.

H_{a11}: There is a significant difference in the percentage of minority graduates at the public law schools prior to and following the creation of MSI law schools.

There was a non-significant change in the percentage of minority graduates of the public law schools in Florida prior to and following the creation of MSIs (See Table 11).

An examination of the data indicated that the percentage of minority graduates was

27.73% in 2001-2002 and 26.27% in 2002-2003, the academic year the MSI law schools opened. The percentage of minority graduates actually decreased to 22.99% in 2004-2005, the academic year for the first graduating class of the newly created MSI law schools. The comparison between the percentage of minority graduates prior to the creation of the MSI laws schools and the first two years in which there were graduates of the MSI laws schools was not significant; however, the comparison between 2004-2005 (22.99%) and 2005-2006 (29.09%) was significant. The reason for this significant difference may be due to a decline in the percentage of minority graduates in 2004-2005, which appears to be part to the regular variability in the percentage of minority graduates when examined over five to ten years. Thus, hypothesis eleven was not rejected, and it was concluded that there was not a significant difference in the percentage of minority graduates of Florida's public law schools prior to and following the creation of MSI law schools.

Table 11

Comparison of the Percentage of Minority Graduates at Public Law Schools Prior to and Following the Creation of Minority Serving Institutions

Academic Year	Percent Minority Graduates	2004-2005 (Percentage Points Difference)	2005-2006 (Percentage Points Difference)
1997-1998	23.34%	---	---
1998-1999	25.90%	---	---
1999-2000	22.00%	---	---
2000-2001	23.84%	---	---

2001-2002	27.73%	---	---
2002-2003	26.27%	---	---
2003-2004	27.29%	---	---
2004-2005	22.99%	-3.28	---
2005-2006	29.09%	2.82	6.10**

*p < .05, **p < .01

H₀₁₂: There is no significant difference in the percentage of minority law school graduates sitting for the Florida Bar Examination prior to and following the creation of MSI law schools.

H_{a12}: There is a significant difference in the percentage of minority law school graduates sitting for the Florida Bar Examination prior to and following the creation of MSI law schools.

This hypothesis could not be tested because the FBA indicated that it could not release this information. The data received from the FBA yielded the percentage of practicing attorneys who are members of the Florida Bar (See Table 8). The percentage of minorities hovered at a given percentage point increase from 1998 to 2006, more specifically from 8% to 15%.

Summary

In summarizing the findings of this study, the researchers learned that there are areas in which implementation of the OFI appears to have had a significant impact, including the percentage of minorities applying and being admitted to Florida's public law schools. With but a few years when there were non-significant declines in the percentage of minority law school applicants, there was an overall increase each year

since 1999 when the OFI was implemented, and that increase continued through 2006. Moreover, the percentage of minority students admitted to the four public law schools rose immediately after the OFI and has increased in most years since, from nearly 28% in the 1999-2000 academic year to more than 31% in 2005-2006. In addition, there was a significant and similar increase in the percentage of minorities who ultimately enrolled in Florida's public law schools.

This study found there to be a non-significant difference in median LSAT scores of students who attended public law schools in Florida prior to and following implementation of the OFI. Likewise, a non-significant difference was discovered in the percentage of minority graduates from these institutions before or after the creation of two MSI law schools.

Implications

This research implies that minorities are at a disadvantage in the legal profession in Florida. The FBA's data supports the fact that there are approximately 1,415 attorneys in Florida's legal profession who are of African American descent, compared with 6,365 who are Hispanic, and 62,943 Whites (FBA, 2007). This coincides with other research in both the United States and Europe suggesting that minority lawyers can face difficulties that are sometimes insurmountable while trying to assimilate into the culture of today's legal profession (Roach, 2006).

The National Association for the Advancement of Colored People (NAACP) recognized the importance of having attorneys who look like the communities they are serving conduct the organization's business. In the early years, the organization was using White lawyers for many of its court fights, but began to face community and

political pressure during the 1920's to use Black lawyers. The Black community made it clear that it wanted organizations that worked in the community to represent the community (Kluger, 1977).

Despite recognition of the importance of diversity in the legal profession of Florida and the nation, the OFI has failed to live up to the promises made by its proponents (Lyons, 2003). Orfield says that his review of the OFI shows that its Talented Twenty plan actually had little impact on qualifying students from high schools who would not ordinarily have qualified prior to implementation of Talented Twenty. Orfield says his research implies that the OFI did not work and its promise of greater diversity was not realized (Lyons, 2003). He says OFI had no impact because most of the state's public universities had no affirmative action policy in the first place, and the Talented Twenty plan did not significantly increase the number of minority students who qualified to attend, for example, the University of Florida (Lyons, 2003).

There is an abundance of research to suggest that, with the exception of affirmative action, which the OFI was intended to redefine, few policies promising to bring about greater diversity have been successful (Walker, 2007). Far from being a panacea, however, it appears affirmative action alone does not guarantee equal treatment for minorities in the hiring and promotion process.

There is evidence suggesting that, even with affirmative action, minorities face obstacles that are difficult to overcome. In the federal government, for example, opportunities for minorities are declining in areas one might not expect, as shown in a recent television news investigative report by WJLA-TV in Washington, DC.

Since 2003, the criminal section within the Civil Rights Division has not hired a single black attorney to replace those who have left. Not one. As a result, the current face of civil rights prosecutions looks like this: Out of fifty attorneys in the Criminal Section, only two are black. The same number the criminal section had in 1978, even though the size of the staff has more than doubled (Baskin, 2007).

According to the television report, the Justice Department responded by pointing out that the Civil Rights Division is more diverse than any other in the Department of Justice.

Advocates of affirmative action consider reports like those from the Justice Department as harbingers of the future if the nation moves toward a race neutral approach to hiring and promotion in the work place. They predict a reversal of progress for Blacks and other minorities without the protections afforded them by affirmative action. Their concerns, however, are not being heard by a growing number of states that appear to be willing to take the risk of promoting policies that do not include race as a factor in many of their decisions.

Impact of Study

Why are states such as Florida moving further away from the customary use of affirmative action policies and towards the OFI and initiatives like it? That is not a question that this study was prepared to answer. Ward Connerly may be the best person to provide the answer to that question. He is chairman of the American Civil Rights Institute and was actively involved in initiatives to reduce the use of affirmative action in California, Washington State, and Michigan. Connerly believes affirmative action sends the wrong message for the nation. In an interview with *The Chronicle of Higher*

Education, he said his goal is to get America to apply one standard to every citizen, regardless of race (Schmidt, 2007).

Who benefits from states abandoning affirmative action policies? The answer to that question may surprise those who would expect that White applicants would be the primary beneficiaries, according to some researchers.

[E]liminating affirmative action would reduce acceptance rates for African American and Hispanic applicants by as much as one-half to two-thirds and have an equivalent impact on the proportion of underrepresented minority students in the admitted class. White applicants would benefit very little by removing racial and ethnic preferences; the White acceptance rate would increase by roughly 0.5 percentage point. Asian applicants would gain the most. They would occupy four out of every five seats created by accepting fewer African American and Hispanic students. (Espenshade & Chung, 2005 303-304)

Recommendations

Based on the findings of the study, recommendations were made in the areas of policy, practice, and further research. Each of these areas is discussed below.

Policy

The researchers, by extension, assume that affirmative action is also of benefit to increasing diversity in all graduate and professional schools. Based on this study, it is apparently not the only policy that has proven effective in diversifying America's law schools and the practice of law. The recommendation to communities around the country, as a result of this study, is to resist the temptation to pass legislation that might have the effect of inhibiting the growth of diversity. It seems as if communities may

want to consider more carefully the impact of such policies because of the possibility of further damaging minority growth in higher education, damage that could take years to repair.

Practice

This study suggests but does not prove the kinds of results that might be expected with implementation of laws and policies similar to the OFI in other states. The limitations of this study prevent expanding its results to other states; however, it does call into question whether similar results might be anticipated. For this reason, and because several states are considering initiatives similar to the OFI, the researchers recommend further research into the impact of policies that are intended to redefine affirmative action in other states. Even more intriguing is the likelihood of determining what effects these policies might produce with respect to minority access to higher education in these states. Given what we have seen in this study, it is anticipated that such policies implemented in other states would yield similar results, minorities gaining improved access to specialized graduate and professional programs offered in higher education institutions.

Further Research

When any new policy is implemented, it requires and deserves the scrutiny of researchers who will spend years analyzing the impact of such policy changes to determine if the actual results bear any resemblance to that which was promised or intended. Additional studies on this subject would serve the interests of higher education and the underrepresented in America. If it is found that policies intended to redefine affirmative action are harming the pursuit of diversity, it then serves the public interest to learn as much about the topic area as possible.

While this study examined the impact of the OFI in Florida, the researchers believe that further study is warranted in this area. For example, data that measure perceptions of law school students in the academy and those who are in the legal profession would add considerably to the wealth of knowledge about this issue. One might also consider replicating this study in the future to include data gathered from private law schools in the state of Florida.

Conclusion

In conclusion, this study found the representation of minorities in Florida's legal profession improved after implementation of OFI and the addition of two MSI law schools. In addition, this study concluded that minorities were represented in larger numbers in Florida SUS law schools; however, Black representation among students in law schools in the SUS of Florida as well as around the country has failed to make the kinds of strides that either affirmative action or race neutral incentives have promised.

According to the U.S. Census Bureau, Blacks made up 12.7% of the population in 2002 but at only one of the 30 law schools that are ranked the highest nationally, were Blacks anywhere near that level of representation (U.S Census, 2002). Minorities are similarly represented in Florida's law schools and in the state's legal profession. Data from the SUS of Florida public law schools suggest admission and enrollment numbers that rank Whites in first place, well ahead of other ethnic groups, Hispanic students second, Blacks in third place, and Asians and Native Americans fourth. These numbers are not unlike those that are certified by the FBA for the current percentage of attorneys by race. As critical race theorists, the researchers believe that, while the intent of the OFI

and the creation of two MSI law schools was to improve diversity, Whites benefited most because their opportunities to attend law schools in the SUS of Florida were expanded.

In an article entitled, "Among the nation's 30 top-rated law schools, Harvard has the highest percentage of Black students," researchers found that Black students are still underrepresented in law schools when compared with their representation in the U.S. population as a whole ("Among the," 2007). Just over 11% of Harvard's law school population is Black ("Among the," 2007). Duke University School of Law has the next highest number of Black students among the top rated schools, followed by Georgetown University and Emory University law schools, each with more than nine percent Black enrollment ("Among the," 2007). Researchers also found that at three of the top-ranked law schools where race neutral admissions policies are mandated by state law, Black enrollment is less than five percent of the institutions' total student population.

The highest concentration of Black law students can be found on the six campuses of HBCU law schools, but even there, they are less represented than one might think. In an article entitled, "African American students at historically Black law schools," researchers found that Howard University's school of law has the highest percentage of Black students, representing just under three-fourths of all students, followed by Southern University's law school, where Blacks make up more than 55% of the total student population ("African American students," 2007). According to the ABA, the nation's six historically Black law schools have a total of 1,484 Black students, or just over 15% of all Black law school students in the country.

Black law school enrollment was actually better nationally prior to implementation of various initiatives in states around the country that reduced their use of

traditional affirmative action policies. For example, the nation's ABA-accredited law schools boasted an enrollment of 7.1% Black in 2000 and only 6.2% in the 2005-2006 academic year ("Black Student," 2007). An article entitled, "Black student enrollments in law school inch higher," indicated that the number of Blacks in law schools is increasing, albeit slowly, with a 3.6% rise in total enrollment or 9,529 Black students in 2006-2007 ("Black Student," 2007).

By the weight of the evidence widely available, one can only conclude what these researchers have, which is that minorities continue to be vastly underrepresented in colleges of law and, by extension, in the legal profession. The plight of minorities in law school has evolved despite improvements brought about by the use of affirmative action and race conscious practices meant to enhance minority enrollment. It took more than 30 years for affirmative action to have the kind of meaningful impact that has led to perceptible progress, yet only a few years of limited use of affirmative action policies could conceivably erase much of that progress. This study suggests that, rather than erasing progress on diversity, the OFI and the addition of two MSI law schools actually improved minority representation. It is apparent that opening the two MSI law schools in Florida did not encourage the predominately White law schools to withdraw their traditional support of minorities in gaining admittance to their programs.

While this research concluded that the OFI and the addition of two MSI law schools have helped to improve minority representation in the legal profession, it also suggests that such policies are not a panacea. It suggests that affirmative action may not be the sole means to the end. In this case, the end is more diversity in higher education, which is most certainly something to be sought. It is clear, however, that more creative

means to diversity than relying solely on affirmative action can achieve similar if not better results, and using race-neutral policies may not be the death of diversity, as some have argued.

The researchers made every effort to protect the integrity of the study and eliminate bias. Regardless, some limitations and delimitations exist. For example, a study's limitations have a direct correlation to the internal legitimacy of the research and are defined by conditions that are generally considered to be outside of the researchers' control and by the application of its conclusion. The study, by its use of secondary data analysis by outside entities, may also have contributed to its limitations. One of the delimitations of this study, which involves the external parameters established by the researchers, is related to the use of only the four public law schools in just one state, which may prevent the study's generalization to other SUS public law schools such as those in Michigan, Texas, Washington, and California.

It is impossible to accurately predict the future; however, there are numerous opportunities for further research into such complex issues as: What impact Florida's decision to abandon all but race neutral policies in its admissions practices in public law schools will have on the private law institutions? What is the actual long-term effect of Florida's implementation of the OFI on the state's minority law population? How can there be middle ground found between two such widely disparate points of view? And, what are the long-term implications for the minority population of states who do not have an adequate number of minority lawyers to satisfy the perceived need of the minority community? Clearly, there is a need for additional research in this area and hopefully this study will lead to future discussion on this subject matter.

References

- Adarand Constructors v. Pena*, 515 U.S. 200 (1995).
- African-American students at historically Black law schools. (2007). *Journal of Blacks in Higher Education*. Retrieved September 13, 2007, from <http://www.jbhe.com/latest/index091307.html>
- Alabama State Constitution. Code of Alabama (1901).
- Alder, P.A., & Alder, P. (1987). *Membership roles in field research*. Newbury Park, CA: Sage Publications.
- Allen, W.R., & Jewel, J.O. (2002). A backward glance forward: Past, present, future perspectives on historically Black colleges and universities. *The Review of Higher Education*, 25(3), 241-261.
- American Bar Association (2006). Enrollment data report.
- Among the nation's 30 top-rated law schools, Harvard has the highest percentage of Black students. (2007). *Journal of Blacks in Higher Education*. Retrieved September 6, 2007, from <http://www.jbhe.com/latest/index090607.html>
- Association of American Colleges and Universities. (1995). *The drama of diversity and democracy: Higher education and American commitments*. Washington, DC: AAC&U.
- Baker, G.A. III. (1994). *A handbook on the community college in America: Its history, mission, and management*. Westport, CT: Greenwood Press.

- Baskin, R. (2007, May 4). Only two Black attorneys in Department of Justice Civil Rights Division. Retrieved July 12, 2007, from <http://thinkprogress.org/2007/05/07/only-two-black-attorneys-in-dojs-civil-rights-division/>
- Bernstein, A. (2002, May 20). Too many workers? Not for long. *Business Week*, 126-130.
- Bernstein, R. (2005). Florida, California and Texas to dominate future population growth, census bureau reports. U.S. Census Bureau News. Retrieved November 13, 2006, from <http://www.census.gov/Press-Release/www/releases/archives/population/004704.html>
- Biondi v. City of Chicago*, 303 F3d 765 (2002).
- Blacks percentage of students at state universities in Florida continues to slide. (2006). *Journal of Blacks in Higher Education*. Retrieved September 28, 2006, from http://www.jbhe.com/latest/index092806_p.html
- Black student enrollments in law school inch higher. (2007). *Journal of Blacks in Higher Education*. Retrieved August 30, 2007, from http://www.jbhe.com/latest/index083007_p.html
- Black Solicitors Network. (2006). The diversity league table. (London: England).
- Bowen, W.G., & Rudenstein, N.L. (2002). *In pursuit of the Ph.D.* Princeton, NJ. Princeton University Press.
- Brown v. Board of Education*, 347 U.S. 483 (1954).
- Brown v. Board of Education (II)*, 349 U.S. 294 (1955).

- Brown, C. M., II. (2001). Collegiate desegregation and the public Black college: A new policy mandate. *The Journal of Higher Education*, 72(1), 46-62.
- Brown, C. M., II. Donahoo, S., & Bertrando, R.D. (2001). The Black college and the quest for educational opportunity. *Urban Education* 36(5), 533-571.
- Brown, H.B. (1896). *Plessy v. Ferguson* majority opinion. U.S. Supreme Court.
- Burger, W. (1972). *Griggs v. Duke Power Co.* majority opinion. U.S. Supreme Court.
- Bush, G. (2003). Says affirmative action unconstitutional, Retrieved March 20, 2005, from www.capitolhillblue.com.
- Bush, J. (2000). One Florida yields big gains in minority enrollment. Tallahassee, FL. Office of the Governor. Retrieved March 26, 2006, from http://www.oneflorida.org/myflorida/government/governorinitiatives/one_florida/statementForward.html
- Callan, P.M., & Finney, J.E. (2002). Assessing educational capital: An imperative for policy. *Change*, 34 (4).
- Callaway, R. (1979). Teachers beliefs concerning values and the functions and purpose of schooling, *Eric Document Reproduction Service*, No. ED 177110.
- Calmore, J. (1993). Spatial equality and the kerner commission report: A back to the future essay. *North Carolina Law Review*, 78, 1487-1518

- Carnevale, A. P., & Desrochers, D.M. (2003). *Standards for what? The economic roots of k-16 reform*. Princeton, NJ: Educational Testing Service.
- City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989).
- Civil Rights Act*. Pub. L. 88-352. (1964).
- Chambliss, E. (2004). *Miles to go: Progress of minorities in the legal profession*. Retrieved January 23, 2007, from www.abanet.org/minorities.
- Clark, B.R. (1983). *The Higher Education System*. Berkeley: University of California Press.
- Clinton, W. (1994). Educational excellence for Hispanic Americans. Executive Order 12900.
- Cohen, A. (1998). *The shaping of American higher education*. San Francisco, CA: Jossey-Bass Publishers.
- Connor, L. (1985). *The impact of affirmative action on the employment practices in Pennsylvania's state system of higher education, 1974-1984*. Unpublished doctoral dissertation, University of Pittsburgh.
- Conway, M. (2000). Political participation in United States. *Congressional Quarterly, Inc.*
- Cooper, F. (2002). The un-balanced fourth amendment: A cultural study of the drug war, racial profiling and arvizu. *Villanova Law Review*, 47, 851-895.
- Crenshaw, K. (2002). The first decade: Critical reflections, or a foot in the closing door. *UCLA Law Review*, 49, 1343-1372.

- Crenshaw, K., Gotanda, N., Peller, G., & Thomas, K. (Eds.). (1995). *Critical race theory*. New York: The New Press.
- Creswell, J. (1994). *Research design: Qualitative and quantitative approaches*. Newbury Park, CA: Sage Publications.
- Crum, S. (1989). The history of Tribal Colleges. *Tribal College Journal*, 1, 1.
- Davenport, W. (1991). Development of a survey of faculty attitudes to determine the need for a faculty development plan in affirmative action at Broome Community College. New York: Nova University. (Eric Document Reproduction Service No. ED 3404341).
- Davidson, R.C., & Lewis, E.L. (1997). Affirmative action and other special consideration admissions at the University of California Davis, School of Medicine. *Journal of the American Medical Association*, 278, 1153-1158.
- de Gruyter, W. (1992). *American Universities and Colleges, 14th ed.*
- Delgado, R. (1995). Affirmative action as a majoritarian device: Or, do you really want to be a role model? In R. Delgado (Ed.), *CRT: The cutting edge*. Philadelphia: Temple University Press.
- Denzin, N., & Lincoln, Y. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Dougherty, K.J. (1994). *The contradictory college: The conflicting origins, impacts, and futures of the community college*. Albany, NY: State University of New York Press.

- Ellis, P. (2006). *Law career access: An examination of the occupational outcomes for University of Maryland School of Law graduates (Class of 2000-2003)*. Unpublished doctoral dissertation, Morgan State University.
- Elwell, F. (2002). The sociology of C. Wright Mills. Retrieved November 20, 2005, from <http://www.faculty.rsu.edu/~felwell/Theorists/Mills/index.htm>
- Espenshade, T.J., & Chung, C.Y. (2005). The opportunity cost of admission preferences at elite universities. *Social Science Quarterly*, 86(293), 303-304.
- Ewell, P.T. (1999). Assessment of higher education and quality: Promise and politics. In S.J. Messick (Ed.), *Assessment in higher education: Issues of access, quality, student development, and public policy*. Mahwah, NJ: Erlbaum.
- Executive Order 13096 (2002). Navajo Nation.
- Fisher, W.R. (1985). The narrative paradigm: An elaboration. *Communication Monographs*, 52, 347-367.
- Fleming, J. (1976). *The lengthening shadow of slavery: A historical justification for affirmative action for Blacks in higher education*. Washington, DC: Howard University Press.
- Fleming, J., Gill, G., & Swinton, D. H. (1978). *The case for affirmative action for Blacks in higher education*. Washington, DC: Institute for the Study of Educational Policy, Howard University Press.
- Freeman, K. (2005). *African Americans in college choice: The influence of family and school*. New York: State University of New York.

- Frye, J.H. (1992). *The vision of the public junior college, 1900-1940*. Westport, CT: Greenwood Press.
- Gannon, M. (1996). *The New History of Florida*. Gainesville: Florida. University of Florida Press.
- Garibaldi, A. (1991). *The role of historically Black colleges in facilitating resilience among African American students*. *Education and Urban Society*, 24, 103-112.
- Goldman, A. (1979). *Justice and reverse discrimination*. Princeton, NJ: Princeton University Press.
- Gratz v. Bollinger*, 539 U.S. 244 (2003).
- Griggs v. Duke Power Co.*, 401 U.S. 424 (1971).
- Grutter v. Bollinger*, 539 U.S. 306 (2003).
- Hamel, J., Dufour, S., & Fortin, D. (1993). *Case study methods*. Newbury Park, CA: Sage Publications.
- Harris, C. (2002). Critical race studies. *UCLA Law Review*, 49, 1215-1240.
- Harris, C.I., & Kidder, W.C. (2005). The Black student mismatch myth in legal education: The systemic flaws in Richard Sander's affirmative action study. *The Journal of Blacks in Higher Education*, 46, 102-105.
- Hawkins v. Board of Control*, 350 U.S. 413 (1950).
- Herbert, A.W. (1999). Remarks and recommendations regarding additional law schools. Florida Board of Regents meeting, Tallahassee, FL.
- Hopwood v. State of Texas*, 78 F. 3d 932 (5th Cir.) 1996.

Howard University. (2006). *History of Howard University School of Law*. Retrieved March 20, 2007, from <http://www.law.howard.edu/19>

Hutchinson, D. (1999). Ignoring the sexualization of race: Heteronormativity, critical race theory, and anti-racist politics. *Buffalo Law Review*, 47, 1-116.

Jed Bush's One Florida plan continues to damage Black enrollments at the state's most prestigious law schools. (2006). *Journal of Blacks in Higher Education*. Retrieved March 29, 2007, from <http://www.jbhe.com/latest/index042006.html>

Johnson, L.B. (1969). Executive Order 11748.

Johnson, L.B. (1965). Executive Order 11246.

Katsinas, S.G., & Opp, R.D. (2001). *Title III: A critically important federal initiative supporting rural community colleges*. MDC, Inc. Chapel Hill, NC, Retrieved January 20, 2007, from www.mdcinc.org/rcc/titleiii.pdf

Klink, M. (2003). *The reestablishment of the Florida Agricultural and Mechanical University College of Law: A policy analysis of equality of educational opportunity and legal education policy making in Florida (1949-2000)*. Unpublished doctoral dissertation, The Florida State University.

Kluger, R. (1977). *Simple justice: The history of Brown v. Board of Education and Black America's struggle for equality*. New York: Vintage Books.

Lack of support. (2006, April 6). Lack of support leads to young Black lawyers struggling to survive. *The Independent*. Retrieved June 20, 2007, from http://education.independent.co.uk/careers_advice/article355931.ece

Laurent, A. (1999) What is affirmative action? *Government Executive*.

Retrieved March 20, 2005, from www.govexec.com.

Louisiana State Constitution. Louisiana Acts No. 111, p. 152. (1890).

Lovett, B.L. (1990). Black adult education during the Civil War, 1861-1865. In H.G. Neufeldt, & L. McGee. (Eds.). *Education of the African American adult: An historical overview*. New York: Greenwood Press.

Lyons, D. (2003). Gary Orfield on one Florida. *South Florida Sun-Sentinel*.

Retrieved June 23, 2007, from

<http://www.racematters.org/garyorfieldononeflorida.htm>

Mallory, K. (2005 August 5). Black presence in law schools dwindling. *The Chicago Defender*.

Marin, P., & Lee, E. (2003). *Appearance and reality in the sunshine state: The talented 20 program in Florida*. Retrieved, April 20, 2007, from

<http://www.civilrightsproject.harvard.edu/research/affirmativeaction/tristate.php>

McCormick, J.L. (1972). The role of the federal government in student financial aid: A history. *The Journal of Student Financial Aid*, 2, p. 47.

McDonough, P., Antonio A.L., & Trent, J.W. (1997). *Black students, Black colleges: An African American college choice model*. *Journal for a Just and Caring Society*, 3, 9-36.

McLaurin v. Board of Regents of Oklahoma, 339 U.S. 637 (1950).

McPhail, I.P. (2005). Top 10 reasons to attend a community college.

Community College Week, 17, 11: 4-5.

Merriam, S. (1998). *Qualitative research and case study applications in*

- education*. San Francisco, CA: Jossey-Bass Publications.
- Michigan Civil Rights Committee. (2006). What is the Michigan civil rights initiative? Retrieved January 20, 2007, from http://www.michigancivilrights.org/media/MCRI_FAQs.pdf.
- Milakovich, M., & Gordon, G. (2001). *Public administration in America* (7th ed.). Belmont, CA: Wadworth Group Thomson Learning.
- Mingers, J., & Brocklesby, J. (1997). Multimethodology: Towards a framework for mixing methodologies. *Omega*, 25(5), 489-509.
- Moore, J. (2000). Florida students organize to defend affirmative action from Connerly, Gov. Jeb Bush. *Motion Magazine*. Retrieved January 20, 2007, from <http://www.inmotionmagazine.com/jm.html>
- National Center for Higher Education Management Systems. (1993). *Increasing minority participation in The Florida Bar: An analysis of current legal education conditions and options*. Boulder, Co: Young Lawyers Division of The Florida Bar.
- Nettles, M. T., & Millett, C.M. (2006). *Three magic letters; Getting to Ph.D.* Johns Hopkins University Press.
- Neyland, L.W. (2000). *The rise, fall and rebirth of the Florida A&M University College of Law*. Tallahassee: Florida A&M University Press.
- North Carolina Central University. (2007). *History of North Carolina Central University School of Law*. Retrieved March 26, 2007, from <http://web.nccu.edu/law/about/history.html>
- O'Connor, S.D. (2003). *Grutter v. Bollinger* majority opinion. U.S. Supreme

Court.

Office of the Governor. (1999). One Florida Initiative, Executive Order No. 99-281.

Orfield, G., & Miller, E. (1998). *Chilling admissions: The affirmative action crisis and the search for alternatives*. Civil Rights Project, Harvard University Press.

Paget-Clark, N. (1999). Ward Connerly is bringing his anti-affirmative action campaign to Florida. *Motion Magazine*. Retrieved January 20, 2007, from <http://www.inmotionmagazine.com/cbrown.html>

Penner, D.S. (1998). The heritage of university planning: *Medieval colleges: Early development of universities*. Berkshire, England: Newbold College Press.

Plessy v. Ferguson, 163 U.S. 537 (1896).

Powell, J. (1978). *University of California Regents v. Bakke* majority opinion. United States Supreme Court.

Proposition 209 Analysis. (1996). Retrieved March 26, 2006, from <http://vote96.ss.ca.gov/Vote96/html/BP/209.htm>

Raise Black enrollment by dropping One Florida. (2006, September 18). *Palm Beach Post*.

Randall, V. (2004). The 2004 Whitest law schools report. Retrieved January 23, 2007, from <http://academic.udayton.edu/race/03justice/LegalEd/Whitest/index.htm>

Rashdall, H. (1936). *The universities of Europe in the Middle Ages*. England: Oxford University, Clarendon Press.

Reskin, B.F. (1998). *The realities of affirmative action in an employment*. Washington, DC: American Sociological Association.

- Ritchie, D. A. (2003). *Doing Oral History: A Practical Guide*. Oxford University Press.
- Rivers, L.O. (2000). *Florida A&M University College of Law (1949-2000)*. Tallahassee, FL: Florida A&M University Press.
- Roach, R. (2006). Getting to the truth. *Diverse Issues in Higher Education*, 23(21), 24-28.
- Roebuck, J. and Murty, K. (1993). *Historically Black colleges and universities: Their place in American higher education*. Westport, CT: Praeger.
- Sander, R.H. (2004). A systemic analysis of affirmative action in American law schools. *Stanford Law Review*, 57, 367.
- Schmidt, P. (2007). 4 states named as new targets in affirmative action fight. *The Chronicle of Higher Education*, 53(35), A34-A35.
- Schmidt, P. (2007). Civil-Rights panel wants law schools required to disclose key affirmative-action data. *The Chronicle of Higher Education*. Retrieved August 28, 2007, from <http://chronicle.com/daily/2007/08/2007082801n.htm>
- Senate Bill 68. (2002). Tallahassee, FL: The Florida Senate.
- Senate Bill 140. (1946). Austin, TX: The Texas Senate.
- Senate Staff Analysis and Economic Impact Statement. (2000). *Senate Bill 68*. Tallahassee, FL: The Florida Senate.
- Stake, R. (1995). *The art of case research*. Thousand Oaks, CA: Sage Publications.
- Starling, G. (2002) *Managing the Public Sector*, Sixth Edition.
- Stepping Up the Pace. (1958, 8 Dec.). *Newsweek*, 6.

Stowell, W. (2002) *Biondi v. City of Chicago*, NO. 88C3773. *National Law Journal*, 24,(43).

Sweatt v. Painter, 339 U.S. 629 (1950).

Swygert, H.P. (2004). *The accomplishments and challenges of historically Black colleges and universities*. 2nd Annual African American Leadership Summit: Washington, DC.

Taking the Initiative. (1998). Retrieved March 26, 2006, from <http://www.highbeam.com/doc/1G1:53459607/Taking+the+Initiative.html?refid=SEO>.

Tennessee State University. (2006). *History of Tennessee State University*. Retrieved January 20, 2007, from <http://www.tnstate.edu/interior.asp?mid=938&ptid=1>

Tewksbury, D.G. (1932). *The founding of American colleges and universities before the Civil War*. New York: Teachers College Press.

Thomas, K. (1994, February 20). Recalling sad memories of a law school that died or was Stolen. *Tallahassee Democrat*.

United States v. Fordice, 505 U.S. 717 (1992).

U.S Census Bureau. (2002). *Current Population Survey*.

U.S. Department of Education, National Center for Education Statistics. (2006). *The Condition of Education 2006*, NCES 2006-071, Washington, DC: U.S. Government Printing Office.

University of California Regents v. Bakke, 438 U.S. 265 (1978).

- Valdes, F. (1999). Afterword: Theorizing “outcrit” theories: Coalitional method and comparative jurisprudential experience racecrits, queercrits, and latcrits. *University of Miami Law Review*, 53, 1266-1322.
- Vinson, F.M. (1950). *Sweatt v. Painter* majority opinion. U.S. Supreme Court.
- Walker, B.S. (2007). Two states, two stories. *Diverse Issues in Higher Education*, 24(3), 15.
- Warren, E. (1954). *Brown v. Board* majority opinion. U.S. Supreme Court.
- Webb, N. (1981). Task related verbal interaction and mathematics learning in small groups. *Journal of research in Mathematics Education*, 22(5), 366-389.
- Wenglinsky, H. (1996). The educational justification of historically Black colleges and universities: A policy response to the U.S. Supreme Court. *Educational Evaluation and Policy Analysis*, 18, 91-103.
- West, R., & Turner, L. (2004). *The narrative paradigm. Introducing communication theory: Analysis and application*. 2nd edition, New York: The McGraw-Hill Companies.
- Weston, M. (2005). *The letter from Leon County jail: Patricia Stephens Due and the Tallahassee, Florida civil rights movement*. Unpublished master's thesis, The Florida State University.
- White, J. (1992). *U.S. v. Fordice* majority opinion. U.S. Supreme Court.
- Williams, J., & Ashley, D. (2004). *I'll find a way or make one: A tribute to historically Black colleges and universities*. New York: Harper Collins.

Wing, A. (2000). *Global critical race feminism: An international reader*. New York: New York University Press.

Wolcott, H. (1999). *Ethnography: A way of seeing*. Walnut Creek, CA: Alta Mira Press.

Wolcott, H. (1995). *The art of fieldwork*. Walnut Creek, CA: Alta Mira Press.

Yin, R. (1994). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.



The mission of the Department of Educational Leadership and Policy Analysis is to create, integrate, exchange, and apply knowledge about leadership, learning, and organizational performance to advance educational quality and opportunity.

Nationally Ranked

#1 ranked Department of Educational Leadership & Policy Analysis

Over the past decade US News and World Report's annual national rankings of graduate programs has consistently ranked the Department in the top five programs in the country.

Departmental Emphases

To fulfill this mission, the Department offers programs leading to PhD, master's and certification in Educational Leadership and Policy Analysis with a focus on leadership for learning for all students.

K-12 School Leadership
Higher, Postsecondary and Continuing Education
Educational Policy

Program Options

Doctor of Philosophy (Ph.D.)
Master's of Science
Educational Specialist Certificate
Administrative Certifications

Committed to Diversity

The Department is committed to developing educational leaders who can advance diversity, equity, and social justice by engaging others through leadership for learning.

For further information view our website at www.education.wisc.edu/elpa, contact the Department of Educational Leadership & Policy Analysis, 1025 W. Johnson Street, Room 1152, Madison, Wisconsin 53706-1796 or 608-263-2701.

Using a Tenet of Critical Theory to Explain the African American Male Achievement Disparity

Robert T. Palmer
Assistant Professor of Student Affairs
Community of College and Public Affairs
Binghamton University

Adriel A. Hilton
Public Policy Fellow
Greater Baltimore Committee

Patricia A. Green-Powell
Associate Professor of Educational Leadership
Florida Agricultural and Mechanical University

Abstract

Although African Americans continue to demonstrate a desire for education, African American male enrollment and completion rates in higher education are dismal when compared to other ethnic groups. Researchers and scholars have noted various theories and philosophies responsible for the academic disengagement of African American males in higher education. This article will provide a new contextual lens for understanding the academic disengagement of African American males using a tenet of Critical Theory as a method to explain the African American male achievement disparity. Additionally, this research offers employable strategies and activities that may encourage African American male achievement.

Using a Tenet of Critical Theory to Explain the African American Male Achievement Disparity

African Americans¹ have a long history of valuing education (Allen, Jewell, Griffin, & Wolf, 2007; Freeman, 2005; Lee, 2005). Although many state laws, especially during the Civil War period, prohibited the education of Blacks, African Americans have traditionally linked their educational pursuits to a sense of liberation and a desire to improve the plight of their people (Perry, 2003). Slaves, such as Frederick Douglass and Denmark Vesey are good illustrations of these principles. Although they never received a formal education, they exhibited a passion for education and actively sought it as a means to promote empowerment and freedom from the bondage of servitude (Perry, 2003).

After slavery, emancipated Blacks maintained their passion for education. By 1890, one-third of Black children were attending schools (White & Cones, 1999). Historically Black colleges and universities (HBCUs) were another venue African Americans used to pursue their proclivity for education after the Civil War (Allen, Jewell, Griffin, & Wolf, 2007). As time progressed, so too did the centrality of education in the lives of African Americans. This is reflected in the writings and teachings of African American historical figures, such as Carter G. Woodson, Malcolm X, and W.E. B. Du Bois. These men demonstrated a missionary zeal for education and urged other African Americans to engage enthusiastically in education (Haley & X, 1965/1998; Woodson, 1933/2000).

Other African Americans have been receptive to the message these and other historical figures heralded about education. Their receptivity manifested in African Americans supporting organizations such as the National Association for the Advancement of Colored People (NAACP), which focused on employing legal tactics to challenge *de jure* segregation emanating from *Plessy v. Ferguson* (1896), which legalized separate but equal facilities between Whites and African Americans

¹ The terms “African American” and “Black” are used interchangeably in this manuscript.

in the United States. As support from African Americans remained unabated, the NAACP's defense team convinced the Supreme Court, in the *Brown v. Board of Education of Topeka, Kansas* (1954) case, that the doctrine of separate but equal, in the context of education promoted injustice and inequality. This decision prompted gradual integration of public schools, met by limited governmental intervention and massive resistance from Whites (Patterson, 2001).

Although African Americans continue to demonstrate a desire for education, African American males' enrollment and completion rates in higher education are dismal compared to other groups, most notably their female counterparts (Cross & Slater, 2000; Jackson & Moore, 2006, 2008). Currently, African American men account for 4.3% of the total enrollment at four-year higher education institutions in the U.S. (Harper, 2006; Strayhorn, 2008). Notably, college enrollment among African American males is the same as it was in 1976 (Harper, 2006; Strayhorn, 2008). Harvey (2008) notes, out of the 73.7% of African American males who graduated from high school in 2000 compared to 79.7% for African American females, only 33.8% of African American males enrolled in college compared to 43.9% of their female counterparts. While the current gender gap among men and women seem to be problematic across all racial and ethnic lines, the extent to which this is true is striking among African Americans.

Researchers and scholars have noted various theories and philosophies, responsible for the academic disengagement of African American males in higher education. The purpose of the article is to provide a new contextual lens for understanding the academic disengagement for African American males. By examining African Americans' academic dilemmas and challenges through this contextual lens, we will offer strategies that can be employed to encourage African American male achievement. The article will first provide an overview of the experience of African American males throughout the educational pipeline. Furthermore, it will provide a review of the literature on the theories and philosophies exploring the academic disengagement for African American males. The

purpose of this review is to not critique these theories and philosophies, but to merely provide an overview.

A Review of the Literature on African American Males

The Status of African American Males in Elementary and Secondary Education

The social science literature is replete with the bleak conditions and experiences of African American males in education (Bailey & Moore, 2004; Davis, 2003; Moore, 2000; Jackson & Moore, 2006, 2008; Noguera, 2003; Strayhorn, 2008). Researchers note that terms—such as endangered, uneducable, dysfunctional, and dangerous are often used to describe African American males (Majors & Billson, 1992; Parham & McDavis, 1987; Jackson & Moore, 2006; Strayhorn, 2008). According to Jackson and Moore (2006), these characterizations of African American men are noticeable in the social domain of education (Jackson & Moore, 2006).

Research has shown that academic problems hindering the educational progress of African American men begin early, impinging their ability to graduate from high school (Davis, 2003; Epps, 1995; Howard-Hamilton, 1997). In elementary and secondary education, teachers and counselors are far more likely to impose negative expectations upon African American males as it relates to attending college than their White counterparts (Davis & Jordan, 1994; Epps, 1995; Jones, 2002; Ogbu, 2003). African American males are also disproportionately disciplined, more apt to face expulsions, and suspended longer and more frequently than White students (Hale, 2001; Major & Billson, 1992; Polite & Davis, 1999).

African American males are far more likely to be underrepresented in gifted education programs or advanced placement courses (Jackson & Moore, 2006). Teachers and counselors disproportionately track African American males into low academic ability classrooms, while many of their White counterparts are placed in advanced courses that prepare them for college placement in competitive institutions. In some educational settings, African American males are more likely

than other racial and ethnic groups to be marginalized, stigmatized, and labeled with behavior problems (Noguera, 2003). African American men are also overwhelmingly concentrated in special education and are more likely to be classified as mentally retarded and labeled as having learning disabilities (Levin, Belfield, & Muenning, Rouse, 2007; Jackson, Henfield, & Owens, 2008; Noguera, 2003). Research has shown that the educational experiences of African Americans impinge upon their ability to graduate from high school, manifesting in high rates of illiteracy and unemployment (Hale, 2001; Majors & Billson, 1992). Even when African American males graduate from high school, because of the lack of parity between the quality of education between them and their White, more affluent counterparts, often times, African Americans have a deficient in crucial academic skills. In her book, *We Real Cool: Black Men and Masculinity*, hooks (2004) notes:

[Literacy] skills are not taught to [African American] males. Educational systems fail to impart or inspire learning in African American males of all ages . . . Many African American males graduate from high schools reading and writing on a third or fourth grade level. (pp. 40-41)

It is estimated that approximately 44% of African American males are functionally illiterate (Blake & Darling, 1994). African American males with lower educational attainment are predisposed to inferior employment prospects, low wages, poor health, and are more likely to be involved with the criminal justice system (Harvey, 2008; Levin, et al., 2007).

African American males and Higher Education

The educational problems and issues that African American males experience in elementary and secondary schools are not endemic to those educational settings. Similar trends can be noted in postsecondary education. Although the number of African American males entering higher education increased substantially during the late 1960s and again during the 1980s and 1990s, African American males continue to lag behind their female and White male counterparts with

respect to college participation, retention, and degree completion rates (Noguera, 2003; Polite & Davis, 1994). In 2000, Levin et al (2007) noted that African American males between the ages of 26-30 on average had 0.72 fewer years of education than their White male counterparts.

According to researchers (Green, 2008; Jackson & Moore, 2006, 2008), the number of African American males in prison exceeds those in postsecondary institutions. “Approximately one in four African American males between the ages of 20 and 29 are incarcerated, on probation, or on parole . . . only one in five is enrolled in a two- or four-year college program” (Prothrow-Stith, 1993, p. 163). More recently, Green (2008) notes that in 2000, there were 188,550 more African American men incarcerated than enrolled in institutions of higher education.

While research has shown a relationship between educational attainment and income (Bush & Bush, 2005; Cuyjet, 1997; Jackson & Moore, 2006), African American males enrollment and completion rates in higher education are dismal compared to other groups, most notably their female counterparts (Cross & Slater, 2000; Jackson & Moore, 2006). Recent research has noted a gender disparity between African American males and African American females as it relates to college attendance and completion (Ferguson, 2003; Jackson & Moore, 2006, 2008; Strayhorn, 2008; Palmer & Young, in press; Polite & Davis, 1999). Harvey (2008) notes that out of the 73.7% of African American males who graduated from high school in 2000 compared to 79.7% for African American females, only 33.8% of African American males enrolled in college compared to 43.9% of their female counterparts. Data from the *Journal of Blacks in Higher Education* (2008) reiterates this gender disparity by noting that in 2006, African American males earned 94,341 bachelor’s degrees compared to 48,079 awarded to African American males.

This gender disparity is not endemic to African Americans. Surprisingly, however, gender disparities are most pronounced among Blacks (Cuyjet, 2006; Palmer & Strayhorn, in press, Strayhorn, 2008; Polite & Davis, 1999; Ross, 1998). Roach (2001) emphasized this trend by noting

while Black women are scoring big gains in education, particularly at the college level, the progress for African American males has either stagnated or increased minimally from year to year.

A Review of Explanations for the Educational Disengagement of African American Males

Researchers have put forth several theories and philosophies to explain the dismal academic performance and progress of African American males. One such theory is “Acting White”—a theoretical concept that Fordham and Ogbu (1986) proposed to explain the academic disengagement of African Americans. Although this concept has generated opposition (Ainsworth-Darnell & Downey, 1998; Kao & Tienda, 1998; Tyson, Darity, & Castellino, 2005), Fordham and Ogbu posited that African Americans have formed an oppositional culture, which stems from the oppression, enslavement, and discrimination they have experienced in America. Not only does this oppositional culture act as a bulwark between African Americans and White America, it also provokes African Americans to persuade their same-race peers to devalue academic success because of its association with “acting White.” Specifically, Fordham and Ogbu notes:

schooling is perceived by Blacks, especially by Black adolescents, as learning to act White . . . In our view . . . the academic learning and performance problems of Black children arise not only from a limited opportunity structure and Black people’s responses to it, but also from the way Black people attempt to cope with the burden of ‘acting White’. (p. 201)

Lundy (2003) states that African Americans indoctrinated with this ideology of “acting White” view academically inclined African Americans as abandoning their Black cultural identity, and rejecting the norms of their peers as well as the peer group itself. Compounding this phenomenon of “acting White” is the job ceiling that precludes minorities from attaining employment and financial status compared to their White counterparts with comparable academic credentials. Fordham and Ogbu noted that the job ceiling cast(s) disillusionment about the real value of schooling, which discourages African Americans from working hard to excel in school.

While research from Lundy (2003) supported this theory of “acting White,” he has also asserted that this theory is more applicable to African American males than females (Fordham & Ogbu, 1986; Lundy, 2003, 2005; hook, 2004; Major & Billson, 1992; Noguera, 2003). Davis (2003) explained that African American men tend to perform poorly academically because they perceive schooling as contradictory to their masculinity. Majors and Billson (1992) agreed with Davis’ assertion. They argue that Black males have developed a cool pose—that is, a coping mechanism used to become acclimated to their environment and to communicate masculinity. Majors and Billson points out a cool persona aids in sustaining the balance between the Black “male’s inner life and his social environment” (p. 9). Further, they contend “the cool front of black masculinity is crucial for preservation of pride, dignity, and respect. It is a way for Black males to express bitterness, anger, and distrust toward the dominant society” (p. 9). This cool pose propels African American men to become indifferent toward education as a form of social advancement.

Other researchers (e.g., Farley, 1993; Robinson, 2000; West, 2001) explain that discrimination is another factor, prohibiting African American males from advancing through the educational pipelines. Specifically, Farley (1993) argues racial prejudices cripple the social and educational progress of American Americans. Hale (2001) concurs with the positions described thus far. Hale (2001) argued by sending African Americans to inferior schools, resulting in inferior skills and credentials, White American maintains the oppression of African Americans. She notes that under the guise of freedom and opportunity, African Americans are blamed for their own plight. She notes, however, that racism is actually the culprit preventing African Americans from educational parity with their White counterparts.

Negative imagines that African American males are exposed to at an early age through the mass media have also been attributed to their academic disengagement (hook, 2004; Jackson & Moore, 2006; Palmer & Hilton, 2008). The media rarely focuses on positive accomplishments of

African American males. Instead, they commonly use their public platform to perpetuate and instigate negative stereotypical depictions of African Americans. Consequently, African American males are victimized by these images (Bailey & Moore, 2004; Jackson & Moore, 2006, 2008; Madison-Colmore & Moore, 2002; Moore, 2000). The media, in this sense, widely contributes to the problems that African American males experience in education.

The most contemporary thought for the academic problems of African Americans is stereotype threat. While this theory does not focus on the academic disengagement of African Americans, it focuses on the achievement disparity between African Americans, particularly African American males, and their White counterparts. Nevertheless, it still provides another lens from which to view the underachievement of African Americans. Claude Steele and his colleagues believed that stereotype threat—that is, the “threat of being viewed through the lens of a negative stereotype, or the fear of doing something that would inadvertently confirm that stereotype,” (Steele, 1999, p. 46) negatively impact the academic performance of African Americans. In support of his theory, Steele and his colleagues tested the theory of stereotype threat by conducting studies in which groups of students were exposed to a set of stereotypes before completing an academic task. Steele and his colleagues hypothesized that the performance of the group, sensitive to the stereotype, would be negatively impacted. Their results indicated a relationship between stereotype threat and task performance when academic ability is measured. Conversely, when academic ability was not measured, the task for the group was not impaired. Other researchers (Fries-Britt, 1998; Moore, 2000; Osborne, 1999; Steele, 1999) also support stereotype threat and how it impacted African American students in their research.

A Review of Literature on Critical Theory

Critical Theory: Another Method to Examine the Academic Disengagement for African American Males

Critical theory provides another forum to examine disparities in education for African American males. Critical theory emanated from a cadre of German social theorists associated with the Institute for Social Research at Frankfurt, at the University of Frankfurt, in 1923 (Kincheloe, 2001). Some of the early contributors to critical theory were Max Horkheimer, Theodor Adorno, and Herbert Marcuse (Gibson, 1986; Giroux, 1983). They were influenced by the devastation of World War I, Postwar Germany's economic depression, and Central Europe's social upheaval (Kincheloe & McLaren, 2000). Initially, these men focused on the changing nature of the European labor movement and the evolution of Soviet communism and Western capitalism (Gibson, 1986). They later shifted their interest to address the psycho-social dynamics under girding authoritarian, fascist tendencies, and the potentiality for totalitarianism in the mass production and consumption of culture (Gibson, 1986). Of particular interest to them was how injustice and subjugation impact the social world (Kincheloe, 2001; Kincheloe & McLaren, 2000).

A decade after the Frankfurt school was established, the Nazis took control of Germany, causing Horkheimer, Adorno, and Marcuse to leave because of their Jewish ethnicity and association with Marxism (Gibson, 1986; Kincheloe, 2001; Kincheloe & McLaren, 2000). These critical theorists settled in California, where they were shocked by the American contradiction of equality and racial and class discrimination. They produced their major work in the United States. In 1953, Horkheimer, and Adorno returned to Germany and resuscitated the Institute of Social Research, while Marcuse stayed in the States where he found a new audience for his work in social theory (Kincheloe, 2001; Kincheloe & McLaren, 2000).

Critical theories, as there is no unified critical theory (Held, 1980; Kincheloe, 2001; Kincheloe & McLaren, 2000), repudiate the scientific approach, arguing it is irrelevant to the study of human phenomenon (Giroux, 1983; Kincheloe, 2001). Instead, critical theory perceives human

affairs as socially constructed, “humanly determined and interpreted, and hence subject to change through human means” (Gibson, 1986, p. 4).

Critical theory represents an integration of diverse philosophical approaches. For example, critical theory is concerned with nature of truth, reason, and beauty, which was derived by the German idealistic thought. The theory’s concern with social transformation was extrapolated from Marxism (Gibson, 1986). Furthermore, the notion of critique emanated from Kant’s philosophical approach. Finally, the theory’s idea of an emergence of spirit came from the Hegelian philosophy (Held, 1989). Fundamental to this theory, is the process of self-conscious critique. Such a process provides a basis to interpret interactions among individuals, school, and society.

Culture is an interesting phenomenon to critical theory because it is the manifestation of human consciousness shaped by daily living (Gibson, 1986). Critical theorists posit that humans are responsible for their futures. Thus, critical theory aims to empower people to deal with real problems by addressing issues in their own lives, such as the biases and distortions, which may preclude healthy personal and social growth. In employing this framework, critical theory emphasizes transformation to promote new truth for individuals and society (Gibson, 1986; Kincheloe, 2001).

Critical theory aims to promote enlightenment—that is, cognizant of the “sociocultural, political, and economic forces that shape our consciousness and identity” (Kincheloe, 2001, p. 128) to conditions of the social world. Such enlightenment forms the disclosure of the interests of individuals and groups. Critical theory defines interest as partiality toward a particular group (Kincheloe, 2001; Kincheloe & McLaren, 2000). Gibson (1986, p. 5) explains that the dominant group has an interest in maintaining the status quo to protect their advantages He posits that “men thus have a vested interest in the continuing disadvantage of women. Subordinate groups have an interest in change in order to remove the disabilities their detrimental position involves.”

The purpose of enlightenment is to emancipate and guide individuals from oppression. Enlightenment frees the world from the chains of superstition, ignorance, and suffering (Giroux, 1983). According to Kincheloe and McLaren (2000), enlightenment unveils the “winners” and “losers” in social arrangements “and the process by which such power play operate” (p.281). As previously mentioned, issues of power, culture, and hegemony were significant philosophical issues to early critical theorists (Gibson, 1986; Kincheloe & McLaren, 2000). These issues of struggle remain vital to critical theorists today. Gibson argued that hegemony is indicative of the way in which the dominant class influences the social paradigms of the subjugated groups. One of the conduits the dominant group uses to influence the social behavior and beliefs of other groups is the media, which supposedly prescribes appropriate cultural conformity. In turn, this process of social indoctrination circumvents the development of critical consciousness and emancipation in subjugated group members (Kincheloe & McLaren, 2000). In this way, the hegemonic classes do not forcibly dominate oppressed groups. Rather, they control subordinate groups through a passive consent (Gibson, 1986). In essence, the oppressed groups work to support the interest of the dominant groups. By doing so, they consent to their own oppression. Other issues of importance to critical theorists today are the replication of “oppressive social patterns and the viability of social transformation,” (Giroux, 1983, p. 25) and the role in which school plays in this phenomenon.

Critical Theory in Education

Critical educational theorists have used critical theory to examine inequalities and injustices in education. Critical theorists do not place blame on the student for school failure or underachievement. Instead, student underachievement and/or failure are attributed to social structure and processes. According to critical theorists, answers to questions, such as ‘Why do children fail?’ and ‘Why do schools fail to eradicate inequality?’ lies in the fact that the economic structure demands and ensures those outcomes. Critical theorist notes “that the economic system is

unequal and unfair (in power, wealth, opportunity, and so on). School mirrors that system, are subordinate to it, determined by it, and therefore function to reproduce it” (Gibson, 1986, p. 47).

According to critical theorists, the primary function of schools is to maintain state ethos. Gibson contends that schools are a mean of reproducing “the power and ideology of the state by providing appropriately socialized workers into economic and political structure” (1986, p. 49).

Paulo Freire discusses this concept. He argues that education is concerned with the transmission of knowledge, but education is controlled by the ruling class, and to protect their interests . . . the ruling class ensures that the knowledge transmitted serves those ends . . . (Shor, 1992, p. 51).

Another illustration of critical theory’s application to education is Freire’s concept of social pedagogy. Shor notes that “social pedagogy defines education as one place where the individual and society are constructed, a social action which can either empower or domesticate students” (1992, p. 25). With this construct, teachers may pose problems based on students’ lives, social issues or academic subjects. In a Freirean critical classroom, educators reject the methods, which make students passive. Instead, educators pose critical problems to students and encourage curiosity.

A Freirian educator may encourage students to question rather than to merely answer questions. In this sense, educators are creating possibilities for the construction of new knowledge (Freire, 1998). In this framework, the aim for students is to become proactive and learn to reconstruct the way in which they see themselves, their society, and education. The Freirian approach rejects the concept of banking in education in which the student is viewed as an empty vessel waiting to be filled. To the contrary, Freire assumes that knowledge is a gift given to those who view themselves as knowledgeable, to share with those with whom know nothing. Undergirding Friere’ theory of social pedagogy is a critique of hegemony and a commitment to challenge injustice. From a democratic perspective, Friere viewed society as being controlled by an elite group,

which assumes that its culture and values are supreme. In school, this is manifest in the required syllabi, mandated textbooks, tracking and standardized exams.

Critical Pedagogy and Curriculum

Critical educational theorists have used critical pedagogy—a variation of critical theory to examine a school’s curriculum. Critical educational theorists view the curriculum as more than a program of study. Instead, it is indicative of a particular form of life. This curriculum serves to prepare students for hegemonic or subordinate positions in society. Critical theorist points out in as much as there is a curriculum overt— there is a curriculum that is covert, referred to as the hidden curriculum. McLaren argues that the hidden curriculum focuses on the subtle ways in which knowledge and behavior are constructed, outside the traditional course materials and scheduled lessons. McLaren states “it is part of the bureaucratic and managerial press of the school—the combined forces by which students are induced to comply with dominant ideologies and social practices related to authority, behavior, and morality” (p. 184). Succinctly, the hidden curriculum is based on learning outcomes not openly acknowledged by the learners (Giroux, 1997; McLaren, 1989).

Critical Theory and the Educational Disengagement of African American Males

As discussed previously, critical theory asserts that society is orchestrated in such a way to help the dominant class maintain their hegemony and the subservient classes maintain their oppression. In this paper, we draw from a tenet of critical theory—that is, critical pedagogy to provide a new contextual lens for understanding the educational disengagement of African American males. Specifically, we are using critical pedagogy’s conceptualization of the hidden curriculum as a method to explore the underachievement of African American males. In using this tenet, we are applying this notion of a hidden curriculum to a larger societal context. In applying this notion, we are asserting that the dominant class is using the media—a curriculum that many people

to do not think of as a curriculum, to discourage the academic achievement of African American males.

In making this claim, we think about the media, television, and other forms of propaganda, and how they have been used to continuously cast African American, specifically, African American males in a negative light. Television news is a good example of this. The news outlets rarely display anything positive about African American males. Many of these news organizations perpetuate negative, stereotypical images of African American males. Cable television outlets are another example that comes to mind.

Shows, movies, video games, and videos on network and cable television are other examples that illustrate this point. For example, Black Entertainment Television (BET) has endured much criticism because of the videos and television shows that it airs. Critics claim that many of these videos glorify the thug life for Black men, portray women as sex objects and the Black community as unreasonably obsessed with sex, money, and drugs. Rarely are positive images of African American males depicted on BET.

Television is not alone in its portrayal of African American males. Radio stations have also met with community outrage over what is viewed as their role in promoting the gangster life style, drug use, materialism, and disrespect toward public authority, flagrant swearing, and objectification of women. Youth in society emulate what they see and hear through mainstream rap heard on hip hop radio stations and viewed on VH1 and MTV2 and other media outlets. Most importantly, the young generation believes that it's acceptable to objectify women as well as sell drugs to make fast money. As important, say critics, is that these are the images of Black males being broadcast to other countries around the world.

Our youth are followers of these degrading media images and they seek to imitate what they see and hear. It is, they believe, the way to make quick, easy money; to become popular with young women, to earn a fancy car. Artist Ja Rule, and several others like him, attracted particular criticism when he was recently charged in 2001 for the use of indecent language at the Sun Fest festival in Jamaica. The lyrics portrayed "Game is the topic and what's between your legs is the product, use it properly and you'll make dollars bitch," from Ja Rule's Bitch Betta Have My Money, continue to incense women.

In this paper, we have posited that the media acts as a hidden curriculum and uses negative images to stymie the educational engagement of African American males. As parents, educators, and policymakers what can we do to combat this hidden curriculum? As parents, one of the things that we can do is be cognizant of what our children watch and how its impact their self-perception and self-efficacy. In addition, parents should try and prevent their children from watching television shows or listening to music that demean or perpetuates negative stereotypes about African Americans, particularly African American males. Parents should also try to create an environment where their children are surrounded with positive images of African Americans. Children should be encouraged to read book, magazines that focus specifically on the value that African Americans attached to education. Some books that come to mind are Ben Carson's *Think Big*, *The Autobiography of Malcolm X*, and *The PACT*, the book written by three African American medical doctors. Parents should also instill in their children a "can do" attitude and impress upon them that education is a "gateway to opportunity."

Teachers who work with African American students, particularly, African American males can play a role in helping to fight against the implications of the media's, music, and other forms of visual imagery's negative characterization of African American males. Teachers can use their classrooms as an effective forum for combating the impact of the hidden curriculum. Specifically,

they can decorate their classrooms with positive images of African American males and assign readings that will serve as a source of inspiration for students and encourage them to think that education is a necessary prerequisite for social and economic advancement. Teachers can also encourage young African American professional males to come to the class and speak to their students. These young professionals should be encouraged to speak about their trials and tribulation, and focus particularly on their educational pathways, which enabled them to get to their current position in life.

Finally, policymakers can play a role in helping to construct a bulwark—that is, a protection shield, which serves to prevent the negative characterizations of African Americans from having an impact on the psyche of African Americans. One of the things that policymakers can do is discourage bias media reporting. Instead of having the reporters and journalists focus on the violent acts of one group, they should be encouraged to report the violent of all groups. Policymakers should also encourage a sense of balance in reporting the news. In other words, the reporters should focus on not only on the bad, but also the good. Policymakers should also encourage better censorship in television, cable, and radio. In many cases, this would serve as an effective means to prevent negative images of certain groups from being exposed to young people, particularly African Americans.

Conclusion

The research is clear, critical theory provides another forum to observe disparities for African American males. Critical theory, answers questions, such as, “Why do children fail?” and “Why do schools fail to eradicate inequality?” lies in the fact that the economic structure demands and ensures those outcomes. With this in mind, we think that the media, television, and other forms of propaganda have been used to continuously cast African American, specifically, African American males in a negative light. Television often portrays African Americans in unfavorable positions in

comparison to Caucasians. Typically these unfavorable depictions reinforce negative stereotypes associated with African Americans. Research indicates that television portrayals can influence people's attitudes toward one another. Television's general portrayal of African Americans perpetuates negative stereotypes, while the number of Black-oriented programs offering positive images is limited in number. The television industry does not, of course, have a monopoly on stereotyping; it gets considerable help from the motion picture industry.

Because perception creates reality, the misinformation conveyed in the depictions of African American is troublesome. In our society, perceptions are formed about African Americans from the media; stereotypical presentations do a tremendous disservice to both. Through theory and empirical research we know that people's attitudes and at times their behaviors are a reflection of what is seen on television; however, educational leaders and officials must combat the stereotypical presentations by promoting and embracing teaching and learning throughout the educational landscape.

References

- African American women continue to hold huge lead over Black men in bachelor's degree awards (2008). *Journal of Blacks in Higher Education*. Retrieved on June 13, 2008, from <http://www.jbhe.com/latest/index.htm1>.
- Allen, W.R., Jewell, J. O., Griffin, K. A., & Wolf, D. S. (2007). Historically black colleges and universities: Honoring the past, engaging the present, touching the future. *The Journal of Negro Education*, 76(3), 263-280.
- Ainsworth-Darnell, J. W., & Downey, D. B. (1998). Assessing the oppositional culture explanation for racial/ethnic differences in school performance. *American Sociological Review*, 63(4), 536-553.
- Bailey, D. F., & Moore, J. L., III. (2004). Emotional isolation, depression, and suicide among African American men: Reasons for concern. In C. Rabin (Ed.), *Linking lives across borders: Gender-sensitive*
- Blake, W. M., & Darling, C. A. (1994). The dilemmas of the African American males. *Journal of Black Studies*, 24(4), 402-415.
- Brown v. Board of Education, 347 U.S. 483 (1954).
- Bush, E. C., & Bush, L. (2005). Black male achievement and the community college. *Black Issues in Higher Education*, 22(2), 44.
- Cross, T., & Slater, R. B. (2000, spring). The alarming decline in the academic performance of African American men. *The Journal of Blacks in Higher Education*, 82-87.
- Cuyjet, M. J. (Ed.). (1997) Helping African American men succeed in college: Their needs and their perceptions. *Helping African American men succeed in college* (pp. 5-15). San Francisco: Jossey-Bass.

- Cuyjey, M. J. (2006). African American college men: Twenty first century issues and concerns. In M. J. Cuyjet (Ed.), *African American men in college*. (pp. 3-23). San Francisco: Jossey-Bass.
- Davis, J. E. (2003). Early schooling and academic achievement of African American males. *Urban Education, 38*(5), 515-537.
- Davis, J. E., & Jordan, W. (1994, autumn). The effects of school context, structure, and experiences on African American males and high school. *The Journal of Negro Education, 63*(4), 570-587.
- Farley, R. (1993). The common destiny of Blacks and Whites: Observations about the social and economic status of the races. In H. Hill & J. E. Jones, Jr. (Eds). *Race in America: The struggle for equality*. Madison: Wisconsin: The University of Wisconsin Press.
- Epps, E. G. (1995). Race, class, and educational opportunity: Trends in the sociology of education. *Sociological Forum, 10*(4), 593-608.
- Ferguson, R. F. (2003). Teachers' perceptions and expectations and the Black-White test score gap. *Urban Education, 38*, 460-537.
- Freeman, K. (2005). *African Americans in college choice: The influence of family and school*. New York: State University of New York.
- Freire, P. (1998). *Pedagogy of freedom*. Boston: Rowman & Littlefield.
- Fries-Britt, S. (1998). Moving beyond Black achiever isolation: Experience of gifted Black collegians. *The Journal of Higher Education, 69* (5), 556-576.
- Fordham, S., & Ogbu, J. (1986). Black students' school success: Coping with the burden of acting White. *The Urban Review, 18*(3), 176-206.
- Gibson, R. (1986). *Critical theory and education*. London: Hodder and Stroughton
- Giroux, H. (1983). *Theory and resistance in education*. Boulder: CO Westview Press.
- Giroux, H. (1997). *Pedagogy and the politics of hope: Theory, culture, and schooling*. Boulder: CO Westview Press.

- Green, P. C., III. (2008). The impact of laws on African American males. *American Behavioral Science*, 51(7), 827-884.
- Hale, J. E. (2001). *Learning while Black: Creating educational excellence for African American children*. Baltimore: The John Hopkins University Press.
- Haley, A., & X, M. (1965/1998). *The autobiography of Malcolm X*. New York: Ballantine Books.
- Harper, S. R. (2006). Reconceptualizing reactive policy responses to Black male college achievement: Implications from a national study. *Focus: Magazine of the Joint Center for Political and Economic Studies*, 34(6), 14-15.
- Harvey, W. B. (2008). The weakest link: A commentary on the connections between K-12 and higher education. *American Behavioral Scientist*, 51(7), 972-983.
- Harvey, W., & Harvey, A. (2005). A bi-generational analysis of the *Brown vs. Board* decision. *Negro Education Review*, 56(1), 43-50.
- Held, D. (1989). *Introduction to critical theory*. Berkeley and Los Angeles: University of California Press.
- hooks, b. (2004). *We real cool: Black men and masculinity*. New York: Routledge.
- Howard-Hamilton, M. F. (1997). Theory to practice: Applying developmental theories relevant to African American men. *New Directions for Student Services*, 80, 17-30.
- Jackson, J. F. L., & Moore, J. L., III. (2006). African American males in education: Endangered or ignored. *Teachers College Record*. 108(2), 201-205.
- Jackson, J. F. L., & Moore, J. L., III. (2008). The African American male crisis in Education: A popular media infatuation or needed public policy response. *American Behavioral Science*, 51(7), 847-853.
- Jones, L. (2002). *Making it on broke promises: Leading African American male scholars confront the culture of higher education*. Sterling, VA: Stylus.

- Kao, G., & Tienda, M. (1998). Educational aspirations of minority youth. *American Journal of Education, 106*, 349-384.
- Kincheloe, J.L. (2001). *Getting beyond the facts: Teaching social studies/ social sciences in the twenty-first century*. (2nd ed.). New York: Peter Lang Publishing Inc.
- Kincheloe, J. L., & McLaren, P. L. (2000). Rethinking critical theory and qualitative research. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.). (pp. 279-313). Thousand Oaks, CA: Sage.
- Lee, C. D. (2005). The state of knowledge about the education of African Americans. In J. E. King (Ed.), *Black education: A transformative research and action agenda for the new century* (pp. 45-71) Mahwah, NJ: Lawrence Erlbaum.
- Levin, H. M., Belfield, C., & Muennig, P., Rouse, C. (2007). The public returns to public educational investments in African American males. *Economics of Educational Review, 26*, 700-709.
- Lundy, G. F. (2003). School resistance in America high schools: The role of race and gender in oppositional culture theory. *Evaluation and Research in Education, 17*(1), 6-27.
- Lundy, G. F. (2005). Peer relations and school resistance: Does oppositional culture apply to race or to gender? *Journal of Negro Education, 73*(3), 233-245.
- Madison-Colmore, O., & Moore, J. L., III. (2002). Using the H.I.S. model in counseling African American men. *Journal of Men Studies, 10*, 197-208.
- Majors, R., & Billson, M. (1992). *Cool pose: Dilemmas of Black manhood in America*. New York: Simon & Schuster.
- Mc Laren, P. (1989). *Life in schools: An introduction to critical pedagogy in the foundations of education*. New York: Longman.
- Moore, J. L., III. (2000). Counseling African American men back to health. In L. Jones (Ed.), *Brothers of the academy: Up and coming Black scholars earning our way in higher education* (pp. 248-261). Herndon, VA: Stylus.

- Moore, J. L., III, & Herndon, M. K. (2003). Editorial. *The Journal of Men's Study*, 12(1), 1-2.
- Moore, J., L. III, Henfield, M. S., Owens, D. (2008). African American males in special education: Their attitudes and perceptions toward high school counselors and school counseling services. *American Behavioral Scientist*, 51(7), 907-927.
- Noguera, P. (2003). The trouble with Black boys: The role and influence of environmental and cultural factors on academic performance of African American males. *Urban Education*, 38(4), 431-459.
- Ogbu, J. U. (2003). *Black American students in an affluent suburb: A study of academic disengagement*. Mahwah: New Jersey: Lawrence Erlbaum Associates, Inc.
- Osborne, J. W. (2001). Academic disidentification: Unraveling underachievement among Black boys. R. Majors. (Ed.), *Education our Black children: New directions and radical approaches*. (pp. 45-58). London: Routledge Falmer.
- Palmer, R. T., & Hilton, A. A. (2008, March). *A new paradigm to examine the academic disengagement conundrum among Black males*. Session presented at the annual meeting of the National Association for Student Affairs Professionals, Atlanta, GA.
- Palmer, R. T., & Strayhorn, T. L. (in press). 'Mastering One's Own Fate: Non-cognitive factors with the success of African American males at an HBCU. *National Association of Student Affairs Practitioners Journal*.
- Palmer, R. T., & Young E. M. (in press). Determined to succeed: Salient factors that foster academic success for academically unprepared Black males at a Black college. *Journal of College Student Retention: Research, Theory and Practice*.
- Patterson, J. T. (2001). *Brown v. Board of Education: A civil rights milestone and its troubled legacy*. New York: Oxford University Press.

- Parham, T. A., & McDavis, R. J. (1987). Black men, an endangered species: Who's really pulling the trigger? *Journal of Counseling and Development*, 66, 24-27
- Perry, T. (2003). Up from the parched Earth toward a theory of African American achievement. In T. Perry, C. Steele, & A. Hilliard III (Eds.), *Young, gifted and Black: Promoting high achievement among African American students* (pp. 1-10) Boston Massachusetts: Beacon Press.
- Plessy v. Ferguson, 163 U.S. 537 (1896).
- Polite, V. C., & Davis, J. E. (1999). Introduction: Research focused on African American males. V. C. Polite, & J.E. Davis (Eds.). *African American males in school and society: Practices and policies for effective education* (xiii). New York: Teacher College Press.
- Prothrow-Stith, D. (1993). *Deadly consequences: How violence is destroying our teenage population and a plan to begin solving the problem*. New York: Harper Perennial.
- Roach, R. (2001, May). Where are the Black men on campus? *Black Issues in Higher Education* 18(6), 18-21.
- Robinson, R. (2000). *The debt: What America owes to Blacks*. New York: Plume Books.
- Ross, M. (1998). *Success factors of young African American males at a historically Black college*. Westport, CT: Bergin and Garvey.
- Shor, I. (1992). *Empowering education: Critical teaching for social change*. Chicago: The University of Chicago Press.
- Steele, C. (1999). Thin ice: Stereotype threat and Black college students. *The Atlantic Monthly*, August, 44-54.
- Strayhorn, T. (2008). The role of supportive relationships in supporting African American males' success in college. *NASPA Journal*, 45(1), 26-48.

Tyson, K., Darity W., & Castellino, D.R. (2005). It's not "a Black Thing": Understanding the burden of acting White and other dilemmas of high achievement. *American Sociological Review*, 70, 582-605.

West, C. (2001). *Race matters*. New York: Vintage Books.

White, J., & Cones, J. III (1999). *Black man emerging: Facing the past and seizing future in America*. New York: W. H. Freeman and Company.

Woodson, C. (1933/2000). *The mis-education of the Negro*. Chicago: African American Images.

Journal of the Professoriate

A new forum to explore academic pathways for postsecondary faculty, including issues relating to diverse and underrepresented faculty

Aims and Scope

This international, refereed, and scholarly journal seeks to promote lively discourse among scholars and policymakers on various issues affecting college and university faculty in higher education in America and abroad. The journal's mission is to provide an outlet for critical analysis and scholarship concerning the pathways leading to the professoriate and all issues about and relevant to faculty. The journal is interdisciplinary in design and seeks to offer a rich mixture of empirical research (i.e., quantitative and qualitative) and theoretical discussions.

The Journal of the Professoriate will address many of, but not limited to, the following issues and topics: (a) the impact of faculty on student development (e.g., recruitment, retention, academic achievement, and life-long learning); (b) the role, experiences, and outcomes of faculty at two-year and four-year colleges and other postsecondary settings; (c) issues concerning faculty of color and women; (d) organizational, leadership, and legal issues impacting college faculty; (e) issues pertaining to the utilization of technology by college and university faculty; (f) issues concerning faculty unionization, interactions between faculty and other university personnel, collective bargaining, academic freedom, adjunct faculty, instructional staff, and other special faculty appointments; and (g) comparative studies of faculty in America and abroad.

Contents of First Issue

Mintzberg's Managerial Roles Revisited: The Study of the Work Lives of Academic Executives—Jerlando F. L. Jackson, University of Wisconsin-Madison

Collaborating for Survival: The Role of New Faculty Orientation and Colleague Support in Faculty Socialization—Barbara J. Johnson, University of New Orleans

A National Study of Job Satisfaction of Faculty of Color in Doctoral Institutions—Luis Ponjuan, University of Florida

The Role of Faculty in Student Success: Lessons from Project DEEP—John Schuh, Iowa State University

Examining the Professional Development Needs of Community College Faculty: A Descriptive Analysis—Frankie Keels Williams, Clemson University

Editor-in-Chief

Lamont A. Flowers, *Clemson University*

Senior Associate Editors

Jerlando F. L. Jackson, *University of Wisconsin-Madison*

James L. Moore III, *The Ohio State University*

Brian N. Williams, *University of Georgia*

Managing Editor

Lee Jones, *University of Wisconsin-Whitewater*

Associate Editors

Samuel Hodge, *The Ohio State University*

Tyrone Howard, *University of California, Los Angeles*

Barbara Johnson, *University of New Orleans*

Reitumetse Obakeng Mabokela, *Michigan State University*

Laura Perna, *University of Pennsylvania*

Consulting Editors

Ann E. Austin, *Michigan State University*
 Elizabeth Balbachevsky, *University of São Paulo*
 Madonna Constantine, *Teachers College*
 William B. Harvey, *American Council on
 Education*
 Philo Hutchenson, *Georgia State University*
 Walter M. Kimbrough, *Philander Smith College*
 Ming Mu, *Ocean University of China*
 William Tierney, *University of Southern
 California*
 Cornel West, *Princeton University*

Reviewers

Derrick Alridge, *University of Georgia*
 Floyd Beachum, *University of Wisconsin-Milwaukee*
 Brian K. Bridges, *George Washington University*
 Tony Cawthon, *Clemson University*
 Kevin Cokley, *University of Missouri-Columbia*
 Darryl Corey, *Valdosta State University*
 Elizabeth G. Creamer, *Virginia Polytechnic
 Institute and State University*
 J. Vern Cromartie, *Contra Costa College*
 Stanley Elliot, *St. Augustine's College*
 Donna Y. Ford, *Vanderbilt University*
 Joy Gaston-Gayles, *Florida State University*
 Timothy J. Glaude, *Xavier University of New
 Orleans*
 Anna L. Green, *Florida A&M University*
 Willie J. Heggins III, *Washington State University*
 Sharon L. Holmes, *Northern Illinois University*
 Kimberly L. King-Jupiter, *Auburn University*
 Richard Massie, *Shawnee Community College*
 H. Rich Milner, *Vanderbilt University*
 James T. Minor, *Michigan State University*
 E. Newton Jackson, Jr., *Florida A&M University*
 Chance W. Lewis, *Colorado State University*
 Aaron Oforlea, *Santa Clara University*
 Stephen J. Quaye, *University of Southern
 California*
 Robert D. Reason, *The Pennsylvania State
 University*
 Larry Rowley, *University of Michigan*
 Andrew Ryan, *George Mason University*
 David Staten, *South Carolina State University*
 Daffina L. Stewart, *Bowling Green State
 University*
 Roland J. Thorpe, *Johns Hopkins University*
 Marvin A. Titus, *North Carolina State University*
 Shawn Utsey, *Virginia Commonwealth University*
 Frankie Keels Williams, *Clemson University*
 Carol Camp Yeakey, *Washington University*

JPP

Journal of the Professoriate

Spring 2006
 Volume 1 • Number 1

Call for Papers

Manuscript submissions should be submitted via the online submission process. Specific details for submitting a manuscript via the online submission process are located on the following URL:
www.brothersoftheacademy.org/journal.html

Subscription Information

The *Journal of the Professoriate* is a bi-annual publication. Volume 1 (2006) comprises a July and November issue. Print ISSN 1556-7680.

Individual Subscription:

\$50.00 annually (individual issue, \$27.50)

Brothers of the Academy Member & Official Affinity Association Members' Subscription:

\$40.00 annually (individual issue, \$22.50)

Institutional Subscription:

\$110.00 (individual issue, \$65.00)

**A co-publication of the Brothers of
 the Academy Institute and Stylus
 Publishing, LLC**

The Use of Community-Owned and Managed Research (COMR) to Address Public Health
Issues and Empower and Revitalize Disadvantaged Communities

Sacoby M. Wilson¹, Omega Wilson², Christopher D. Heaney³, and John Cooper⁴

¹Institute for Families in Society, University of South Carolina, Columbia, SC, USA

²West End Revitalization Association, Mebane, NC and Member of the National Environmental Justice Advisory Council (NEJAC), U.S. Environmental Protection Agency, Washington, DC, PO Box 661, Mebane, North Carolina, 27302, USA; (919) 321-1296 (phone); 919-338-2445 (fax); wera1usa@earthlink.net

³Department of Epidemiology, CB# 7435, University of Carolina, Chapel Hill, NC, 27599, USA; 919-966-7458 (phone); cheaney@email.unc.edu

⁴MDC, Inc., 400 Silver Cedar Court, Chapel Hill, NC, 27514, USA; (919) 968-4531 (phone); (919) 929-8557 (fax); jcooper@mdcinc.org

Corresponding Author:
Sacoby Wilson, PhD
Institute for Families in Society
University of South Carolina
1600 Hampton St, Suite 507
Columbia, SC 29208
Phone: (803) 777-2982
Fax: (803) 777-1120
wilsons2@gwm.sc.edu

Abstract

We present community-owned and -managed research (COMR), as a new community-driven research model developed by the West End Revitalization Association (WERA), a community-based organization located in Mebane, North Carolina to address environmental justice, public health issues, and community revitalization. WERA sought solutions-oriented research methods beyond community-based participatory research (CBPR) and university-managed research models (UMRMs) CBPR to address inequities in planning and development and disparities in health-promoting infrastructure and the built environment in three historically African-American neighborhoods. WERA developed principles and methods for community-driven research forged from its own set of tools and a priori knowledge of EJ issues, culture, and historical conditions in Mebane, North Carolina. This paper presents the theoretical basis and methods that WERA and its partners used to develop and apply a research approach that stresses community creativity, ownership, management, empowerment and applied solutions at each stage of the research process in order to address environmental justice issues and infrastructure disparities which we describe in detail.

In addition, we describe WERA's development of COMR, compare the power hierarchies of COMR with traditional UMRMs including CBPR, distinguish COMR partnerships from UMRM partnerships, detail the use of collaborative problem-solving principles, and discuss control/ ownership of data. We also discuss the use of legal epidemiology as one of the COMR methods to address environmental justice issues, related health disparities, and infrastructure disparities. We recommend the use of community-facilitated strategies to help empower communities and catalyze revitalization.

Introduction

A wealth of environmental justice (EJ) literature has demonstrated that many disadvantaged populations and populations of color live in communities that are differentially burdened by unhealthy land uses such as landfills, incinerators, Publicly Owned Treatment Works (POTWs) (e.g., sewer and water treatment plants), Toxic Release Inventory (TRI) facilities, coal-fired facilities, chemical plants, and heavily trafficked roadways (Bullard, 2007; Bullard et al., 2007; Payne-Sturges et al., 2006; Gee & Payne-Sturges, 2004; IOM, 1999; Morello-Frosch & Lopez, 2006; Morello-Frosch et al., 2001; Morello-Frosch & Jesdale, 2006; Brulle & Pellow, 2006). Due to their lack of economic and political power, many of these communities do not have the ability to control or benefit from zoning and planning and positive community development opportunities like more affluent, White, and privileged communities (Maantay, 2001; Pulido, 2000). Inequities in power and privilege drive inequities in community planning, zoning, and development which leads to a greater presence of environmental hazards, pollution, and unhealthy land uses in poor communities of color (Wilson, Hutson, & Mujahid, 2008). Furthermore, segregation exacerbates environmental injustice by concentrating large numbers of poor and people of color in locations disproportionately burdened by unhealthy land uses particularly in urban environments. Recent literature emphasizes the importance of racial residential segregation in leading to differential exposure of populations of color to health risk factors such as pollution from locally unwanted land uses as well as differential access to resources such as basic amenities, medical services, and good housing stock (Collins and Williams, 1999; Williams and Collins, 2001; Payne-Sturges et al., 2006; Gee & Payne-Sturges, 2004; IOM, 1999; Morello-Frosch & Lopez, 2006; Morello-Frosch et al., 2001; Wilson, Hutson, & Mujahid, 2008; Wilson, 2008). This emerging area of research indicates that segregation acts

as a driver of environmental health disparities (Payne-Sturges et al., 2006; Gee & Payne-Sturges, 2004; IOM, 1999; Morello-Frosch & Lopez, 2006; Morello-Frosch et al., 2001; Wilson, Hutson, & Mujahid, 2008; Wilson, 2008).

The lack of healthy and equitable planning and zoning in poor communities of color contributes to the production of high risk geographic settings classified as unhealthy geographies (Wilson, 2008). Examples of these unhealthy geographies can be found across the country. In Atlanta, one of the most sprawled metropolitan cities in the US, many poor neighborhoods are impacted by large amounts of criteria air pollutants (CAPs) and hazardous air pollutants (HAPs) because they host heavily trafficked highways. In New York, Latino and African-American populations are burdened by diesel traffic, factories, and waste facilities. Poor neighborhoods of color are differentially exposed to air pollution in many port cities like West Oakland, Los Angeles, and Charleston due to the emissions of particulates, NO_x, SO_x, volatile organic compounds (VOCs), HAPs, and other pollutants released from ships, diesel trucks, rails, and related port industries which increases their risk of asthma, bronchitis, and cardiovascular disease. In some urban communities in cities like Detroit and Flint, Michigan, not only are poor people of color disparately burdened by unhealthy land uses such as pollution-intensive industries, but are also burdened by other pathogenic environments, land uses and businesses (drug environs, empty and trash-filled lots, fast food restaurants, liquor stores, gas stations/convenience stores, check cashing facilities). In cities like Detroit and Flint, the effects of urban decay and economic stress are worse in poor communities of color. Instead of receiving good and healthy community planning and development (i.e., supermarkets, grocery stores, safe parks, recreational centers, schools), more pathogenic land uses become the norm which

increases the public health risks for populations already burdened by environmental hazards and noxious industries (Wilson, 2008).

Infrastructure Disparities in Underserved Communities of Color

Disadvantaged neighborhoods may not only be overburdened by environmental hazards and unhealthy land uses but may also have infrastructure disparities such as the lack of basic amenities. This has negative consequences for community health, sustainability, and quality of life. Basic amenities include public regulated sewer and water services, paved roads, gutters and ditches for stormwater management, accessible roads (e.g., proper ingress/egress), sidewalks, green space, and recreational facilities (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). Basic amenities provide the salutogenic infrastructure that act as the building blocks for neighborhoods (Wilson, 2008). Neighborhoods with limited basic amenities may have higher levels of neighborhood stress, lower quality of life, less vitality, lower property values, greater exposure to negative living environments, and worse health outcomes (Wilson et al., 2008a,b). For example, literature has shown that living in communities without infrastructure and resources (e.g., sidewalks, parks, grocery stores, good transportation networks) impacts healthy food access, physical activity opportunities, and obesity and diabetes prevalence (Wolch, Wilson, & Fehrenbach, 2005; Moore et al., 2008; Taylor et al., 2006; Taylor et al., 2008; Moore & Diez Roux, 2006; Morland, Wing, & Diez Roux 2002; Morland, Diez Roux, & Wing, 2006; Greenberg & Renne, 2005). Also, residents without access to regulated sewer and water services who use private septic systems for sewage disposal purposes and well water as their primary drinking water source may have septic system failure (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). While, residents with low quality publicly, regulated sewer and water

infrastructure may also have failures. Fecal wastes can contaminate ground water and surface waters leading to human exposure to enteric microbes, endemic illness and waterborne disease outbreaks (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007).

The lack of basic amenities particularly sewer and water infrastructure, paved accessible roads, good housing stock, etc in disadvantaged neighborhoods supports the need for new funding to build infrastructure in unserved areas, and expand, maintain, and upgrade infrastructure in underserved areas. The American Society of Civil Engineers (ASCE) released its *2005 Report Card for America's Infrastructure* which gave a grade of D minus to the quality of both the nation's wastewater and drinking water infrastructure (2005). The ASCE estimated an annual shortfall of \$11 billion for drinking water and \$12 billion for wastewater, due to the need to replace aging facilities and to comply with federal regulations (ASCE, 2005). The report gave the USA a grade of D for road infrastructure with a total spending of \$59.4 billion annually is well below the \$94 billion needed annually to improve transportation infrastructure conditions nationally (ASCE, 2005). In addition, a grade of D+ was given to mass transit infrastructure with \$20.6 billion needed to make significant improvement in mass transit across the country (ASCE, 2005). However, the ASCE report really covers areas served by moderate levels of infrastructure and not areas where disadvantaged unserved and underserved populations with limited access to infrastructure particularly basic amenities reside.

Legal Epidemiology and the Exposure-Disease Paradigm

The provision of adequate and safe water and sewer services by local municipalities to unserved residents (those using septic systems and well water) and underserved residents (those using sub-standard sewer and drinking water infrastructure) prevents disease and improves

neighborhood health both from a population and ecological viewpoint (Wilson et al., 2008a,b). The reliance of disadvantaged and underserved EJ communities on sub-standard sewer and water system infrastructure may stem from non-compliance by local Publicly Operated Treatment Works (POTWs) (e.g., sewage and drinking water treatment facilities) with Clean Water Act and the Safe Drinking Water Act regulations (Wilson et al., 2008a,b). The failure of municipalities to install up-to-code sewer and water infrastructure (i.e., underground sewage and drinking water pipes of the adequate size and material) leads to vulnerabilities in the sewer and water systems, increased levels of harmful microbes and chemicals in residential drinking and surface water supplies, elevated exposure risks, and increased occurrence of gastrointestinal (GI) and other illnesses (Wilson et al., 2008a,b). In addition, the failure of municipalities to obtain block grants from the federal government to provide road, mass transit, good housing, and recreational infrastructure in unserved and underserved disadvantaged neighborhoods also contributes to the destabilization and lack of sustainability of these neighborhoods. This leads to a reduction in the quality of life of these neighborhoods and higher levels of psychosocial stress (e.g., violence, crime, social disorder) which leads to worse health outcomes over the life course and inter-generationally and results in social, economic, and health disparities.

Currently, the exposure-disease paradigm focuses on the external exposure, exposure pathway mechanisms, biologically effective dose, dose-response relationships, and resultant health outcome (Lioy, 1990). We suggest that in unserved and underserved neighborhoods (where residents often have no access or access to *low quality* infrastructure), disparities in health-promoting infrastructure and the built environment act as the engine for exposure-disease dynamics (Wilson et al., 2008b). An alternate interpretation of the exposure-disease paradigm should be employed in these populations. The paradigm should focus on exposure-disease, and

also quality of life to be a more holistic health-based paradigm that moves beyond pathogenesis to a more salutogenic approach to community health (Wilson, 2008). We suggest that instead of employing resources to rework a known exposure-disease relationship (e.g., exposure to air pollution leads to decreased lung function and cardiovascular disease); it is sufficient to document the existence of infrastructure and built environment disparities by showing non-compliance with existing environmental statutes, building codes, housing laws, and civil rights legislation. By demonstrating non-compliance, communities can seek corrective actions and improve access to health-promoting infrastructure, which will reduce their exposure to unhealthy land uses, environmental hazards, and psychosocial stressors, adverse health outcomes, and other harmful effects (Wilson et al., 2008b).

We frame the process of examining the intersection of environmental laws, public health statutes, and building codes with the assessment of exposure-disease dynamics in overburdened, marginalized, or underserved communities as “legal epidemiology” (Wilson et al., 2008b). Legal epidemiology focuses on non-compliance with legal statutes by municipalities and other entities, which leads to disparities in infrastructure and the production of sources of unhealthy exposures in underserved and unserved environmental justice communities (Wilson et al. 2008b). Other epidemiological approaches focus on the exposure, dose, and disease in the exposure-disease continuum and causality instead of the source of exposure and infrastructure disparities (Wilson et al. 2008b). Thus, by using legal epidemiology and application of a comprehensive infrastructure planning and development perspective, environmental conditions and health outcomes can be improved by gaining compliance with environmental laws, public health statutes, building codes, and Civil Rights statutes, releasing the unserved and underserved communities from showing a burden of proof or finding a “smoking gun” (Wilson et al., 2008b).

Classic epidemiologic research following the traditional exposure-disease framework is not necessary. We believe that demonstrating non-compliance with existing statutes and inequities in community planning, zoning, and development is sufficient to address built environment and infrastructure disparities and public health problems in disadvantaged neighborhoods, EJ communities, and underserved areas (Wilson et al., 2008b). Legal epidemiology combines methods from traditional epidemiology, urban planning, and environmental and civil rights law that community-based organizations can employ to address environmental injustice and inequities in community planning and development to catalyze community revitalization.

COMMUNITY-OWNED AND MANAGED EJ AND PUBLIC HEALTH RESEARCH

In the following section, we will discuss the limitations of CBPR methods to effectively address EJ, empowerment, and revitalization issues and present the community-owned and managed research (COMR) approach as an alternative research framework that the West End Revitalization Association (WERA), a community-based environmental protection organization based in Mebane, NC, developed and implemented to address the aforementioned issues particularly the lack of basic amenities.

West End Revitalization Association: Background and Issues

Mebane, NC, an old textile and furniture-producing town of less than 8,000 residents, is located twenty miles west of Chapel Hill and overlaps Orange and Alamance counties (Wilson et al. 2008a, b; Heaney et al., 2007; Wilson et al., 2007). In this town, West End, White Level, and the Buckhorn/Perry Hill communities, three low-income African-American neighborhoods without basic amenities have been located in Mebane's ETJ for decades while new subdivisions

and businesses encroach around them with new infrastructure (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). These neighborhoods founded during Reconstruction have a high homeownership rate (~75%) because many of the current residents are descendants of slaves whose families have owned land and property in Mebane passed down multiple generations (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). The neighborhoods are 85-95% African-American, have a large number of elderly residents, and many are poor (i.e., earn less than \$20,000 annually) (Wilson et al, 2004; WERA, 2002) (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007).

West End, White Level, and Buckhorn/Perry Hill neighborhoods have negative living conditions and public health issues because of planning abuses and their lack of basic amenities. Residents live on dirt paths, have dead end streets, do not have access to safe drinking water or sewer services, and have been denied voting rights due to ETJ redlining. In addition, noxious land uses are present in these neighborhoods. (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). For example, West End is burdened by a 100-year old landfill and the Craftique furniture plant with underground storage tanks leaking benzene and xylenes that threaten residents' drinking well water supplies (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). The publicly owned treatment works (POTW) is also located in the West End community (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). Air pollution emitted from the POTW impacts quality of life in West End. Even though, the City of Mebane POTW is located in West End, residents have limited access to its sewer services (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007). Mebane officials have been slow to seek funding to provide affordable sewer and water services for underserved and unserved African-American neighborhoods while local governments sought federal funds to plan and construct the

119-bypass, a four-lane highway through West End and White Level (Wilson et. al 2008a, b; Heaney et al., 2007; Wilson et al., 2007).

WERA's COMR Approach Compared to CBPR

WERA developed the COMR framework as an alternative approach to the traditional CBPR approach because of its negative experiences with academic researchers (Wilson et al., 2008a; Heaney et al., 2007). WERA's approach emphasizes principles of community ownership and management at each research stage to address locally-relevant EJ and public health issues (Heaney et al., 2007). We suggest that the COMR approach model is more appropriate to address EJ issues than CBPR, because it emphasizes the credibility and capacity of the community to develop, manage, and sustain a research agenda following a public health justice perspective (Heaney et al., 2007).. The COMR approach is founded on the belief that the EJ community should be the center of knowledge production, learning, action, and social change instead of academia in order to sustain long-term reduction and removal of environmental health hazards (Heaney et al., 2007)..

Figure 1 displays an organizational schematic comparing WERA's experience with power hierarchies of three university-managed research models (UMRMs) in comparison to COMR.

Figure 1. Comparison of the Types of Research Approaches and Power Hierarchies



Traditional UMRMs including cancer and drug clinical trials and biomarker studies often incorporate community-based principles to increase participation of under-represented, at-risk, or difficult to reach communities of color (Heaney et al., 2007). Affected residents rarely benefit beyond the term of the research study and their participation benefits the researcher and academic community by ensuring the successful completion of the study. Similarly, Community Advisory Board (CAB) studies often include focus groups and community-based principles to narrow research questions and increase participation from residents of color (Heaney et al., 2007). Yet in CAB-related research there are few long-term sustainable benefits after participation because community members do not have assurance that the research partner will not pull out of the community when the study is completed or research funding runs out (Heaney et al., 2007). CBPR has led to more sustained long-term mutual benefits for community partners, but we believe that CBPR does not go far enough.

The COMR model builds upon and extends CBPR principles by stressing: 1) identification of community-based organizations with a demonstrated ability to define, build capacity and organize around an EJ community and related EJ issues; 2) a shift to a process where CBOs prioritize research objectives; 3) funding the CBO directly as principal investigator and/or project manager; 4) the CBO's selection of university "experts" whom they identify as open to working on the EJ-related health issue and sign a Memorandum of Agreement (MOA); and 5) community ownership and management of the research process to foster long-term sustainability during the solutions implementation phase of the community-driven research. These five principles provide a new foundation for community-driven research that pushes the CBPR framework one step farther—to a community-owned and managed research approach (Heaney et al., 2007).

Figure 1 also highlights the involvement or lack thereof of affected residents and university investigators during the development, management, and sharing of information while conducting research in communities. There is a long history of community members' involvement in community-based research "in name only" and being treated like "guinea pigs" ((Heaney et al., 2007) due to scientific racism. We find that community members who participate in community-based research receive minor benefits (i.e., small monetary awards, free medical services, health training). While some progress has been made to change the status of community members involved in community-based participatory research from "subjects" to "empowered participants", we argue that COMR offers a more effective means for participants to become truly liberated from "scientific colonialism", the participation of community members affected by EJ issues in well-funded studies without investment in long-term solutions by university researchers (Heaney et al., 2007). We also postulate that science must be "for the

community, and by the community” to address EJ-related public health issues and community empowerment and revitalization (Heaney et al., 2007). We contend that COMR allows EJ and underserved communities to engage in “empowerment science” to overcome political, social, and epistemic obstacles more than CBPR. It is WERA members’ lived experience that led to the principles and methods of COMR where the community research board is the genesis of the research process. COMR provides an empowerment framework that community experts and affected stakeholders can use to develop and sustain an applied, action-oriented research agenda based on their concerns, values, and principles. We believe that even with the full implementation of CBPR principles by university researchers, the inherent biases in the American academic system about who should produce and use knowledge, institutional racism, elitism, lack of racial/ethnic and cultural diversity, and low levels of researchers’ cultural competence limits the overall effectiveness of CBPR in fulfilling the public health justice agenda of EJ communities.

The COMR framework has as one of its central precepts the right of CBOs to control study design and implementation (Heaney et al., 2007). The CBO can choose to collaborate with academic researchers to develop study methods and materials as in CBPR; however, the COMR model promotes the CBO as PI and project manager (Heaney et al., 2007). As the primary owner and manager of the research process, the CBO has the following roles and duties: 1) ability to “hire and fire” academic researchers and other partners, 2) execution of quality assurance and quality control procedures, 3) submission of community research protocols and materials for community and institutional review, 4) planning of data collection efforts, 5) secure household data to protect participants’ identity and confidentiality, 6) use research data for

action, activism, and empowerment, and 7) develop new community-driven strategies to address local EJ issues (Wilson et al., 2007; Heaney et al., 2007).

Additionally, in community-based research (see figure 1), we observe an investment of energy and resources to collect data from communities to: 1) document environmental injustice and health issues, 2) assess differences in disease burden or prevalence between a target population and a referent population, or 3) test the efficacy of short-term interventions to reduce harmful exposures, disease prevalence, or disparity between populations (Heaney et al., 2007). Even though the implementation of CBPR principles improves process-related outcomes such as better communication between partners and more community involvement in data collection, capacity-building, and empowerment, we feel that CBPR efforts tend not to effectively translate data into community solutions (Heaney et al., 2007). We purport that in some cases, CBPR does not lead to real solutions, but short-term interventions that “treat the symptoms and not the problem”. For example, CBPR does not use data to force compliance with existing civil rights and environmental health statutes and regulations (Heaney et al., 2007; Wilson et al. 2007). In contrast, the primary goal of WERA’s COMR approach is to use data to obtain compliance with environmental and public health statutes in order to: 1) enhance neighborhood infrastructure, 2) reduce the burden of environmental hazards, 3) improve health outcomes and quality of life, 4) achieve social justice, and 5) support political action and policy change (Wilson et al., 2008a,b; Heaney et al., 2007; Wilson et al., 2007).

In the following section, we will describe the efforts of WERA to use legal epidemiology and COMR to address their EJ-related public health issues, empower residents, and spark community revitalization.

WERA's Use of Legal Epidemiology

In 1999, WERA residents and Omega Wilson, president of WERA, filed an administrative complaint at the United States Department of Justice (DOJ) under title VI of the Civil Rights Act of 1964 and President W.J. Clinton's Executive Order 12898 on Environmental Justice (DOJ, 1999). The DOJ administrative complaint cited the systematic denial of basic amenities by local, state, and federal administrative plans, practices, and procedures for development and transportation (DOJ, 1999). The DOJ complaint assembled documentation of actions by local, state, and federal administrative agencies that decreased health-related quality of life due to the denial of municipal drinking water and sewer services in West End, White Level, and Buckhorn/Perry Hill (DOJ, 1999). The remedies sought in the complaint included "installation of basic amenities, including water, sewer services, sidewalks, and clean ditches [for] water drainage areas" (DOJ, 1999).

The complaint states that West End residents who are one-quarter mile from Mebane's federally funded sewer treatment plant were not able to use the service because they do not have sewer lines extended to their households (DOJ, 1999). In the DOJ complaint, WERA states, "the City of Mebane would not annex West End, only five blocks from downtown, and avoided providing basic amenities" (DOJ, 1999). In 1978-79, an application for federal Community Development Block Grant (CDBG) funds through Alamance County allowed one-third of West End's streets to be paved, sewer lines to be installed for the first time to one-third of houses covered by the grant, and several houses were repaired (DOJ, 1999). In 1988, the City of Mebane annexed the area covered by the 1978-79 federal block grant project, but has provided little maintenance of these services (DOJ, 1999). West End residents outside the CDBG block grant area use septic tanks and all parts of West End have unpaved streets (DOJ, 1999). West

End's narrative in the 1999 DOJ administrative complaint concerning lack of basic amenities epitomizes the situation in White Level and Buckhorn.

WERA's DOJ complaint also cited the issue of the NC Department of Transportation's (DOT) plans for construction of the 119 bypass highway through West End and White Level without any public input and public comment period (DOJ, 1999). WERA's civil rights complaint forced a moratorium on the 119 bypass which would destroy over 40 homes, the 107 year old St. Luke Christian Church, Yadkin Lodge 799, and several Masonic Temples in West End and White Level (WERA annual report, 2000).

In 2000, WERA worked with the city of Mebane to apply for grant funds from the NC Division of Water Quality (DWQ) through the Clean Water Revolving Loan and Grant Act of 1987 (CWRLGA) to make wastewater collection system improvements in West End and White Level. DWQ oversees North Carolina's Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) programs which were established under the authority of the CWRLGA of 1987 and the 1996 Safe Drinking Water Act Amendments (SDWA). The CWSRF program accepts applications for loans to improve sewer infrastructure.

The SDWA authorizes states to create a disadvantaged communities program to meet the financing needs for water and sewer service infrastructure improvements in low-income communities. Section 1452 of the SDWA of 1996 defines a disadvantaged community as "the service area of a public water system that meets affordability criteria established after public review and comment by the State in which the public water system is located." North Carolina does not have a disadvantaged community CWSRF or DWSRF program for infrastructure improvements. In its CWSRF application, the City of Mebane planned to arrange financing for all remaining installation costs to provide wastewater collection in all three WERA

neighborhoods, if it received DWQ approval of the CWSRF project award. However, the grant for over \$2 million was not applied to improvements in wastewater collection services in WERA communities (WERA, 2002).

Use of COMR to Address Injustice, Empower Residents, and Spark Revitalization

Infrastructure disparities are clearly evident as a form of environmental injustice in Mebane, NC where West End, White Level, and Buckhorn/Perry Hill lack comprehensive coverage by a public, regulated drinking water supply, adequate sewer service, and other basic amenities, yet neighboring more affluent communities benefit from access to basic amenities (Wilson et al., 2008b). Local municipal land use planning decisions regarding development in these neighborhoods contribute to infrastructure disparities that impact the health and quality of life of these unserved and underserved residents (Wilson et al., 2008b).

There are substantial limitations to surveillance of disease events in poor and under- and unserved populations using traditional models, especially outcomes like gastroenteritis that could be self-treated or tolerated by people with poor access to transportation, difficulties in taking time from work or childcare, low trust of medical care providers, and difficulties in paying for medical care. A community-driven research approach is well suited to collect data on environmental and social conditions and on health problems in these populations. Community-driven methods can help achieve the levels of trust and community involvement needed to support data collection (Heaney et al., 2008; Wilson et al., 2008a). Just as important, community-driven methods can promote community education, community empowerment, and civic engagement by residents that have historically been excluded from policy development. Active involvement of residents that are most directly affected by threats to health and wellbeing

can be important in making broader public health improvements and reducing the impact of infrastructure disparities (Wilson et al., 2008a,b; Heaney et al., 2007; Wilson et al., 2007).

For example, in 2000, WERA submitted a small grant proposal to the Environmental Protection Agency (EPA) Office of Environmental Justice (OEJ) Region 4, Atlanta, Georgia outlining their situation with respect to the lack of basic amenities and local, State, and Federal plans for the siting of the 119 bypass highway through their communities as an environmental injustice issue (Wilson et al., 2007; Heaney et al., 2007; Wilson et al., 2008a). In 2001, WERA obtained an EPA OEJ small grant award. This funding helped WERA to develop and implement its COMR model and build its research infrastructure. WERA began to investigate the historical pattern of discrimination, public health risks, environmental water quality, and failing septic systems in West End, White Level, and Buckhorn/Perry Hill. In 2002, the EPA classified West End, White Level, and Buckhorn/Perry Hill as official EPA environmental justice (EJ) communities. EPA OEJ support helped WERA develop strategies for collaborative research (Heaney et al., 2007; Wilson et al., 2007) including community capacity building, environmental health training, education, and outreach, and partnership formation with local university researchers.

For example, WERA established a community-driven water and sewer surveillance program to obtain data on the quality of sewer and water infrastructure and drinking water in WERA neighborhoods (Wilson et al., 2007; Heaney et al., 2007; Wilson et al., 2008a). WERA reports that over 500 homes, churches, and a Masonic Temple are threatened by failing septic systems and contaminated well water and surface water in the ETJ and along water and sewer lines that do not meet minimum code standards in the City of Mebane (Wilson et al., 2007; Heaney et al., 2007; Wilson et al., 2008a). WERA community monitors were trained by WERA

leadership and academic research partners to collect household survey data on water and sewer infrastructure (Wilson et al., 2007; Heaney et al., 2007; Wilson et al, 2008a). WERA leaders and community monitors worked with research partners to develop a plan to collect samples from WERA households on well water or city/county water and surface waters in WERA neighborhoods (Wilson et al., 2007; Heaney et al., 2007; Wilson et al, 2008a). Results from the water/sewer questionnaire reveal that 70% of WERA residents who use septic systems have tanks more than 11 years old and 30% of WERA residents using septic tanks are on well water (Wilson et al., 2007; Heaney et al., 2007; Wilson et al, 2008a). Analysis of water samples revealed that local drinking water supplies and surface waters in WERA neighborhoods contained microbial agents (e.g., *E. coli*, fecal coliforms, coliphages) that exceeded EPA maximum contaminant levels (MCLs) (Wilson et al., 2007; Heaney et al., 2007; Wilson et al, 2008a). These results indicate the high level of public health risks for unserved and underserved African-American populations living in or near Mebane's extra-territorial jurisdiction.

WERA obtained a collaborative-problem solving model grant in 2003 which continued to fund the organization as both PI and project manager (Wilson et al., 2007; Heaney et al., 2007; Wilson et al, 2008a). WERA developed a collaborative-problem-solving partnership with local researchers, town officials, other non-profit organizations, and public health professionals to utilize conflict resolution, consensus building, resource leveraging and mobilization, and problem-solving principles to encourage government officials to comply with environmental laws (i.e., Clean Water Act, Safe Drinking Water Act, Clean Air Act, Toxic Substances Control Act) and provide basic amenities to underserved and unserved WERA residents (Heaney et al., 2007; Wilson et al., 2007; Wilson et al., 2008a,b).

The WERA CPS partnership was established based on the EPA’s collaborative problem-solving model framework and operationalizes WERA’s community-owned and managed research (COMR) principles (Heaney et al., 2007). The WERA CPS partnership consists of nine working groups involved in assessment, management, and corrective action (figure 2). These working groups include: 1) WERA CPS project manager and steering committee; 2) representatives from impacted communities in Mebane; 3) stakeholders from other NC communities; 4) officials experienced with environmental, public, economic, and social health issues; 5) legal professionals who lead efforts to receive compliance with environmental statutes; 6) professionals who perform environmental and public health research; 7) experienced professionals in community planning and development; 8) non-governmental agency representatives; and 9) local/state/federal government officials who represent the public interest on issues of the impacted communities and residents (Wilson et al., 2007).

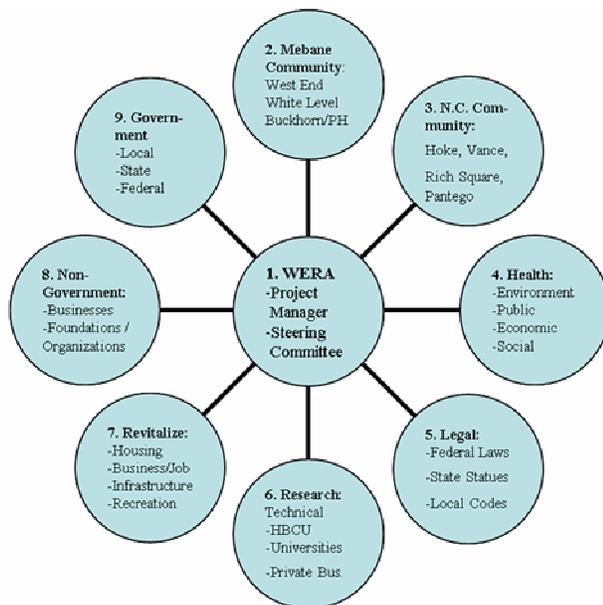


Fig. 2. Collaborative Problem-Solving Model Workgroups

This three-year collaborative problem-solving partnership (2004-2007) has been effective in encouraging Mebane officials to partner with Alamance and Orange Counties to provide matching funds for community development block grants for first-time municipal sewer and water installation and repairs to existing infrastructure in WERA neighborhoods (Heaney et al., 2007; Wilson et al., 2007; Wilson et al., 2008a,b). WERA's efforts have also prompted NCDOT to pave dirt roads, improve stormwater management, and significantly decrease the impact of the planned I-19-bypass on African-American neighborhoods (Heaney et al., 2007; Wilson et al., 2007; Wilson et al., 2008a,b).

Strategies for Community Empowerment and Revitalization

As seen by the work of the West End Revitalization Association, Community Facilitated Strategies (CFS) such as COMR encourage consensus building among residents in low-income and minority communities and Native Americans in indigenous territories who are adversely and disproportionately impacted by air, water, and soil pollution and inequities in planning and community development which create exposure and health risks. CFS affords impacted communities the access and remedies through the legal protection, privileges, rights, and redress under federal and related international policies, regulations, statutes, and treaties. CFS should be visible in community-based facilitation and management of capacity building, alliances, partnerships, collaboratives, inter-tribal councils, and ground-truthing research that supports measurable short and long-term outcome solutions in: a) improved health, b) property value, c) on-site monitoring, d) equitable funding for the sustainability of quality of life in air, water, earth, and human and animal life, and e) community revitalization.

Co-beneficiary relationships exist when CFS alliances and partners recognize that solutions must focus on reducing environmental hazards and infrastructure disparities to empower marginalized and underserved disadvantaged communities and catalyze community revitalization (environmental, social, economic, political, and spiritual). Evaluation and reporting of environment, health, and economic impacts by impacted environmental justice communities, indigenous peoples, and tribal councils should include community and tribal ownership of research data and reports.

Colleges/universities, government agencies, and business/industry databases may not accurately measure death, suffering, and solutions in site-specific environmental justice and underserved populations. The lack of grant funding equity and parity in research management impedes community and tribal based organizations' research necessary to help correct disparities in currently accepted data-bases and establishment of new data-bases. CFS seeks respect for policies and funding to institutionalize inclusion of affected EJ, disadvantaged, and underserved populations in urban and rural areas, Indian country, and indigenous lands and community councils among diverse cultures and geographical regions.

Principles and Framework: Community Facilitated Strategy

- a. Capacity building for community-based and tribal-based environmental justice organizations help facilitate and manage Community Facilitated Strategies for local solutions should receive adequate funding from EPA, Housing and Urban Development (HUD), other federal agencies, private foundations, and business/industry. Tool-kits and models used should include the U.S. EPA's Community Involvement Plan and Community Facilitated Strategy, Collaborative Problem-Solving, Community-Based

Environmental Protection for air, water, and soil pollution identification, assessment, and reduction and community-based planning strategies for community revitalization and sustainable development. For long-term capacity and sustainability of community-based knowledge, this places high priority on establishing on-site environmental justice resource centers and libraries that support monitoring, literacy, and training to support Community-Owned and Managed Research Models for monitoring and evaluation (i.e., West End Revitalization Association -WERA's Community-Owned and Managed Research Model, Mebane, NC and the Akwesasne Territory Task Forces on Environment, Hogansburg, NY). These resources will provide the foundation for developing community-based human capital from the youth and young adults as healthcare providers, scientists, and regulatory personnel in environmental justice.

- b. Community and tribal based groups should exercise legal protection under privileges, rights, laws, policies, regulations, statutes, and treaties including but not limited to the United States Constitution as amended, United Nations' Declaration on Human Rights of Indigenous Peoples (9/13/2007), Meaningful Involvement and Fair Treatment by Tribal Environmental Regulatory Programs (USEPA's NEJAC 11/15/2004), Title VI of the Civil Rights Act-1964 and related statutes, Executive Order 12898 on Environmental Justice of 1994, U.S. Department of Transportation regulations including Intermodal Surface Transportation Efficiency Act of 1991, Housing and Urban Development statutes, Brownfield regulations, and National Environmental Policy Act of 1969.
- c. Community facilitated strategy empowers community-based organizations and impacted residents to determine appropriate actions including active support/use of current EPA law/policies, civic engagement, public protest, demonstration, collaborative alliance,

official complaints, legal assistance and litigation, sustain media campaigns, and/or advocating new and more effective environmental justice policies.

- d. Focus on impacted environmental justice geographic areas and inhabitants are determined by boundaries and borders per legal statutes, and treaties as well as ground-truthing, ancestry, history (oral and written) of residents of barrios, homeplaces, low-income and minority communities, Indian territories, indigenous lands, and where mother earth shelters the homeless.
- e. Prioritizing threats from environmental hazards, unhealthy land uses, inequities in planning and development, and infrastructure disparities in environmental justice geographical areas should be based upon: a) human exposures, adverse health effects, public health risks, and improved health outcomes; b) contaminations of air, water, land, plants, and animal and human life; c) contamination of built real-estate, business, and personal properties; d) damage to community infrastructure; e) “chronic exposures and crisis level health risks” that involve cumulative and multiple impacts; and f) demonstration of adverse impacts in response to emergency and natural disaster, evacuation, recovery, and restoration.
- f. It is necessary to advocate new policies, guidelines, and administrative procedures that create and protect funding equity when government grants are awarded to colleges/universities by Environmental Protection Agency, National Institute of Health, National Institute of Environmental Health Sciences, Housing and Urban Development, Department of Transportation and other federal agencies. The lack of grant funding equity and parity in research management impedes effective civic engagement and long-

term sustainability for community-based organizations working to address environmental injustice, inequities in planning and development, and community revitalization.

- g. Evaluation and reporting of environment, health, and economic impacts by impacted environmental justice communities should include community ownership of research data and reports. This insures confidentiality of impacted populations and continuity in longitudinal evaluations and reviews of positive health outcomes.
- h. Measurable outcomes should be realized through: a) written prevention and mitigation agreements; b) impacted community capacity building and funding; c) prevention and mitigation of exposures and hazards with oversight under EPA's public health statutes, Civil Right Act of 1964, and Indian treaties; d) impacted community research, monitoring, reporting, and evaluation; and e) short and long-term health improvements support by peer review and scientific methods.

Recommendations: Community Facilitated Strategy

1. Implement new policies that support equitable funding and parity of management when consultants are hired with federal monies to conduct community impact assessments, environmental impact statements/studies, and health impact studies (Community Impact Assessment/Environmental Impact Statement/Health Impact Statement). Where federal monies are used to plan, present, and implement projects with pollution risks and impact community infrastructure and revitalization, community-based and tribal-based organizations in site specific areas should also be equally federally funded for effective and long-term engagement to protect health and quality of life.

2. Implement new policies that support community-owned and managed research data within site specific EJ and underserved communities and Native American territories.
3. Implement new policies that communicate the legal liability for violations of Title VI of Civil Right Act of 1964 for colleges/universities that claim disproportionate amounts (i.e., 50-97%) of federal grant funds for direct and indirect expenses involving research and clinical trials in communities/tribal territories. These institutions of higher learning should demonstrate successful recruitment, retention, and graduation of students from site specific impacted communities and Native American territories for careers that address environmental justice policy-making, assessment, reduce/removal, and healthcare.
4. Strengthen stakeholder alliances, partnerships, collaboratives, legal agreements and treaties to foster solutions to environmental hazards that create public health risks and infrastructure disparities in EJ, underserved, and disadvantaged communities that are multiple and cumulative whether in-compliance or out-of-compliance with current laws, policies, or statutes for pollution limits, building codes, planning and zoning laws, and civil rights legislation.

Conclusions

WERA's development of a community-driven research approach was needed because the organization's previous experience with traditional CBPR limited its ability to own the research process including acting as the primary PI and project manager and controlling the data. We believe that COMR is a community-facilitated strategy (CFS) that can act as a good alternative to the CBPR approach as exemplified by WERA's establishment of a successful EPA Collaborative Problem-Solving Model Project that follows COMR principles and methods

(Wilson et al., 2007). WERA's implementation of the COMR model empowered the organization to use the data to seek compliance with environmental laws and public health statutes by city, state, and federal officials and receive improvements in infrastructure and access to basic amenities. The community-owned and managed research approach (Heaney et al., 2007; Wilson et al., 2007), legal epidemiology (Wilson et al., 2008b) and other community-facilitated strategies employed by WERA have had a substantial impact on policies to coordinate local and regional efforts to deliver safe water and sewer infrastructure to residents of communities that have previously been denied services due to institutional and environmental racism, and inequities in community planning and development.

WERA's approach has also drawn attention to the fact that disadvantaged populations and communities often do not benefit from regular and routine maintenance to improve frequent failures of rapidly deteriorating public water and sewer infrastructure. These and similar populations across the nation are denied the basic amenities of a safe, public drinking water supply and sewer service, in addition to other amenities, infrastructure, and services such as good housing stock, parks and green space, pedestrian infrastructure, solid waste disposal and emergency medical, fire, and police services. Future community-driven and applied research should employ COMR principles and methods and legal epidemiology to solve environmental justice problems and catalyze community empowerment and revitalization.

References

- ASCE. (2005). American Society of Civil Engineers (ASCE) report card for America's infrastructure. Reston, VA, ASCE.
- Brulle, R.J. & Pellow, D.N. (2006). Environmental justice: Human health and environmental inequalities. *Annual Review of Public Health, 27*, 103-24.
- Bullard, R.D. (2007). *Growing smarter: Achieving livable communities, environmental justice, and regional equity*. Cambridge, MA: The MIT Press.
- Bullard, R.D., Mohai, P., Saha, R., & Wright, B. 2007. *Toxic wastes and race at twenty 1987-2007: Grassroots struggles to dismantle environmental racism in the United States*. Cleveland, OH: United Church of Christ.
- Collins, C.A., & Williams, D.R. (1999). Segregation and mortality: The deadly effects of racism? *Sociological Forum, 14*, 495–523.
- Gee, G., & Payne-Sturges D. (2004). Environmental health disparities: A framework integrating psychosocial and environmental concepts. *Environmental Health Perspectives, 112*(17), 1645-53.
- Greenberg, M. & Renne, J. (2005). Where does walkability matter the most? An environmental justice interpretation of New Jersey data. *Journal of Urban Health, 82*, 90–100.
- Heaney, C.D., Wilson, S.M., & Wilson, O.R. (2007). The West End Revitalization Association's community-owned and -managed research model: Development, implementation, and action. *Progress in Community Health Partnerships: Research, Education and Action, 1*(4), 339-350.
- Institute of Medicine (IOM) (1999). *Toward Environmental Justice: Research, Education, and Health Policy Needs*. Washington, DC: National Academy Press.

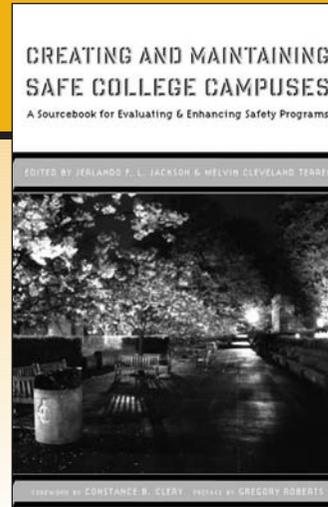
- Lioy, P.J. (1990). Assessing total human exposure to contaminants. *Environmental Science and Technology*, 24, 938–945.
- Maantay, J. (2001). Zoning, equity, and public health. *American Journal of Public Health*, 91, 1033-41.
- Moore, L. & Diez Roux, A. (2006). Associations of neighborhood characteristics with the location and type of food stores. *American Journal Public Health*, 96(2), 325-331.
- Moore, L.V., Diez Roux, A., Evenson, K.R., McGinn, A.P., & Brines, S.J. (2008). Availability of recreational resources in minority and low socioeconomic status areas. *American Journal of Preventive Medicine*, 34(1), 16-22
- Morello-Frosch, R., & Jesdale, B.M. (2006). Separate and unequal: Residential segregation and estimated cancer risks associated with ambient air toxics in U.S. metropolitan areas. *Environmental Health Perspectives*, 114, 386–93.
- Morello-Frosch, R., & Lopez, R. (2006). The riskscape and the color line: examining the role of segregation in environmental health disparities. *Environmental Research*, 102, 181–96.
- Morello-Frosch, R., Pastor, M., Porras, C., & Sadd, J. (2001). Environmental justice and southern California’s “riskscape”: The distribution of air toxics exposures and health risks among diverse communities. *Urban Affairs Review*, 36, 551-578.
- Morland, K., Diez Roux, A., & Wing, S. (2001). Supermarkets, other food stores, and obesity: the atherosclerosis risk in communities study. *American Journal of Preventive Medicine*, 30(4), 333-339.
- Morland, K., Wing, S., & Diez Roux, A. (2002). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal Preventive Medicine*, 22(1), 23-29.

- Payne-Sturges, D., & Gee, G.C. (2006). National environmental health measures for minority and low income populations: An approach for tracking environmental health disparities. *Environmental Research*, 102(2), 154-71.
- Pulido, L. (2000). Rethinking environmental racism: white privilege and urban development in Southern California. *Annals of the Association of American Geographers*, 90, 12-40.
- Taylor, W.C., Hepworth, J.T., Lees, E., Feliz, K., Ahsan, S., Cassells, A., Volding, D.C., & Tobin, J.N. (2008). Obesity, physical activity, and the environment: Is there a legal basis for environmental injustices? *Environmental Justice*, 1(1), 45-48.
- Taylor, W.C., Poston, W.S.C., Jones, L., & Kraft, M.K. (2006). Environmental justice: Obesity, physical activity, and healthy eating. *Journal of Physical Activity and Health*, 3(Suppl 1), s30-s54.
- US Department of Justice (DOJ) (1999). WERA's Administrative Complaint to the Coordination and Review Section of the Civil Rights Division of the United States Department of Justice. Washington, DC.
- West End Revitalization Association (WERA) (2002). EPA Environmental Justice Small Grant Study. Failing septic systems and contaminated well waters: African-American communities in Mebane, North Carolina. EPA# 4EAD/EJ,
- West End Revitalization Association (WERA) (2000). WERA Annual Report. Mebane, NC: WERA.
- Williams, D.R., & Collins, C. (2001). Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Reports*, 116(5), 404-416.
- Wilson, S.M. (2008). An ecologic framework to study and address environmental justice and community health issues. *Environmental Justice* (Accepted for Publication).

- Wilson, S.M., Wilson, O.R., Heaney, C.D., & Cooper, J. (2008a). Community-driven environmental protection: Reducing the P.A.I.N. of the built environment in low-income African-American communities in North Carolina. *Social Justice in Context* (Accepted for Publication).
- Wilson, S.M., Cooper, J., Heaney, C.D., & Wilson, O. (2008b). Built environment issues in unserved and underserved African-American neighborhoods in North Carolina. *Environmental Justice*, 1(2), 63-72.
- Wilson, S.M., Hutson, M., & Mujahid, M. (2008). How planning and zoning contribute to inequitable development, neighborhood health, and environmental (in)justice. *Environmental Justice* (Accepted for Publication).
- Wilson, S.M., Wilson, O.R., Heaney, C.D., & Cooper J. (2007). Use of EPA collaborative problem-solving model to obtain environmental justice in North Carolina. *Progress in Community Health Partnerships: Research, Education and Action*, 1(4), 327-338.
- Wolch, J., Wilson, J.P., & Fehrenbach, J. (2005). Parks and park funding in Los Angeles: an equity mapping analysis. *Urban Geography*, 26(1), 4-35.

“A must read for campus leaders who wish to remain current with the ever-evolving field of campus safety.”

—Michael S. Brophy, *President, Marymount College*



CREATING AND MAINTAINING SAFE COLLEGE CAMPUSES

A Sourcebook for Evaluating and Enhancing Safety Programs

Edited by Jerlando F. L. Jackson and Melvin Cleveland Terrell

Foreword by Constance B. Clery

Preface by Gregory Roberts

“Outstanding! The authors’ thorough discussions center on the most current data, issues, problems and concerns, making this a must-read for all stakeholders in higher education.”

—Larry D. Bolles, *Director, Judicial Affairs, Northern Illinois University*

“This book frames the issues with great understanding of the complex nature of young adults, the campus environment, and the growing challenges of safety in America. A great reference, a basis for discussion and action, and a benchmarking tool all in one.”

—Susan Riseling, *Associate Vice Chancellor/Police Chief, University of Wisconsin; Vice President at Large, International Association of Chiefs of Police*

“This book challenges us to look at institutional cultures that sustain and support negative behaviors. More importantly, this book provides its readers with the ideas and best practices to help campuses galvanize current resources and maximize the return on their future investments.”

—Jeanne S. Steffes, *Associate Vice President of Student Affairs, Syracuse University, President, American College Personnel Association-College Student Educators International*

“An excellent source for higher education administrators in their quest to design safe college environments. I highly recommend this book for student affairs and academic affairs administrators.”

—Cynthia Daniels Sellers, *Executive Assistant to the President, Hampton University, and Past Chair, National Association of Student Affairs Professionals*

Stylus
PUBLISHING, LLC.

22883 Quicksilver Drive
Sterling, VA 20166-2102



“An excellent source for higher education administrators in their quest to design safe college environments. I highly recommend

this book for student affairs and academic affairs administrators.”

—CYNTHIA DANIELS SELLERS, *Executive Assistant to the President, Hampton University, and Past Chair, National Association of Student Affairs Professionals*

PRSR STD
U.S. POSTAGE
PAID
HMS PRINTING
PARTNERSHIP

CONTENTS

IDENTIFYING THE PROBLEM

Chapter 1: *The Complexity of Maintaining a Safe Campus in Higher Education – an Administrative Dilemma*

INSTITUTIONAL AND INDIVIDUAL-BASED CHALLENGES

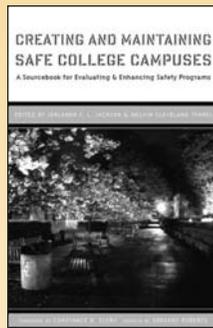
- Chapter 2:** *Changing the Culture of High-Risk Drinking*
- Chapter 3:** *Violence and Hate Crimes on Campus – Uncovering the Mystique*
- Chapter 4:** *Why Students Beat Each Other – a Developmental Perspective for a Detrimental Crime*
- Chapter 5:** *Safe Campuses for LGBTQA Students – Systemic Transformation through Re(A)wakened Senior Leaders*
- Chapter 6:** *A Growing Concern – Sexual Violence against Women on College Campuses*

INSTITUTIONAL CONTEXT AND RESPONSES

- Chapter 7:** *Safety in the Community College Environment*
- Chapter 8:** *A Call for Community-Based Education – the State of Public Safety Issues at Minority Serving Institutions*
- Chapter 9:** *The Role of the Campus Police and Security Department in the 21st Century – an Essay Based on 30 Years of Experience*
- Chapter 10:** *The Incompatibility of Weapons and College Campuses*
- Chapter 11:** *The Legal Implications of Campus Crime for Student Affairs Professionals*

INSTITUTIONAL RESOURCES

- Chapter 12:** *Exemplar Programs and Procedures: Best Practices in Public Safety*
- Chapter 13:** *You are not Alone – Resources for the College Administrator*
- Chapter 14:** *Elements of a 2008 Think Tank Proceedings Paper*



This is a sourcebook to enhance and evaluate safety programs, generate new solutions and interventions, comply with new legislation, and present practical steps and guidelines to establish best practices.

This book pays particular attention to the factors that

may give rise to crime. It examines the intersection between hate crimes and violence and devotes chapters to discrimination in all its forms, whether against international students, students of color, or on the basis of ethnicity or sexual orientation. It reviews the range of issues relating to harassment and violence against women; and engages with hazing, the presence of guns on campus and high risk drinking.

The authors pay attention to the different circumstances that may apply in specific institutional types, such as community colleges and minority-serving institutions. The book offers perspectives from administrators, campus security, student affairs personnel, faculty and policy makers; as well as a review of legal considerations.

The purpose is to provide readers with the context and tools to devise a comprehensive safety plan. For administrators operating with few formal support systems, advice is given on how to co-opt individuals and resources from around the campus and the local community to assist in the common goal of maintaining a safe and welcoming campus.

THE EDITORS:

Jerlando F. L. Jackson is an Assistant Professor of Higher and Postsecondary Education in Educational Leadership and Policy Analysis, Faculty Associate for the Wisconsin Center for the Advancement of Postsecondary Education, and Faculty Affiliate in the Weinert Center for Entrepreneurship at the University of Wisconsin-Madison. **Melvin Cleveland Terrell** serves as Vice President for Student Affairs and Professor of Counselor Education at Northeastern Illinois University in Chicago, Illinois.

286pp, 6" x 9"
 Cloth, April 2007, 978-1-57922-124-9, \$59.95
 Paper, April 2007, 978-1-57922-196-6, \$24.95

ALSO AVAILABLE



UNIVERSITY STUDENTS BEHAVING BADLY

Deborah Lee

The book seeks ways to understand unacceptable student behavior, sexual relations in universities, and bullying. How can the poor management of students' bad behavior be improved—something the research shows to be sorely needed. This original book on a topical subject should be required reading for faculty, staff, and administrators, and will be helpful to those working in human resources, and staff development.

THE AUTHOR:

Deborah Lee is Senior Lecturer in Sociology, Nottingham Trent University.

192 pp, 5 3/4" x 9"
 Paper, 2006, 978-1-85856-369-5, \$32.50 (\$5)



ORDER FORM

Order by phone: 1-800-232-0223 **Fax:** 703-661-1501 **On-line:** www.Styluspub.com

We request prepayment in US dollars. We accept American Express, MasterCard and Visa. Make checks payable to "Stylus Publishing".

SHIP TO:

Name: _____
 Company/Inst.: _____
 Address: _____
 City: _____
 State/Zip/Postal Code: _____ Country: _____
 E-mail address: _____

I enclose payment by (check one): Check American Express Visa MasterCard

Card #: _____ Exp. Date: _____
 Signature: _____ Daytime Tel: _____

Please Ship:

TITLE	ISBN	BINDING	PRICE	QTY.	TOTAL
Creating and Maintaining Safe College Campuses	978-1-57922-124-9	Cloth	\$59.95		
Creating and Maintaining Safe College Campuses	978-1-57922-196-6	Paper	\$24.95		
University Students Behaving Badly	978 1 85856 369 5	Paper	\$32.50		

Subtotal _____

VA residents add 5% sales tax _____

Add shipping: \$5.00 for 1st book; \$1.00 each subsequent _____

TOTAL _____



PO Box 605, Herndon, VA 20172-0605
 TEL: 800 232 0223 • 703 661 1581 FAX: 703 661 1501
 E-MAIL: StylusMail@PressWarehouse.com
 VISIT US ON THE WEB: www.styluspub.com

Prices and descriptions subject to change without notice.

Source code: CAMS07

**Community Action Research for Capacity Building Through Historically Black
Colleges and Universities (HBCU's): A Collaborative Model**

**Bobbie J. Shaw-Hunter, Ph.D.
Assistant Professor
LeMoyne-Owen College**

ABSTRACT

This work examined the Eurocentric Centered Worldview models and discovered that under normal circumstances, these models assume that Africans/Blacks should think, feel, act/react in the same way as whites. After extensive research of these models, the African Centered Worldview approaches were examined. The findings concluded that rarely, if ever, have effective solutions been developed for African communities' problems using Eurocentric norms and standards for understanding African/Black people. Therefore, Historical Black Colleges and Universities (HBCU's) are positioned to effectively provide the needed Africentric social action projects that accentuate the strengths and positive features of African/Blacks and its African cultural foundation. In no way is this study designed to place blame or foster hatred. It is designed to be a cultural knowledge base that fosters a greater understanding of African/Black people through the philosophical and psychological tenets.

HBCU's Community Action Research for Capacity Building: An African Centered Collaborative Model is the creative social action response to the need for Africentric empowerment of African/Black Americans families and communities. It is based upon Africentric approaches that focus on the adaptive and defensive functioning of African/Black Families through its cultural infrastructure.

Action Research for Capacity Building Through Historically Black Colleges and Universities (HBCU's): A Collaborative Model

Overview of Problems/Concerns:

Many African American families (families of African decent) are in crisis (George & George 1991, Kambon, 1999). Unemployment, poverty, crime, drug abuse and HIV/AIDS infection are at record breaking levels in many low-income, urban and rural Black neighborhoods. Information taken from the US Census Bureau (2000) indicates that the household income for African Americans is the lowest of all identified races. The undermining of the social and economic fabric of the Black community is reflected in the destabilization of African American Families. The most recent information from the US Census Bureau (2000) indicated the following:

- That in the year 2000, the medium household income reported for African Americans was \$27,900.00 compared to \$30,700.00 for Hispanics and \$44,400.00 for non-Hispanic whites,
- That 26% of African American families live below the poverty level compared to 22% of Hispanic families and 13% non-Hispanic white families.
- That 47% of African American households are headed by a single female.

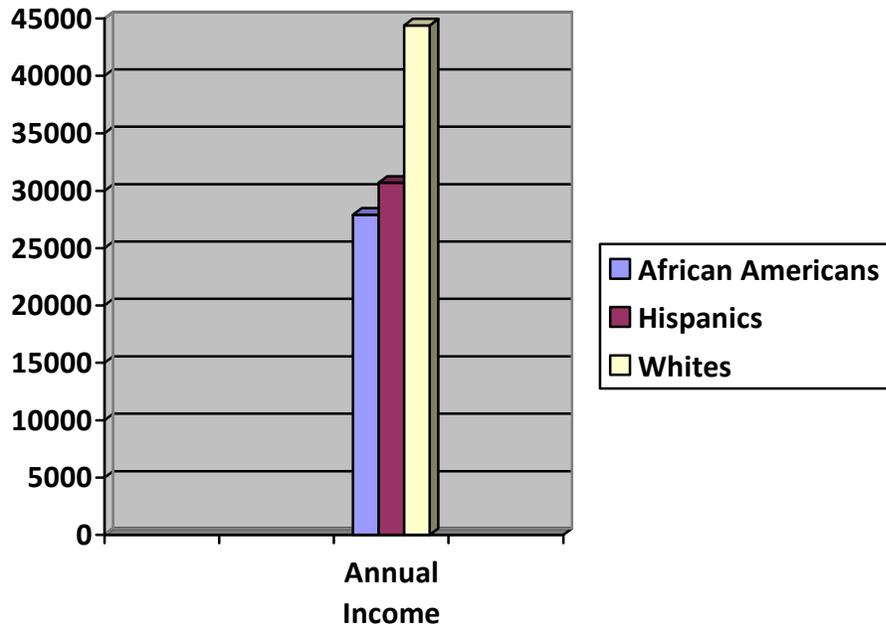


Table 1

The National Children Defense Funds (2000) reported the following:

For Black Children:

Every Day in America

- 1 youth under 20 commits suicide
- 2 young persons under 25 die from HIV Infection
- 5 children and youths under 20 die from firearms
- 6 children and youth under 20 die from accidents
- 6 children and youths under 20 are homicide victims
- 143 children are arrested for violent crimes
- 450 babies are born to mothers who are not high school graduates
- 723 babies are born into poverty
- 1,009 public school students are corporally punished

1,138 babies are born to unmarried mothers

1,426 Children are arrested

5,725 public school students are suspended

There is a tremendous need for HBCU's Community Action Research for Capacity Building: An African Centered Collaborative Models that empowers and liberate families and their communities while fostering community-wide collaboration. The HBCU Community Action Research initiative is African-centered and that does not view African Americans/Blacks as being less than whites in dimensions of life that are considered by Eurocentric norms and standards. HBCU's are African centered program that defines concerns/problems and provides solutions that are not based on a false and distorted understanding of African people and their unique biosocial condition.

HBCU's are African centered programs which can provide the answer to the long standing problems of portraying African peoples' psychological functioning and behaviors based upon the white Eurocentric American reality (their norms and standards) rather than as they really are based upon the Africentric perspective.

Severely Distressed Neighborhoods

A Kids Count/PRB 2000 Census Report on Distressed Neighborhoods by William O' Hare and Mark Mather (revised, 2003) indicated that the number of children living in severely distressed neighborhoods increased significantly between 1990 and 2000. Severely distressed neighborhoods are defined here as census tracts with at least three of the four following characteristics:

1. High poverty rate (27.4 percent or more);
2. High percentage of female-headed families (37.1 percent or more);
3. High percentage of high school dropouts (23.0 percent or more);
4. High percentage of working-age males unattached to the labor force (34.0 percent or more).

The Distressed Neighborhood report by O'Hare and Mather (revised, 2003), reports that for black children, the concentration of child poverty in severely distressed neighborhoods is truly staggering. In 2000, over two-fifths (44.7 percent) of all poor black children resided in a severely distressed neighborhood (see Table 1). The figure compares with 22.9 percent for Latino children and 5.1 percent for non-Hispanic white children.

According to O'Hare and McCarthy (2003), the large numbers of poor, minority children isolated in severely distressed neighborhoods reflect an enormous gap between mainstream society and a significant segment of the minority community. Attempts to close this gap between minority and majority populations in terms of income, education, and other socioeconomic measures must overcome the barriers that minority kids accumulate by growing up in distressed communities.

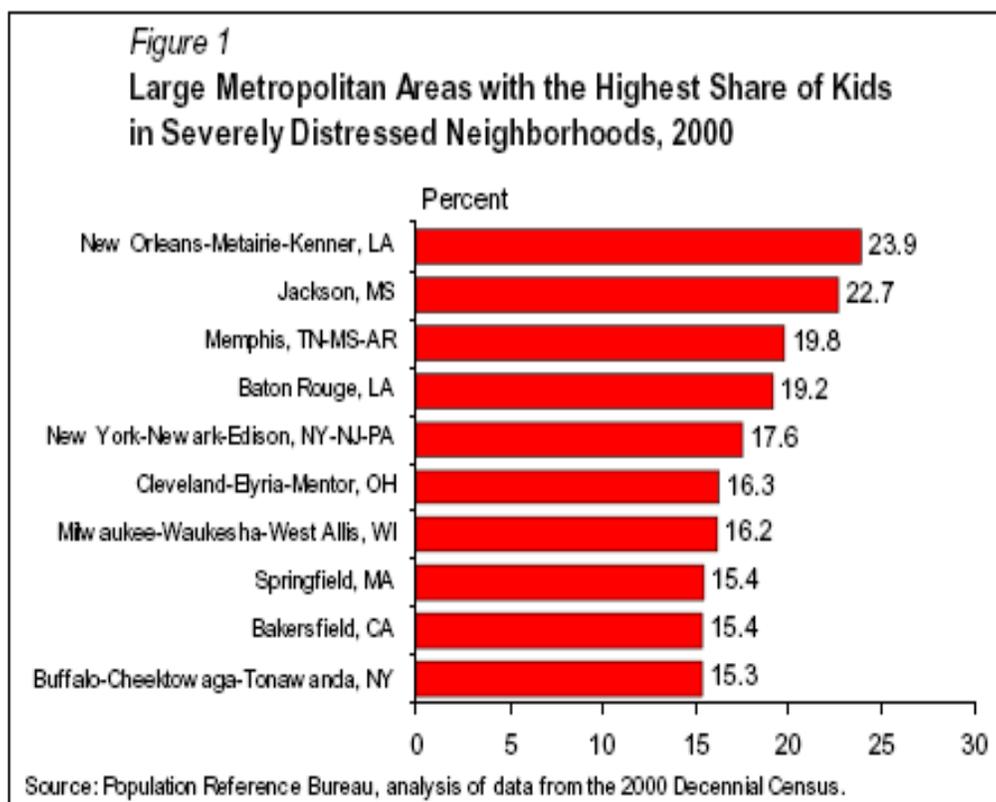


Figure 1 indicates the most severely distressed neighborhoods by state in 2000. Louisiana had the highest proportion of children living in severely distressed neighborhoods (22 percent), followed by Mississippi (21 percent), New York (18 percent), and Rhode Island (15 percent). In terms of numbers of children living in severely distressed neighborhoods, New York (827,000) had the most, followed by California (689,000) and Texas (407,000). Vermont was the only state without any severely distressed neighborhoods in 2000. The share of children living in severely distressed neighborhoods increased during the 1990s in 34 states and in the District of Columbia.

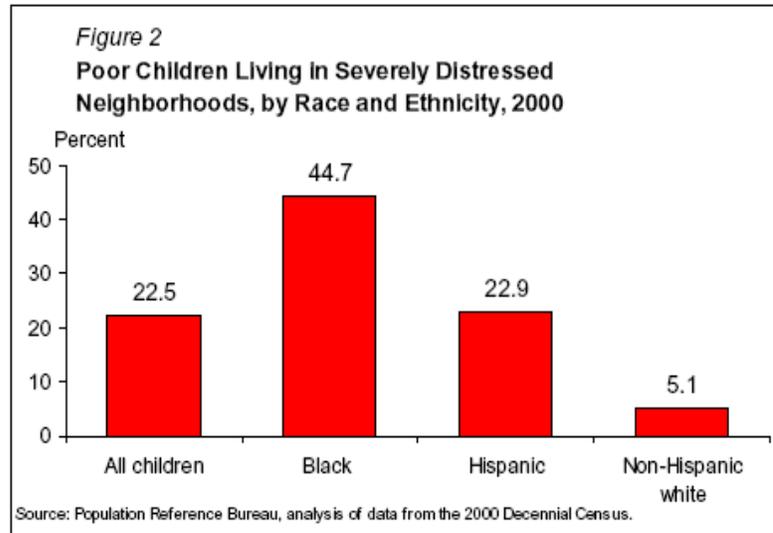


Figure 2 indicates the most severely distressed neighborhoods by state in 2000. Louisiana had the highest proportion of children living in severely distressed neighborhoods (22 percent), followed by Mississippi (21 percent), New York (18 percent), and Rhode Island (15 percent). In terms of numbers of children living in

Research indicates that children growing up in severely distressed neighborhoods are less likely to perform well in school, are more susceptible to teenage pregnancy, and are less likely to make a smooth transition to the work force. Children in these neighborhoods are especially vulnerable because there is often a dearth of strong community institutions or positive role models (O'Hare and McCarty, 2003).

African/Black Marriages

On June 25, 2004 (Young) a story on Black Marriages appeared in the USA Today. It stated that for many African-Americans, who often marry at a rate lower than any other ethnic group, in the place of wishful anticipation is a sense of hopelessness. The following information was given:

- For black women, only 31% of whom have husbands compared with 54% for whites
- 50% of Black women will not be married by age 40 (This is largely because of the high number of black males who are incarcerated, jobless or in interracial relationships.)
- Studies project that 70% of black marriages will end in divorce.
- Family therapist Audrey Chapman says black couples face more obstacles than whites.
- Education and finance affect all marriages, she says, but because of higher rates of unemployment and underemployment, black couples are affected more.
- Because many blacks have been raised in single-parent or dysfunctional two-parent families, they do not have a template of a successful marriage.

- Reports suggest that married people live longer and are less likely to commit suicide, suffer from alcoholism, depression or acute and chronic illnesses. They earn more, save more, are promoted faster and have better sex lives.

- Conversely, studies show children of single-parent households have a higher rate of infant mortality and behavioral problems and are twice as likely to drop out of school. Even so, these factors are not proving to be enough of an incentive to keep black couples together.

- A study by the Centers for Disease Control and Prevention found that couples for whom religion was important divorced at a lower rate than other couples. This month, the Brookings Institution conducted a panel discussion called "The Marriage Movement and the Black Church." And House Republicans have introduced a measure that would provide funding to religious institutions to promote healthy marriages.

- Though Rep. Elijah Cummings, D-MD., chairman of the Congressional Black Caucus, does not believe that marriage can be legislated, he says African-Americans should seek out institutions, such as the church, that provide a nurturing environment. Chapman, too, concedes that her clients with religious influences fare better. It seems for African-Americans to make their marriages work, they've got to have faith.

Purpose

The purpose of this examination is to demonstrate how the social impact of HBCU's Community Action Research for Capacity Building: An African Centered Collaborative Model being implemented universally to curtail culture alienation and postulate a positive impact on the African American Community and all people as students and faculty are engaged in research strands of 1) Civic Engagement and Social Justice 2) Diversity and Globalization, 3) Active Learning and Engagement and 4) Community Service/Service Learning. Interpretation of the African psychological functioning and behavior from the perspective of the African Worldview, i.e., the African-centered value system (philosophy, norms, rituals, practices and social organization, etc.) which contrasts with the traditional (European) American psychological perspective which interprets African behavior in terms of its deviation from the Eurocentric standard or norm.

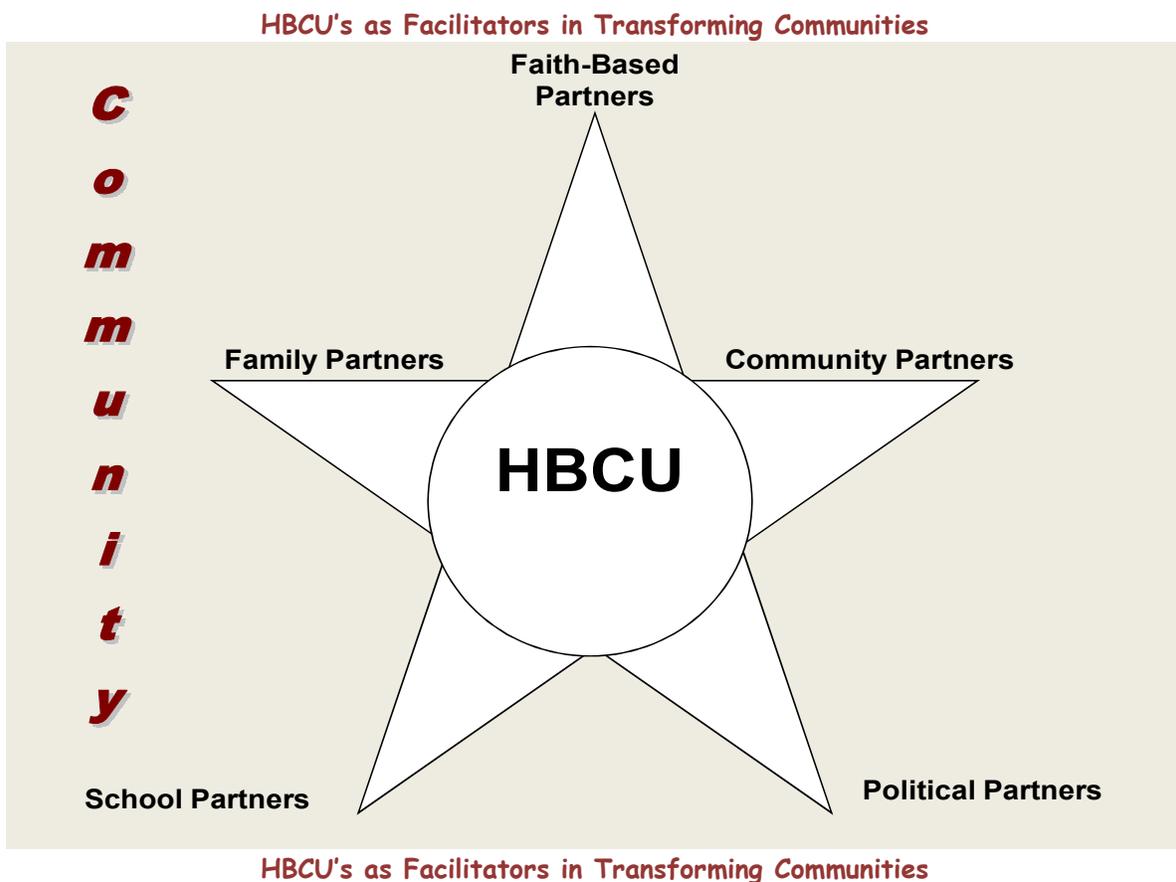
Objectives

The objectives of this research are:

1. To actively engage HBCU's with community partners, agencies by introducing an effective, collaborative, community action research model that connects and maximizes community resources.
2. To integrate and implement community action research in all campus-wide disciplines where teaching and learning takes place.

3. To engage students and faculty in into Capacity-Building Research with the purpose of nation building.
4. To position HBCU's as the lead agent in securing grants and funding while modeling and initializing a collaborative partnerships model for community and college sustainability.
5. To improve academic outcomes and scholarships for students while collaboratively providing needed community services.

Conceptual Framework



1. Provides a method of teaching through which students apply their academic skills and knowledge to address real-life needs in their own communities. HBCU's Community

Action Research for Capacity Building: An African Centered Collaborative Model can provide a diverse and innovative learning experience that extends from the classroom to the community.

2. Provides a compelling reason to learn and teach the skills of civic participation and develops an ethic of service and civic responsibility.
3. Uses resources that already exist on campus and in the community.

Literature Review

I believe that every aspect of African Americans lives is directly affected by the cultural alienation and misorientation to the African Centered Worldview (Baldwin 1980; Cook, 1977; Fuller, 1969, Kambon, 1999; Noble 1986). The conceptual framework of orientation or reality values, beliefs, definitions, rituals, customs, practices, etc. are based on the history, culture and philosophy of African people. (Kambon, 1999, Welshing, 1991; Nobles, 1986, White, 1990). I became disheartened yet challenged to discover that an enormous amount of money is directed (local, state and federal) to servicing agencies within South Carolina (and many states) to address issues/concerns pertaining to African/Black Americans; however, only Eurocentric Supremacy Worldview approaches are implemented (Kambon, 1999, Nobles, 1986). Eurocentric Supremacy Worldview approaches are beliefs and practices by White-European people, and their domination over African people globally (Kambon, 1999).

With the state of the nation as partially reflected earlier, it is not surprising that African American families would be in crisis, given the range of routine assaults they face daily. The

traditional American/Eurocentric intervention programs of assisting African American families have failed to enhance our understanding due to its views of Blacks as "less than" whites along whatever dimension of life that was being considered. Dr. Kobi Kambon (1999) in his book *African/Black Psychology in the American Context: An African-Centered Approach* states that "The definitions and solutions for so-called *Black Problems* are based on a false and distorted understanding (hence, a misunderstanding) of African people and their problems." Dr. Kambon continued by stating that "Rarely (if ever) have effective solutions been developed for African community's problems in America because American Psychology, through its Eurocentric norms and standards for understanding African people, actually distorts and incorrectly portrays Blacks in America and their unique biosocial condition" (p93).

African/Black Psychology on the other hand, provides the answer to this long standing problem by portraying African peoples' psychological functioning and behaviors as they really are, rather than as the White Eurocentric American reality (their norms and standards) insist that Blacks must be. (Kambon, 1999; Nobles, 1986).

J. A. Baldwin (1984) stated that the Africentric approach provides the only legitimate/African cultural-based conception for understanding African/Black people. He identified the two distinct approaches as Africentric versus the Non-Africentric approaches. The fundamental difference between the two is that the Africentric approach derives from the African worldview, while the Non-Africentric approach derives from the European Worldview. Baldwin (1984) continued by stating that the Africentric conceptual framework thus interprets African psychological functioning and behavior from the perspective of the African Worldview, i.e., the African-centered value system (philosophy, norms, rituals, practices and social organization, etc.) This approach draws its conceptual framework from the distinct history, culture and

philosophy of African people, which prioritizes the affirmation of African life; its cultural integrity and authenticity. This African cosmological approach (the African System of organizing) of experiencing, construing, and describing the structure of reality contrasts with the traditional (European) American psychological perspective which interprets African behavior in terms of its deviation from the Eurocentric standard or norm.

Significance of HBCU Interventions:

Historical Black Colleges and Universities are Africentric cultural, knowledge based institutions that educates and empowers and families and communities. African/Black researchers (Nobles, 1997, Kambon, 1999, etc.) argue that when African family dynamics in America adopt/reflect the beliefs, function, and style of the European-American family system, the outcomes are disastrous with direct increase in African children's abnormal and aberrant behaviors.

This HBCU Capacity Building Research Model supports the idea that the ability of African parents to nurture and develop healthy African Children is directly related to the extent to which they participate in reclaiming African culture and traditions, and practice the appropriate cultural codes within the family.

Finally, this HBCU Capacity Building Research Model supports providing knowledge to non-African/Blacks who genuinely desire to have a better cultural, psychological, and philosophical understanding of African/Black people to eliminate or eradicate the perpetuation of inferior treatment based on misorientation and misinformation.

Literature Review

The review of the literature was completed in two (2) parts. The first phase was devoted to examining Eurocentric Centered Worldview approaches with White Supremacy domination and its oppressive and negative psychological effects on African/Black people. The second part of this literature review focused on the African/Black Centered Worldview approaches and the African cultural-based conception for understanding African/Black people. **C-FACT** (Churches-Families-And-Communities-Together) empowerment was created to foster a greater philosophical and psychological understanding of African/Black people.

Eurocentric Centered Worldview:

The Pure Eurocentric group represents a body of theories advanced by White psychologist and social scientists from the earliest historical developments of formal Eurocentric Psychology up to the present (Kambon, 1999). The basic assumptions from the theories produced by these Eurocentric psychologists and social scientists seem to be that racism and racial oppression have had negative psychological effects on Africans such as envy, admiring and desiring to be like Whites because of their position of power over Blacks, despising, and hating the self. The Eurocentric standards assume that under normal circumstances, Africans/Blacks should think, feel, and act/react to things as Whites do.

Sigmund Freud (1950) never addressed in any of his major works the issue of African - Americans; however, in *Totem and Taboo*, he attempted to explicate the psychology of contemporary society by examining and theorizing about the traditional practices of so-called primitive people. Freud's interchangeable reference to the practices and behaviors of African people as "savage" or "primitive" did more than attempt to find Darwinian justification for his "primal horde theory." Freud gave credence (without any proof) to the belief that African people held an inferior position to whites on the evolutionary chain (Noble, 1986; Welshing, 1991).

Carl Gustav Jung, Freud's star pupil believed that certain psychological maladies found amongst Africans were due to the presence of Black people in America. He noted that the causes for the American energetic sexual repression can be found in the specific American complex, namely to living together with lower races, especially with Negroes. Jung continued by stating that living with barbaric races exerts a suggestive effect on the laboriously tamed instincts of the white race and tends to pull it down (Nobles, 1986).

White scholarship continued to portray African/Black Americans in a negative manner. This resulted in an intellectual atmosphere which continues to dominate Western psychology, (Kambon, 1999; Welshing, 1970 and 1991; Nobles, 1986; White, 1990; Wilson 1991).

Bremeister (1853) published his book *The Black Man: The Comparative Anatomy and Psychology of the African Negro*. In his book, Bremeister concluded that it was not worthwhile to look into the soul of the Negro. He also concluded that it was the judgment of God being executed that the savage man must perish. The racist attitude of Eurocentric approaches (Kambon, 1999; Welshing, 1991, 1979; Nobles, 1987, 1984) for intervention of African Americans and non-Whites continued to be implemented throughout the history of this great country (Akbar, 1984; Kambon, 1992; R. Jones, 1972, 1980, 1991, 1996; Nobles, 1986; Nobles and Goddard, 1984; Thomas A. Parham, Adisa Aiamu, 1999). Shortly after the U.S. emancipation of African slaves, Sir Francis Galton (cf Galton, 1869) proposed the development and implementation of a "science of heredity." He published his major work on "hereditary genius" and argued that, based on his "scientific scale of racial values," he was able to conclude that the average intellectual standard of the Negro was at least two grades below that of whites. Galton did not mention slavery, which ended in the U.S. less than four years prior to his "findings," as a factor in the discovered intellectual deficit. It is said that Galton is reportedly

Charles Darwin's cousin and was adamant about reporting the idea of racial improvement through selective mating and sterilization of the "unfit." The acceptance of Galton's eugenic doctrine without requiring further proof by the scientific community marks the beginning where the natural inferiority of the African was accepted (Nobles, 1986).

Shortly after leaders of Western Psychology accepted Galton's "scientific" position, Herbert Spencer (1996) coined the term "survival of the fittest" and developed the "doctrine of Social Darwinism." Spencer believed that the suffering of the poor was nature's mechanism of insuring the survival of the fittest. In Spencer's (1896) book, *Principles of Psychology*, he suggested that science was being used to select the best character of the various inferior races and breed them in scientific mixtures with a plan to salvage whatever rudimentary human worth was present.

The following European theories helped to perpetrate the idea that Africans were inferior to Whites. In 1895, M. Bache in the *Psychological Review* stated that Africans were highly developed in physiological tasks and attributes, yet slower being(s) in comparison to Whites on auditory, visual, and electrical reaction time. He made this conclusion after sampling only 11 (eleven) African with prevailing techniques measuring "reaction time."

Bache's research inspired the Cambridge Anthropological Society to begin their inquiry into the purpose of measuring psychological attributes of various races in New Guinea. The New Guinea experiments culminated at the St. Louis World's Fair where the Congress of Races convened with many prominent psychologist present, including R.S. Woolworth (who later became APA president) to test various Black African types. These scientists concluded that the darker-skinned participants rated lower in intelligence.

In a study conducted on the psychology of the Black man by G.O. Ferguson (1916), the

following was offered:

Without great ability in the process of abstract thought, the Negro is yet very capable in the sensory and motor power which are involved in manual work. An economy would indicate that training should be concentrated upon these capabilities which promise the best return for the education effort expended (p.125).

Ferguson (1916) theorized that Black people were intelligent in proportion to the amount of White blood they possessed. His attack on Black people continued as he characterized defective morals as a Negro trait. Edward L. Thorndike (1969) wrote in his book, *Human Nature and the Social Order* that, "The principle of eliminating bad genes is so thoroughly sound that almost any practice based on it is likely to do more good than harm" (p.44). Thorndike served as president for of the American Association for the Advancement of Science, and esteemed by many to be American's greatest psychologist. Thorndike also helped developed the Army's intelligence test. He also believed and stated that the institution of slavery existed because the Black man's original nature was conducive to exploitation. In effect, what appeared to be said was Black people were enslaved because it was predetermined by Black people's nature.

In the early 1900's, with the emergence of American psychology, G. Stanley Hall kept the European tradition of his predecessors (Nobles, 1986). Hall was the founding father of the American Psychological Association. He was influenced by the Malthusian doctrine and his philosophy reflected the essence of the Machiavellian theory, which deals with the dichotomy of White and Black. The Machiavellian theory indicated that what is true and good for one is often false and bad for the other. In his work, *The Negro in Africa and America*, Hall (1905) stated that:

Among tribes of Dahomey, and in the Fan, Felup Wolop, Kru and other strips...sometimes resort to cannibalism, use an agglutinative speech, believe profoundly in witchcraft, are lazy, improvident imitative fitful, passionate, affectionate, faithful are devoted to music and rhythm and have always practiced slavery amongst the themselves (p.350).

Hall further stated that Polygamy is universal, fecundity is high, and mortality great. Strong sex instincts are necessary to preserve the race. As soon as the child can go it alone, it begins to shift_for itself. Stealing is universal and is a game, and falsehoods are clever accomplishments." "Our slaves" he states, "came from the long narrow belt, not many miles from the sea... It is surprising to see how few of his aboriginal traits the Negro has lost, although many of them are modified" (1905, p. 350).

Hall's racism was extended to other groups beside Africans. It was also extended to Indians and Chinese, whom he classified as "adolescent races." Hall believed that no two races differed in their physical and psychological traits as did the Caucasian and the African. Hall's "recapitulation theory" considered Black people to be in a stage of incomplete growth, and that heredity was the dominant factor determining educational capacity.

Further understanding of African Americans was provided by Lewis (1916). His book, *The Measurement of Intelligence*, provided the following pertaining to African American and other ethnic minority children:

Are uneducable beyond the nearest rudiments of training. No amount of school instruction will ever make them intelligent voters or capable citizens in the true sense of the word, their dullness seems to be racial, or at least inherent in the family stock from

which they come, children of this group should be segregated in special classes and be given instruction which is concrete and practical. They cannot master abstractions, but they can often be made efficient workers... There is no possibility at present of convincing society that they should not be allowed to reproduce, although from a eugenic point of view, they constitute a grave problem because of their unusual prolific breeding (pp.91-92).

Terman helped to standardize "tracking according to ability", and conducted an experiment in Oakland, California which resulted in racial segregation of students by race. William McDougal in his book, *Is America Safe for Democracy?* attempted to establish the position that all people of African America descent were innately and intellectually inferior to Whites. He stated that:

The colored men of his country are largely, I suppose, of mixed White and Negro descent. It may be suggested that the native inferiority in respect to this quality (intelligence) is an evil effect of cross-breeding of these two widely dissimilar races. This is a possibility. But facts are strongly against it. Have they not a large proportion of White blood? I do not know but I suspect it....we have the allegation frequently made that every colored man who has risen to distinction has been of mixed blood. It is perhaps difficult to prove the rule, but it is difficult to find exceptions (1921, pp. 54-55).

As recent as thirty-seven years ago Harry Stack Sullivan (1964), offered a rather unfounded and bizarre contribution to the field's understanding of African Americans. He Stated:

“Heterosexual activity seems to be one of the few unrestricted recreational outlets. I judge that there are many definitely promiscuous people and that this laxity arises from factors of personality development as well as from a permissive culture. Vividly

outstanding factors in the structure of many Negro family groups are superficially identical with those which in Whites eventuate in arrest of heterosexual development, and thus to obligate homosexual or bisexual behavior, it would require careful intensive personality study or a number of Negroes to convert one of my surmises in this connection into fact” (1964, pp. 103-104).

The analysis of the psychological tradition or "intellectual atmosphere" where African/Black Americans have been dehumanized, misunderstood, and labeled as inferior have been racist and crippling, and continues today. Richard J. Herrnstein and Charles Murray (1995) in their controversial book, *The Bell Curve* confirmed the continued belief in the innate inferiority of African/Black people and other ethnic groups. In my opinion and in the opinion of others (Stephen Fraser, 1995; Ann Swidler, 1996; Samuel Lucas, 1996), this book clearly manipulated statistics by stating that certain groups of children are genetically unable to learn because of their race, and, therefore, unworthy of the educational attention and financial resources that flow from federal and state governments.

The Bell Curve is seriously flawed, it dangerous articulate White Supremacy, racism and class ideologies. The danger in works like these is that policy makers, educators and others who are responsible for equality and justice for all may use this information to cause further harm to the oppressed (Kincheloe, 1997).

As shown through this study, the Eurocentric Worldview has been dominated by racist and prejudicial views toward African/Black people; however, there were a few whites that stood out and argued against all forms of racism and oppression. They did not believe that the white male was superior to others and were justified in perpetrating racism, classism, sexism, and elitism (Asnsbacher & Asnsbacher, 1954; G. Myrdal, 1944 and G. Allport, 1994).

Stephen Gould (1999), in his book *The Mismeasure of Man* questioned how scientists decided that intelligence was unipolar and quantifiable, and why the standards keep changing over time. Gould indicates that to maintain power is the simplistic answer. He explicate by demonstrating that the European men of the 19th century saw themselves as the pinnacle of creation, and sought to prove this dissertation by hard measurement. Gould continued by discussing how when one measurement was found to place members of some “inferior” group, such as women over the supposedly rightful champions, it would be discarded and replaced with a new more comfortable measure. The 20th century obsession with numbers led to the institutionalization of IQ testing and subsequent assignment to work (and rewards) commensurate with the score, shown by Gould to be not simply misguided—for surely intelligence is multi-factorial—but also regressive, creating a feedback loop rewarding the rich and powerful. Joe Kincheloe, Steinberg, A. Gresson & A. Gresson III (1997) in their book, *Measured Lies: The Bell Curve Examined* argued a point by point and chapter by chapter against Hernstein and Murray (1995) book *The Bell Curve*. The distinguished scholars used the techniques of reason, logic and evidence to direct and reveal the racism, classism, sexism, and elitism of *The Bell Curve*. Jan Myrdal (1990) in his book, *Confessions of a Disloyal European* openly discusses the European intellect and confronts Western racism. In the book, *An American Dilemma: The Negro Problem and Modern Democracy* Black and African American Studies, Myrdal, (1996) Myrdal discussed the many problems that African/Black Americans still face. He systematically talked against the institutions of racial and segregational indoctrination.

There exists a great need for an African Centered Program that can be used with African/Black people that does not cause alienation and misinformation. Therefore, **C-FACT** (Churches-Families-And-Communities-Together) was designed utilizing an African centered

approach. Research by psychologists who specialize in African centered techniques and interventions for empowering those of African descent through the structure for **C-FACT** (Churches-Families-And-Communities-Together)

The basic assumption of the pure Eurocentric models seems to be racist and produce racial oppression that have negative psychological effects on African. These models assume that under normal circumstances, African should think, feel, and act/react to things as whites do. This is because the standard Eurocentric assumption in the social and behavioral sciences is that Blacks have no sense of reality apart from European-centered reality, which literally translates into White supremacy domination's fundamental postulate of African inferiority to Europeans in all important aspects of existence (Baldwin, 1979).

Dr. Kobi Kambon (1999), in his book, *African/Black Psychology in the American context: An African-Centered Approach* stated that the Africentric models of the African Family focus primarily on the adaptive and defensive functioning of the African family through its cultural infrastructure, rather than on its proactive/natural Nation-Building/ Maintenance functioning. These approaches view the strengths and positive features of the African family as artifacts and expressions of its African cultural foundation that have survived the Maafa and have propelled survival adaptations that account for its survival today. Authors like Wade Nobles (1984) Harriet McAdoo (1981), McAdoo and McAdoo, (1985), Niara Sudarkasa (1981), and others have been the chief proponents of this major African-centered view of African family life in America. Nobles' work provides a very extensive Africentric perspective. I believe his work is the most consistent and strongest among Africentric voices as it pertains to Black family studies. Therefore, his model and Dr. Kobi Kambon's models will serve as examples for the Africentric development of *Action Research for Capacity Building Through Historically Black Colleges and*

Universities (HBCU's): A Collaborative Model.

WADE NOBLES' AFRICENTRIC MODEL FOR AFRICAN/BLACK FAMILIES:

In his work, Nobles (1984) has proposed that the African family in America's special form is determined by its sense of Africanity--which is the hidden force of commonality that defines the Black family. The Traditional African family comprises the several households making up a particular community. The Clan (tribe) was but a much larger extension of the African family/kinship system. Among the major traits of the traditional African family (and its descendant contemporary African family in America) according to Nobles' model are the following:

- a) Continual Flexibility in Circularity/The Extended Family-Kinship Structure: (which is "Appositional" as opposed to "oppositional" in nature).
- b) The continuity and union of people, functions, roles, relations, and processes are the defining Characters.
- c) Role Flexibility: Male and female roles are not fixed but adapt to situational requirements.
- d) Strong Mother Roles and Family Survival: The mother's role is central to family survival.
- e) The Importance of Children and Motherhood: The purpose of family is child rearing and continuance of the clan/biogenetic family, nation, race, etc. Motherhood is therefore vital to this process and it consummates family.
 - Birth is seen as the reincarnation of Ancestors.
 - Sibling Responsibility and mutual accountability are emphasized
 - The family also serves to buffer children from the European Worldview.
- f) Communalistic Socialization of Children: This includes Rites of Passage from

childhood to adulthood for boys and girls, leadership training for the young, etc.

- g) Spiritual over Material Values: Being connected to the collective defines one's membership-value in the family, not one's property of distinct physical features or looks.
- h) The Role of the Elderly: The Elderly play an important role in the governance and education of the family, and in the education of the children.
- i) A Strong sense of Humanness: Viable “human qualities” of love is caring, belonging, helping, support, security and protection are emphasized.

According to Nobles (Nobles, 1974, 1974b, 1985), *the Black family* is “African in nature and American in nurture” (Nobles, 1985,p78) or Americanized-African family” (Nobles, 1987,p31) in terms of cultural beliefs and behavioral practices. The intrinsic nature or integrity of the Black family is “African” (its sense of Africinity), although it is a system embedded or operating within a larger European-American cultural milieu. Thus, the African family in America derives its primary characteristics, forms, and definitions from its African nature. The African family in America, therefore, still reflects several authentic African cultural features which are important for its effective functioning and survival (Nobles et al, 1987,p.31).

Nobles model defines four major issues of understanding about Black families in America. They are:

1. The traditional Black family is a unique cultural form enjoying its own inherent resources and/or features (as previously articulated).
2. The family itself performs important social and psychological functions.
3. Some of its features may be situational (i.e., caused by pressures of the moment) or adaptational (result from long term adjustments to new or changing circumstances).

4. In periods of "crisis" or at "ceremonial" times, the African nature of the family is most visible.

Nobles (1985) identified a number of special features found in African families in America.

They are as follows:

- a) The African family in America is comprised of several individual households, with the family definition and lines of authority and support transcending or going beyond any one household unit which comprises the family.
- b) Structurally, the African family in America expands and diminishes in response to external conditions (elasticity).
- c) The African family in America is a child-centered system. Its organizational *raison d'etre* focuses on, if not requires, the presence of children.
- d) A main function of the African family in America is family networking, as revealed by close networks of relationships between families not necessarily related by blood (elasticity).
- e) Role definition and performance in the African family in America are flexible and interchangeable. In child rearing, there is a clear distinction made between role definition (sex related) and role performance (sexless).
- f) Multiple parentage and inter-familial consensual adoptions are regular features of African family life in America.

Summary

Reviews by many psychologists, both African American and White have acknowledged the inadequacies of western psychology. Akbar (1981, 1985); Asante, (1980); Clark (1972), Nobles(1973) King (1976); Kambon 1999); Wright (1975, 1981) and other psychologists demonstrated that American (White) Psychology has operated in ignorance of the distinct and authentic existence of African reality in America.

Kambon (1999) states that the training in psychology and in American education has resulted in institutionalized ignorance which distorts and misrepresents the true psychological and behavioral picture of what Black people are really like. Kambon continues by stating that in the past, the psychological picture of Black people portrayed in American (White) Psychology has always reflected Blacks as *less than* Whites along whatever dimension of life that was being considered, and as more inadequate than Whites as a general condition.

My review of the literature supports the findings that American/Eurocentric/White Psychology views African people according to American/Eurocentric/White norms or standards. Therefore, proposed solutions for African/Black peoples' problems by the government and other agencies/groups of society are based on false and distorted understanding (hence misunderstanding) of African/Black people and their problems. (Kambon, 1999).

I agree with the scholars who express the need for African/Black Psychology as it provides answers to the long standing problem that portray African peoples' psychological function and behaviors as they really are rather than as the White/Eurocentric American reality (their norms and standards) insist that Africans/Blacks must be. Kobi Kambon, (1999) states in his book, *African/Black Psychology in the American Context: An African - Centered Approach* that African/Black Psychology view Black people from their own distinct norms and standards

i.e. as an authentic distinct racial-cultural group in America like all of the other racial-cultural groups comprising this pluralistic - multicultural American society. (Kambon, 1999)

In closing, African/Black psychology has a vital role in the lives of African people, and is necessary in identifying, solving and improving the quality of life for African/Black people. **C-FACT (Churches-Families-And Communities-Together)**, a knowledge based program was designed to empower African/Black families and communities. It is based upon the cultural norms and standards of African/Black people.

Methodology

This examination utilized qualitative analysis with a social action paradigm which produced the *Action Research for Capacity Building Through Historically Black Colleges and Universities (HBCU's): A Collaborative Model*. This community action research model implements research based systematic engagement of interpersonal strategies that utilizes the African Worldview Centered Model (Kambon, 1999). The *Action Research for Capacity Building Through Historically Black Colleges and Universities (HBCU's): A Collaborative Model* is a practical design that can be replicated at each HBCU by a certified Trainer.

Limitation of Program Design:

Although the *Community Action Research for Capacity Building Through Historically Black Colleges and Universities (HBCU's): A Collaborative Model* attempts to reach all African/Black Americans, there are those who desire not to participate and/or may not be reached. However, implementing the *Community Action Research for Capacity Building Through an Historically*

Black Colleges and Universities (HBCU's): may be more acceptable than through a church or other community organization that may appear as bias.

Findings and Impact on Future Conditions

The findings concluded that rarely, if ever, have effective solution been developed for African communities' problems using Eurocentric norms and standards for understanding African/Black people. Therefore, HBCU's Community Action Research for Capacity Building: an African Centered Collaborative Model can:

- Assist and galvanize current community leadership and policy makers around specific goals of the HBCU and their communities
- Identify, train, nurture, link, and empower a new generation of effective Black servant-leaders while respecting, supporting and including those who shoulder we stand on (the elders and our ancestors)
- Highlight the HBCU as a member of a partnership that is actively working, together to promote character, academic success, and leadership development in all students
- Position the HBCU to be seen as the key partner in community involvement and Community-capacity building and policy making team member.

Conclusion

Community Action Research for Capacity Building Through Historically Black Colleges and Universities (HBCU's): A Collaborative Model increases motivation and retention of academic skills as specific learning goals are tied to community needs. By solving real problems and

addressing real needs, students learn to apply classroom learning to a real world context. At the same time, students provide valuable services to schools and communities.

Community Action Research for Capacity Building Through Historically Black Colleges and Universities (HBCU's): A Collaborative Model increases motivation and retention of academic skills as specific learning goals are tied to community needs. By solving real problems and addressing real needs, students learn to apply classroom learning to a real world context. At the same time, students provide valuable services to schools and communities.

Potential Policy Implications and Recommendations

- Positions the HBCU to play a vital role in the weaving and reweaving the rich fabric of communities that historically have been the cornerstone for the healthy development of African/Black students.
- Providing college-wide opportunities for students to actively engage in research be part of the policy making process. This will promote students to tap into and strengthen the strong African/Black community tradition of self-help.
- Project image of HBCU's rebuilding bridges between generations and between the African/Black middle class and poor through education.
- Commit to sending a team (one from each discipline) to a 1 ½ Day Training Module on ***Linking Students and faculty with Community Action Research: The HBCU Agenda and Integrating Curriculum and Community with Action Research.***

References

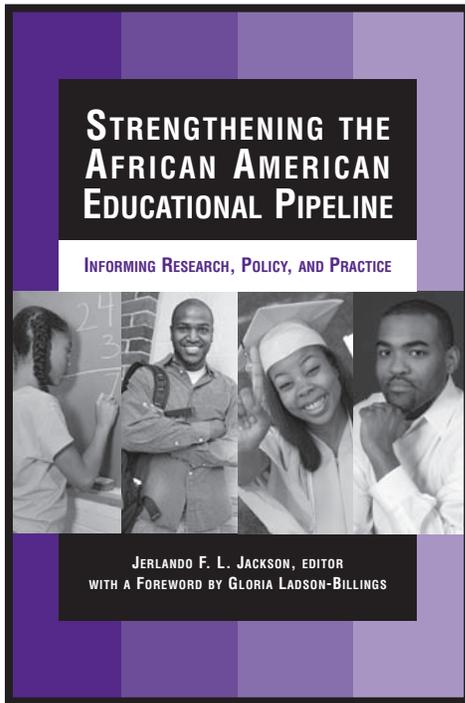
- AKBAR, N. African roots of Black personality, in Smith et al. (eds) *Reflections on Black Psychology*. Washington, D.C.: University Press of America, 1979.
- AKBAR, N. BBB interviews Na'im Akbar, *Black Books Bulletin*, Vol. 4, pp. 34-9), 1976.
- AKBAR, N. Rhythmic patterns in African personality, in King, L. et al. (eds) *African philosophy: Assumptions and paradigms for research on Black persons*. Los Angeles: Fanon Center Publications 1976.
- ALLPORT, G.**, *The Nature of Prejudice* 25th Edition. New York: Addison-Wesley, 1994.
- BALDWIN, J. Notes on an Africentric theory of Black personality, *The Western Journal of Black Studies*, Vol. 5, No. 3, pp. 172-79, 1981.
- BREMEISTER, *The Black man: The comparative anatomy and psychology of the African Negro*, 1853.
- CLARK (X), C. Black studies or the study of Black people, in Jones, R. (ed.) *Black Psychology* (1st edition). New York: Harper and Row, 1972.
- FERGUSON, G.O. JR. *The psychology of the Negro: An experimental Study*. New York: The-Science Press, 1916.
- FREUD, SIGMUND *Totem and taboo*. New York: W. W. Norton and Company, 1950.
- GALTON, FRANCIS *Hereditary genius: Its laws and consequences.*, London: Macmillan 1869.
- GOULD, FRASIER, *The Mismeasure of Man*. Sagebrush Corporation, Topeka, KS,

1999

- GUTHRIE, ROBERT *Even the rat was White*. New York: Harper & Row, 1976.
- GUTHRIE, ROBERT *Being Black*. San Francisco: Canfield Press 1970.
- HALL, STANLEY G. *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion and education*.
- JUNG, C. G. Address delivered to Second Psychoanalytic Congress in 1910, reprinted in *The Basic Writings of Sigmund Freud*, translated by A. A. Brill, New York: Modern Library, 1938.
- JUNG, C.G. Lecture to Zurich Psychoanalytic Society in 1912, reprinted as "On the psychology of the Negro", in William McGuire (ed.), *Collected works of Carl G. Jung*, Vol. 18, Princeton, N.J.: Princeton University Press, 552, 1950.
- KAMBON, KOBI K.K. *African/Black Psychology in the American Context: An African-Centered Approach*. Tallahassee, FL: Nubian Nation Publication, 1999.
- KAMBON, K. *The Worldview Scale Manual* Tallahassee, FL. Department of Psychology, FAMU, 1997a.
- KAMBON, K. Introduction to the ASCS. In R. L. Jones (Ed.) *Handbook of Tests and Measurements for Black Populations*. Hampton, VA: Cobb & Henry Pubs. 1996a.
- KARENKA, MAULANA *Introduction to Black Studies*. Inglewood, Ca.: Kawanda publications, 1982.
- KIACHELOE, JO, STEINBERG, S., GRESSON, A., and GRIESSON A. III, *Measured Lies: The Bell Curve Examined*. New York, NY, St. Martin Press, 1997.
- MYRDAL, G. *An American Dilemma (Vols. I &II)*. New York: Harper & Row, 1944.
- NOBLES, WADE W., *Ancient Egyptian thought and the development of African*

- (Black) psychology in Maulana, Karenga and Jacob H. Carruthers, (eds.) *Kemet and the African worldview, research, rescue and restoration*. Los Angeles: University of Sankore Press, 1986.
- NOBLES, WADE W., African (Black) psychology: Transformed and transforming. *Sage Race Relations Abstracts*, Vol. II., No. 1, February 1986
- NOBLES, WADE W. African consciousness and liberation struggles: Implications for the development and construction of scientific paradigms, Part I, *Journal of Black Studies* Vol. I, November 3, Fall 1985, San Francisco State University, Black Studies Department
- NOBLES, WADE W., et. al. *Critical analysis of scholarship on Black family life*. Final report submitted to United Church of Christ Commission for Racial Justice, February 1983.
- NOBLES, WADE W. Understanding human transformation: The Praxis of science and culture, paper presented to the Fanon Center International Conference on Human Development Models in Action: Praxis and History, Somalia, East Africa, June 1979.
- NOBLES, WADE W. African science and Black research: The consciousness of self, in L. King, V. Dixon and W. Nobles (eds.) *African philosophy: Assumptions and paradigms for research on Black people*. Los Angeles: Fanon Research and Development Center Publications, 1976a.
- NOBLES, WADE W. Black people in White insanity: An issue for Black community mental health. *Journal of Afro-American Issues*, Vol. 4, pp. 21-7, 1976.
- NOBLES, WADE W. Psychological research and the Black self concept: A critical review, *Journal of Social Issues*, Vol. 29, No. 1, pp. 11-31, 1973.

- NOBLES, WADE W. African philosophy: Foundation for ,Black psychology, in
Reginald Jones (ed.) *Black psychology*, New York: Harper & Row, pp. 18-32, 1972.
- SPENCER, HERBERT, *The principles of psychology*, New York: Appleton-Century-Crofts, 1896.
- SULLIVAN, HARRY STACK, *The fusion of psychiatry and social science*. New York: Norton, 1964.
- TERMAN, LEWIS, *The measurement of intelligence*. Cambridge, Mass.: Riverside Press, (quote pp. 91-2) 1916.
- THORNDIKE, EDWARD L. *Human nature and the social order*. New York: MacMillan, 1940.
- WELSING, FRANCES CRESS, The concept and color of God and Black mental health, *Black Books Bulletin*, Vol. 7, No. 1, pp. 27-9, 35, 1981.
- WELSING, FRANCES CRESS, *The Cress theory of color confrontation and racism (White supremacy)*. Washington, D. C.: Frances Welsing, 1970.
- WHITE, J. Guidelines for Black psychologists, *The Black Scholar*, Vol. 1, No. 5, 1970.
- WHITE, J. Toward a Black psychology, *Ebony*, Vol. 25, No. 11, pp. 44-5, 48-50, 52, September 1970. WILLIAMS, CHANCELLOR, *The destruction of Black civilization*. Chicago: Third World Press, 1976.
- WILSON, AMOS *The developmental psychology of the Black child*. New York: United Brothers Communications Systems, 1978.
- WRIGHT, BOBBY *The psychopathic racial personality*. Chicago: Third World Press, 1975.



220 pages
Illustrated: 1 b/w photograph,
26 tables, 6 figures
\$26.95 pb 978-0-7914-6988-0

**\$21.56 for AERA
attendees**

Dr. Jackson
will be signing
copies of his
new book
Thursday,
April 12,
11 am to noon

Booths
502 & 504

STRENGTHENING THE AFRICAN AMERICAN EDUCATIONAL PIPELINE

Informing Research, Policy, and Practice

Jerlando F. L. Jackson, editor

Foreword by Gloria Ladson-Billings

Focusing on pre-K-12 schools, higher education, and social influences, this book examines the following question: What systemic set of strategies is necessary to improve the conditions for African Americans throughout the educational pipeline?

“Comprehensive in its approach to representing the educational experiences of African Americans over the life course, this book fills an important gap in the literature.”
— James Earl Davis, coeditor of *African American Males in School and Society: Practices and Policies for Effective Education*

“Jerlando F. L. Jackson accomplishes the difficult task of helping us understand the complexities involved in getting the African American student from school to the workplace. While seemingly simple, the multiplicity of factors which emerge and impact the educational process must be understood by researchers, policy makers, and educators as we all become partners in the process to improve the conditions and experiences of African Americans in education. Jackson provides us with manageable ways to learn and begin to understand the systemic implications of this process in his book.”
— Barbara M. Pulliam, Superintendent, Clayton County Schools, Jonesboro, Georgia

“The pipeline metaphor has been dominant in discussions of the pre-K-graduate school articulation. Too long have these discussions focused on descriptions of the problem. This book represents a serious effort to bring tools to bear on this significant national concern. The tools redirect the literature from mere descriptive analysis to real solutions of one of the country’s most serious human resource development challenges.” — William F. Tate, Washington University in St. Louis

“*Strengthening the African American Educational Pipeline* is a must read because the contributors present a vivid analysis of the situation that African Americans are facing in the educational realm.” — from the Preface by William B. Harvey

Jerlando F. L. Jackson is Assistant Professor of Higher and Postsecondary Education at the University of Wisconsin at Madison.

**A Web-Based Portal for Estimating the Prevalence of Chronic Disease by Race on
the County Level using Small-Area Analysis Techniques**

Melody S. Goodman, Ph.D.
Graduate Program in Public Health, Center for Public Health and Health Policy Research
Stony Brook University Medical Center

Abstract

The Behavioral Risk Factor Surveillance System (BRFSS) is commonly used for estimating the prevalence of chronic disease. One major limitation of the BRFSS is that valid estimates can only be obtained for state and higher levels. There is limited health data available on the county level and thus many have used small area analysis techniques to estimate the prevalence of disease on the county level using BRFSS data. The paradigm shift towards translational research encourages researchers to make their findings accessible to those who would need them most in practice. We have developed a web-based portal to disseminate our findings to those in the practice and policy arenas.

Introduction

Despite the considerable biomedical advances made in the last half century and heightened national attention to disparities in health, racial disparities have been consistently observed in mortality, morbidity and other indicators of health on the state and national levels. From the colonization of the “New World” to present day, African-Americans have experienced higher rates of infectious and chronic diseases, are more likely to be diagnosed at later stages of diseases, and are less likely to receive the recommended levels of care (LaVeist 2002; Russo, Andrews et al. 2006; Washington 2007). According to the Centers for Disease Control and Prevention (CDC), in 2003 the age-adjusted asthma prevalence for non-Hispanic blacks was 9.2%, compared to 7.8% for non-Hispanic whites. Although African Americans represent only 12.7% of the U.S. population, they accounted for 26% of all asthma deaths. African Americans are more than twice as likely to have diabetes, and more than twice as likely to be hypertensive when compared to their white counterparts (Centers for Disease Control and Prevention).

When dealing with chronic illness such as: asthma, hypertension, and diabetes; prevention, education, and disease management are essential (Landon, Hicks et al. 2007). County health departments, community-based organizations, and policymakers rely on health data for resource allocation, program planning and evaluation. While there is a plethora of national and state level health data, data on the county level are scarce and unavailable for most counties. Unfortunately local health departments and community-based organizations often lack the resources to collect their own data and thus rely on applying small-area analysis techniques to state level data for estimating prevalence on the county level.

The objective of the BRFSS is to collect uniform, state-specific data on preventive health practices and risk behaviors that are linked to chronic diseases, injuries, and preventable infectious diseases in the adult population (2001-2005). The BRFSS is the world's largest, on-going telephone health survey system (National Center for Health Statistics 2001-2005). More than 350,000 adults are interviewed each year with data collected from all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. The BRFSS asks questions about current health conditions such as asthma, diabetes, hypertension, and obesity. It also asks questions about health behaviors such as, alcohol use, cancer screening, nutrition, physical activity, tobacco use, as well as questions related to preventive health practices, and health care access. Federal, state, and local health officials and researchers use this information to track health risks, identify emerging problems, prevent disease, improve treatment, and evaluate public health policies and programs. For many states, the BRFSS is the only available source of timely, accurate data on the prevalence of chronic diseases and health-related behaviors, therefore, many states rely on BRFSS data to support health-related legislative efforts (National Center for Health Statistics 2001-2005).

Although the BRFSS provides a wealth of information, it has one major limitation. Valid estimation of prevalence can only be calculated at State and higher levels due to the structure of the sampling design and weighting scheme (Remington, Smith et al. 1988; National Center for Health Statistics 2001-2005). County level estimation may not be valid because of small sample sizes for most counties; this becomes even more problematic when we try to compare subgroups on the county level.

Despite these limitations, the BRFSS provides the best health data for sub-state estimation of the prevalence of chronic disease by race.

The lack of data on the county and smaller geographic areas may create challenges in the reduction and elimination of racial disparities in health as the agenda to reduce disparities in health have been set on the national and state levels and are based on national and state level data. This is potentially problematic because these levels are far removed from the individual level where health outcomes are realized. The ideal solution to this problem is systematic collection of local public health data, however, the cost of data collection is more than many local health agencies can afford. As mandated by law, local health departments currently collect data on infectious and communicable diseases, however, monitoring chronic preventable diseases is not mandated and this data is rarely collected. The lack of available funding for data collection does not negate the need for local public health data. Readily available data on the differences in health status, exposure to risk factors, and access to care between different populations on the local level is necessary for local governments and health departments to determine priority areas and develop interventions. The lack of data limits the ability to evaluate the effectiveness of public health policy, local public health programs, and public health interventions (Kim and Keppel 1997).

Statistical procedures for small-area analysis have been developed to help fill the local data void. Small area analysis is a statistical procedure that provides a “better” estimate when the sample size in an area is too small or non-existent. Three commonly used methods include the synthetic method, temporal estimation and direct estimation.

Each of these approaches has a unique set of advantages and disadvantages. The synthetic method applies statistics for the larger geographic region to local areas based on the area's demographic characteristics. This technique is often biased toward the larger region estimates and lacks specificity for examining local patterns of disease within a larger geographic area. Temporal approaches combine several years of data together; however, estimates based on temporally aggregated data cannot show time-trend differences. Direct estimation directly estimates the county level prevalence from the national and/or state level data available. However, direct prevalence estimation is not recommended when there are less than 50 respondents (National Center for Health Statistics 2001-2005). In previous work the author has compared small-area analysis techniques for estimating the prevalence of chronic disease by race on the county level (Goodman 2008). However, the choice of which technique to use will often depend on the use of the estimates.

Advances in biostatistical methodological research are several steps ahead of the biostatistics methods used in public health practice. This gap between research and practice, and the shift towards evidence-based public health demonstrates the need for translational public health research. In an effort to translate our findings and make our work accessible to practitioners and policy makers, we developed a beta version of a web-based portal that will produce county level prevalence estimates by race for three chronic diseases disproportionately affecting African-Americans, namely asthma, diabetes and hypertension.

Methods

Data come from the Centers for Disease Control and Prevention (CDC) 2001-2005 Behavioral Risk Factor Surveillance System (BRFSS). The web-based portal produces estimates using three common small-area analysis techniques: direct estimation, synthetic estimation, and temporal estimation for three chronic diseases asthma, diabetes and hypertension, allowing for the comparison of estimates between Non-Hispanic Whites and Non-Hispanic Blacks.

Prevalence estimates

Prevalence estimates for asthma were obtained from a sequence of two questions. Survey participants were first asked “Have you ever been told by a doctor, nurse or other health professional that you had asthma?” if the respondent answered yes they were then asked “Do you still have asthma?” Respondents responding yes to both questions were considered to have asthma. The prevalence of diabetes and hypertension were calculated using survey participants’ responses to the questions “Have you ever been told by a doctor that you have diabetes?” and “Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?” respectively. Respondents responding yes, were then asked “was this only when you were pregnant?”, respondents answering yes, but only during pregnancy were consider as not having chronic diabetes or hypertension for the purpose of this analysis.

Direction estimation: Direct prevalence estimates for asthma, hypertension, and diabetes were calculated by race and county using weighted 2003 BRFSS data.

Synthetic estimation: The synthetic estimate for county i is the sum of the three-way, age-race-gender tabulated rates at the state level for demographic category j over all demographic groups, weighted by the proportion of the county population in each demographic category.

$$\hat{p}_i = \sum_j \frac{n_{ij}}{n_i} \hat{p}_{.j} \quad (1)$$

where \hat{p}_i is the estimated prevalence of disease in county i , n_{ij} is the number of people in county i that belong to demographic group j , $n_i = \sum_j n_{ij}$ is the total population in county i , and $\hat{p}_{.j}$ is the estimated state level age-race-gender prevalence rates.

The demographic population estimates (n_{ij} and n_i) are obtained from the 2000 census.

The estimated state level three-way prevalence rates for asthma, hypertension, and diabetes were calculated using weighted 2003 BRFSS data.

Temporal estimation: Temporal estimates for the prevalence of asthma, hypertension, and diabetes by race and county were calculated using five years (2001-2005) of un-weighted BRFSS data.

Results

In 2003 the BRFSS samples 204,799 non-Hispanic whites and 20,449 non-Hispanic blacks representing 152,510,000 non-Hispanic whites and 20,972,745 non-Hispanic blacks when weighted. The national self-report weighted prevalence of current asthma for non-Hispanic whites was 66.8% (95% Confidence Interval (CI): 66.7% - 66.8%) while the overall prevalence for non-Hispanic blacks was 66.6% (95% CI:

66.6%-66.7%). The national self-reported weighted prevalence for non-pregnancy induced diabetes is 6.9% for non-Hispanic whites (95% CI: 6.9%-7.0%) and 11.6% for non-Hispanic blacks (95% CI: 11.6%-11.7%). The national self-reported weighted prevalence for non-pregnancy induced hypertension is 26.4% (95% CI: 26.4%-26.5%) for non-Hispanic whites and 34.1% (95% CI: 34.0%-34.2%) for non-Hispanic blacks. All prevalence estimates were significantly different from zero ($p < 0.0001$), and χ^2 test of the null hypothesis that there was no difference in prevalence rates among races were also all statistically significant ($p < 0.0001$).

BRFSS does not allow small area analysis for counties with a population of less than 150,000 and these counties were excluded from analysis. Of the 1937 race by county estimates, 906 (47%) had subgroup sample sizes of less than 50, the minimum number of subjects needed for direct estimation of prevalence (National Center for Health Statistics 2001-2005).

Many of the county level prevalence estimates by race differ from state and national estimates with differences depending on the small area analysis method used. These differences demonstrate the need for accurate prevalence estimates on the local level.

Discussion

Small area analysis can provide reliable county level estimates for the prevalence of chronic disease by race using BRFSS data when a county has few respondents. The major limitations of using small area analysis techniques on the BRFSS data are, estimates can not be obtained for counties with populations of less than 150,000, direct prevalence estimation is not recommended when there are less than 50 respondents, and

BRFSS is a telephone survey. The responses are a probability sample of U.S. households with a telephone. Telephone coverage varies by state and subpopulation, with the use of cell phones as a primary line in some households this raises issues of selection bias in data collection.

A good small area analysis estimator should provide stable estimation with such properties as small standard errors and narrow confidence intervals and allow for the evaluation of the quality of the estimation. The estimates should have limited bias and show variation within the larger geographic region. A good small area analysis technique should be conceptually simple and relatively easy to calculate computationally in a statistical software package. Often there is an interest in monitoring trends over time and this is a major factor when choosing a small area analysis technique. Ensuring valid annual estimation raises issues with some temporal approaches regarding the appropriate number of years of data to use in estimation and the ability to monitor trends over time.

In the translation of research findings we found the web-based portal to be an excellent dissemination strategy based on accessibility and ease of use. The use of click and point options allows a user with limited statistical knowledge to obtain county level prevalence estimates using small area analysis techniques in seconds. In future work the author is interested in expanding the web-based portal to include spatial smoothing and regression small area analysis techniques, as well as examining the feasibility of smaller area analysis. Can we estimate the prevalence of chronic disease by race on the zip code or town level, closer to where individual health outcomes are realized? Statistically sound local level estimates of chronic disease by race would provide a different view of this public health dilemma and provide some of the information necessary to improve our

ability to address racial/ethnic disparities in chronic disease utilizing evidence-based public health.

Acknowledgements

This study and the work of Dr. Goodman were supported by the Robert Wood Johnson Foundation New Connections Program. Special thanks to Uday Karki, computer programming consultant for developing the beta version of the web-based portal.

References

(2001-2005). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia, Centers for Disease Control and Prevention.

Centers for Disease Control and Prevention. Retrieved May 14, 2008, from <http://www.cdc.gov>.

Goodman, M. S. (2008). A Comparison of Small-Area Analysis Techniques for Estimating the Prevalence of Chronic Disease by Race on the County Level

Landon, B., L. Hicks, et al. (2007). "Improving the Management of Chronic Disease at Community Health Centers." *N Engl J Med* **356**(9): 921-34.

LaVeist, T., Ed. (2002). Race, Ethnicity, and Health: A Public Health Reader. San Francisco, Jossey-Bass.

National Center for Health Statistics. (2001-2005). "Behavioral Risk Factor Surveillance System Documentation." Retrieved December 22, 2007, from <http://www.cdc.gov/brfss/about.htm>.

Purcell, N. and L. Kish (1979). "Estimation for Small Domains." *Biometrics* **35**(2): 365-384.

Remington, P., M. Smith, et al. (1988). "Design, Characteristics, and usefulness of State-Based Behavioral Risk Factor Surveillance: 1981-1987." *Public Health Reports* **103**(4): 366-375.

Russo, C. A., R. M. Andrews, et al. (2006). Racial and Ethnic Disparities in Potentially Preventable Hospitalizations, 2003. Healthcare Cost and Utilization Project, Agency for Healthcare Research and Quality.

Washington, H. A. (2007). Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present Doubleday.



Broadening Participation in Computing African-American Researchers in Computing Sciences



AARCS

Auburn University proposes African-American Researchers in Computing Sciences (AARCS), a program that aims to broaden the participation of African-Americans at the levels of tenure track faculty and research scientist in the computing sciences. African-American students across the Southeast will be exposed to role models, research, and graduate school opportunities, as well as mentoring. All activities will be specifically designed to address the barriers and disbeliefs, concerns, and misunderstandings about computing sciences faculty and research. The activities will include a series of targeted presentations by African-American computing sciences faculty and graduate students at HBCUs, a Future Faculty Mentoring Program, and an annual AARCS mini-conference hosted at Auburn University. The presentations at HBCUs will provide undergraduates with mentoring, and information on research careers. The Future Faculty Mentoring Program will provide advanced graduate students with e-mentoring on academic careers, and the AARCS mini-conference will be a research and skill building conference for undergraduates and graduate students.



Although African-Americans are the target group for this program, the AARCS program will also serve as a model that can be used to target other underrepresented groups.



A targeted presentation at Spelman College on November 9, 2005 yielded two significant results:

- After attending this session, on average, the likelihood that the participants would pursue graduate study in computer sciences increased 1.5 points on a five-point scale.
- 63% of participants reported that after attending the session they felt that attending graduate school was an option.



Dr. Juan E. Gilbert is the Series Editor for a new series in Computer called Broadening Participation in Computing. The first article will appear in the March issued of Computer.

Dr. Juan E. Gilbert, gilbert@auburn.edu
 Dr. Cheryl D. Seals, sealscd@auburn.edu
 Dr. Gerry V. Dozier, gvdozier@eng.auburn.edu
 Dr. Jerlando F. Jackson, jjackson@education.wisc.edu



Toxic Waste Facilities and Birth Outcomes in South Carolina: An Ecological Perspective

Muhammad M. Salaam, MSPH(c),
Sacoby Wilson, Ph.D.

University of South Carolina
Department of Epidemiology and Biostatistics,
Institutes for Families in Society

Abstract

Objective

This ecological study investigated county level exposure to Toxics Releases Inventory (TRI) emissions and its effects on preterm delivery and low birth weight in South Carolina.

Methods

Birth Certificate Data on infants was obtained from 1995-2005 on all 46 counties in SC. TRI emissions data was also collected on all counties. Additional demographic data was obtained from Census 1990 and Census 2000.

Results

Both preterm delivery and low birth weight increased during the period, while amounts of TRI emissions and number of facilities increased as well. Counties with high concentrations of TRI emissions also had high concentrations of African Americans, high poverty, and low income.

Conclusions

Health disparities in birth outcomes exist in South Carolina. These health disparities are possibly influenced by levels of environmental pollution throughout the state. Additional research is needed to understand the strength of the association between environmental exposures and birth outcomes at the individual level.

Background and Introduction

Preterm birth and infant low birth weight are two of the largest concerns involving prenatal health. This makes sense, since preterm birth is the second leading cause of infant mortality in the United States. In the United States, more than 12.5% of all babies are born prematurely, resulting in one of eight babies born before the typical 37 weeks of pregnancy (Martin et al., 2006). Complementing these rates, one of thirteen babies born in the U.S. is categorized as having low birth weight (LBW), weighing less than 2500 grams (Martin et al., 2006). Preterm birth is the second leading cause of infant mortality and incidence rates have steadily increased over the past decade (Martin et al., 2006). Those infants who survive, are often plagued with additional health problems such as mental retardation (Mervis et al., 1995; McDermott et al., 1993), learning disabilities (Grunau et al., 2002; Cherkes-Julkowski, 1998), and autism (Hultman et al., 2002; Limperopoulos et al., 2008; Schendel & Bhasin, 2008), and later develop other health problems in their adult lives (Curhan et al., 1996b; Curhan et al., 1996a; Brooks et al., 2001; Shaheen et al., 1999; Joseph et al., 2002).

The exact causes of preterm delivery are unknown; however, several epidemiological studies have attributed mother's age (da Silva et al., 2003; Prysak et al., 1995; Berkowitz et al., 1998; Rich-Edwards et al., 2003), ethnicity (Berkowitz et al., 1998; Blackmore et al., 1993; Rowley et al., 1993; Blackmore et al., 1995; Rich-Edwards et al., 2003), and education (McGrady et al., 1992; Peacock et al., 1995; Thompson et al., 2006) as contributors to the phenomenon. Other studies have shown positive associations between prenatal care (Kogan et al., 1994; Krueger & Scholl, 2000), diet (Scholl et al., 1993; Scholl et al., 1996; Scholl & Johnson, 2000; Scholl, 2008), and socioeconomic status (Parker et al., 1994; Spencer et al., 1999; Peacock et al., 1995; Thompson et al., 2006), with pre-term births. Studies have also

shown possible influences from negative behaviors including alcohol consumption (Jackson et al., 2007; Peacock et al., 1995) and smoking (Ahern et al., 2003; Chiolero et al., 2005; Jackson et al., 2007).

There are also growing concerns about the contribution of environmental factors to pregnancy outcomes (Bobak & Leon, 1999; Maisonet et al., 2001; Maroziene & Grazuleviciene, 2002). Many of these studies have focused on drinking water contaminants (Ahmad et al., 2001; Savitz et al., 1995) and air pollution exposures (Bobak & Leon, 1999; Brauer et al., 2008; Maisonet et al., 2001; Maroziene & Grazuleviciene, 2002; Ritz et al., 2000; Ritz & Yu, 1999; Ritz et al., 2002; Ritz et al., 2006; Ritz et al., 2007). In addition, there has been an increasing interest in the relationship between residential exposure to environmental hazards and pregnancy outcomes. Research has found that residential proximity to environmental hazards increases risk for pre-term birth (Ritz et al., 2007), low birth weight (Bobak & Leon, 1999; Maroziene & Grazuleviciene, 2002; Ritz & Yu, 1999; Elliott et al., 2001), childhood cancer (Choi et al., 2006; Reynolds et al., 2003), autism (Hultman et al., 2002; Limperopoulos et al., 2008; Schendel & Bhasin, 2008; Windham et al., 2006), and other birth defects (Brender et al., 2006; Dummer et al., 2003; Marshall et al., 1997; Ritz et al., 2002; Berry & Bove, 1997; Elliott et al., 2001; Bentov et al., 2006). One study conducted in Los Angeles, found that women who lived within 1 mile from high levels of particulate matter from air emissions had at least a 27% increased risk for preterm delivery (Wilhelm & Ritz, 2005). These studies have not only brought to light the potential effects of hazardous wastes on reproduction, but have also shown the effects of space and place on an individual's health. Many toxic sites are located in highly populated and often overcrowded areas (Bullard et al., 2007; Maantay, 2001a). Residents in these areas are usually

people of color and populations with low socioeconomic status (SES) (Dolinoy & Miranda, 2004; Morello-Frosch & Lopez, 2006; Pulido, 2000).

Over the past few decades, a large number of studies examining the relationship between exposure to toxic wastes and birth outcomes have been conducted in New York and California (Ritz et al., 2000; Ritz & Yu, 1999; Ritz et al., 2006; Ritz et al., 2007; Wilhelm & Ritz, 2005; Maisonet et al., 2001; Brauer et al., 2008). Unfortunately, these studies have not provided a complete picture of the state of environmental health and birth outcomes across the country. To date, there have been no studies assessing the linkages between TRI data in South Carolina and birth outcomes. This is very important because the population dynamic in South Carolina is very different from the dynamic in metropolitan cities of the Northeast and West Coast. South Carolina, though small in its general population, has one of the highest African-American concentrations in the United States (U.S.Census Bureau, 2008). South Carolina's unique population distribution, poor health outcomes, and racial/ethnic health disparities make it a prime location for research.

Research in South Carolina is needed to investigate the effects of the environment on birth-related outcomes. Several studies have shown high correlations between race and toxic releases (Downey, 1998; Faber & Krieg, 2002; Bowen et al., 1995; Blackmore et al., 1993; Sheppard et al., 1999). Research has shown that populations of color bear a disproportionate burden from the presence of hazardous waste facilities (Downey, 1998; Faber & Krieg, 2002; Mitchell et al., 1999). These studies have used Toxic Release Inventory (TRI) data to validate these findings (Dolinoy & Miranda, 2004; Faber & Krieg, 2002; Brender et al., 2006). TRI database is an excellent source for evaluating hazardous waste because it provides a comprehensive evaluation of chemicals released into the environment.

From 1990-2004, premature birth rates increased from 10.6% to 12.5% (Martin et al., 2006). In South Carolina, 15.5% of all babies born in 2004 were preterm and 10.1% were born with low birth weight, ranking it 4th for both preterm deliveries and low birth weight (Martin et al., 2006). The problem increases when examining differences across race/ethnicity. During 2003-2005, the average low birth rate among African-American infants was 14.8% compared to 7.7% of White infants were low birth weight (Martin et al., 2006). Compared to other racial/ethnic groups, African-Americans also have higher rates of preterm delivery (Martin et al., 2006). During the same period, the average preterm birth rates were 19.7% for African-Americans, compared to 12.9% for White infants (Martin et al., 2006). Further investigation of these subpopulations may provide much needed insight into the contribution of environmental pollution to negative birth outcomes in South Carolina.

Epidemiologic Investigation

A. Study Purpose and Objectives

To obtain information on the association between residential exposure to TRI facilities and releases and preterm delivery, an ecological study was conducted using data from all 46 counties of South Carolina. The purpose of this study was to investigate the following aims: 1) describe and compare the distribution of preterm delivery and residential exposure to waste facilities in South Carolina from 1995 to 2005 and 2) describe and compare the level of exposure to toxic releases & preterm delivery and low birth weight from 1995 to 2005.

B. Methods

I. Exposure Assessment

As mandated by the Environmental Protection Agency (EPA), all states must document and publish information about releases and transfers of toxic chemicals from facilities. All facilities with at least 10 full-time employees that manufacture at least 10,000 pounds of one or more of 670 different chemicals found in the TRI database must report their releases to the EPA. The TRI database is not an exhaustive list of chemicals, but provides some coverage of toxic chemicals released to the environment, which is important in tracking population exposure and public health outcomes. Releases are classified as either “air”, “water”, “land”, or “other.” Air releases are all stack, point, and fugitive air emissions. Water releases include all expulsion into streams, lakes, rivers, oceans or other bodies of water. Land releases include anything used above or below ground. These can include pesticide compounds, landfills, or waste dumping. Other releases are usually off-site releases that are transferred from other locations (U.S.Environmental Protection Agency, 2008).

Population level exposure to toxic waste facilities in South Carolina was studied from 1995-2005. Data on toxic waste facilities and their emissions was obtained from the Toxic Release Inventory (TRI) database provided by the Right-to-Know Network (RTK NET). Data on location and type of toxic waste facilities, amount of emissions released, and type of emissions (air, water, land) released were obtained from the TRI database.

Three different exposure measures were developed to capture the burden of toxic waste releases on populations at the county level in South Carolina. First, the number of toxic waste facilities per county was obtained to see if there was a relationship between the number of facilities and reduced birth weight, as studies have shown increased risk with residential proximity to one or more pollution-emitting facilities (Brender et al., 2006). Secondly, a ratio of toxic waste facilities and population was then calculated to investigate if increased toxic waste

facilities per person had an effect on low birth weight. We also calculated total toxic releases (land, air, and water) to obtain an aggregate TRI measure for each county.

II. Outcomes

Data on maternal and child characteristics was obtained from the South Carolina Department of Health and Environmental Control (SC DHEC) for years 1999-2001 using birth certificate records. The study population included all mothers (age 18+) and their children born alive in South Carolina from 1995-2005. Information on mother's age, race, marital status, child's birth weight, gestational age, and county of residence was obtained from South Carolina birth certificate data. Both preterm delivery and low birth weight were outcomes that were investigated in the study. Preterm delivery was classified as any child born to a mother before 37 weeks gestation period. All other gestation periods of 37 weeks or later were considered term delivery. Low Birth Weight (LBW) was classified as any infant born weighing less than 2500 grams. Any other birth weights of 2500 grams or more were considered normal. Information on gestational period and child's birth weight was obtained from birth certificate data from the SC DHEC birth registry.

From 1999-2001, 564,361 birth certificates were verified in South Carolina. After exclusion criteria were implemented, 219 (5.6%) subjects were excluded from analysis, leaving 564,142 participants. All subjects must be mothers who gave birth to a child in South Carolina between the ages of 18-44, and did not have any missing information on the exposure, outcome, or any other covariates.

III. Covariates

Information on covariates at the county level was obtained from census data from the South Carolina Office of Research and Statistics (SC ORS). Census data from 1990 was used for the period of 1995-2000, while Census data from 2000 was used for 2000-2005. This was deemed appropriate due to South Carolina's very slow population change. The study examined several covariates based on previous literature including race, median income, education, housing, and poverty. Due to South Carolina's population distribution and its lack of racial/ethnic diversity, the percent of African Americans in the county was used as our race variable. African-Americans have been shown to be disproportionately burdened by toxic releases in other studies (Bullard et al., 2007; Bullard, 2000; Faber & Krieg, 2002) and we believe this will be the case in South Carolina.

The remaining four covariates (median income, education, housing, and poverty) were used to measure county-level SES. These covariates were used because previous studies have shown associations between SES and pregnancy outcomes (Thompson et al., 2006; Spencer et al., 1999; Peacock et al., 1995; Parker et al., 1994). Maternal education (percent of mothers with less than a high school education) was used because previous studies showed associations between educational status and birth outcomes (Thompson et al., 2006; Peacock et al., 1995; McGrady et al., 1992), as well as environmental disparities. Percent poverty was obtained because previous studies indicated that poorer neighborhoods are more susceptible to worse health outcomes (Morello-Frosch et al., 2000; Morello-Frosch & Shenassa, 2006) and are negatively impacted by environmental injustice (Sheppard et al., 1999; Rowley et al., 1993; Maantay, 2001b; Faber & Krieg, 2002). Due to the ecological study design, no additional information was collected from individual participants.

IV. Statistical Methods

Several statistical methods were used to answer the study questions. Basic descriptive statistical methods were employed to provide information about TRI levels, TRI exposure, as well as the distribution of preterm and LBW infants. All data were analyzed using SAS Version 9.1 software (SAS Institute, Cary, NC). To mimic a geographic spatial measurement for toxic waste releases, a facility-per-population ratio was calculated using the 2000 Census Data and TRI database. The ratio was calculated for each county using the equation:

$$FPP_c (\text{Facility-per-Person}) = P(\text{Population of county}) / F(\text{\# of TRI facilities in county})$$

To calculate total TRI chemicals released per county, all TRI releases (including air, water, land, and other) were totaled. We examined total releases because we assumed that this measure would be a good indicator of the cumulative burden of toxic chemicals released from all sources (TRI and non-TRI sources). Thus, counties with high aggregate TRI releases would have a higher concentration of other EPA regulated facilities than counties with lower aggregate TRI releases. Pearson's correlations were calculated to assess the strength of association between population-level exposures and preterm child delivery and infant birth weight. Linear regression was used in modeling and quantifying data as well to detect associations between exposure and covariates.

Results

Figure 1 shows the trend of both total TRI releases and the number of TRI facilities in South Carolina from 1995-2005. Over the period, TRI releases increased more than 13 million pounds, having a significant peak in 1997, peaking in 1998, and declining in 1999. The period

ended with more than 76 million pounds of TRI emissions. Concurrently, over the same period, the number of TRI facilities in South Carolina increased as well, having its highest peak in 2001. The period ended with 526 reported TRI facilities.

Both the percentage of preterm births and infants with low birth weight increased over the study period (1995-2005). Preterm births increased from 9.6% to 12.7% and the percentage of infants with low birth weight increased from 9.1 to 10.1. Table 1 shows demographic characteristics for preterm infants and newborns with low birth weight. African -Americans accounted for about 43% of pre-term infants. Approximately 88% of preterm infants were born to mothers between the ages of 18-34. Approximately 60% of the pre-term births were also considered to have low birth weight (< 2500 g). Among children with low birth weight, half of the children were African-American and approximately 88% were born to mothers 18-34. Among children with low birth weight, 70% were born preterm (< 37 weeks).

Although African-American mothers made up about a third of the newborn population, African Americans accounted for 43% of preterm infants, compared to 56% of whites. The same disparities also exist among infants with low birth weight. The percentage of African-American LBW infants (50.3%) was slightly higher than that of whites (48.2%). Close to 70% of infants with low birth weight were preterm infants, which explains the strong correlation ($p < .0001$).

Figures 2 and 3 show the distribution of Low Birth Weight and Preterm births in South Carolina. Among children with Low Birth Weight, the highest percentage was seen among central to eastern counties of South Carolina, especially in Williamsburg and Clarendon counties (10.4%-14.4%). The northwestern region of the state showed the lowest percentages of children with Low Birth Weight (7.3%-9.4%). The same trends can be seen among preterm births across

the state, with many counties having both high percentages of Low Birth Weight and Preterm births (i.e., Williamsburg, Clarendon, and McCormick).

Figure 4 shows the distribution of TRI facilities and Blacks in South Carolina. Spartanburg and Greenville (NW region of SC) had the highest number of TRI facilities across the state (57 and 61, respectively). The highest concentration of Blacks was found in Williamsburg (66.3%), Orangeburg (60.9%), Allendale (71%), Lee (63.6), and Fairfield (59.1%) counties. Williamsburg, Clarendon, Marion, and Allendale also had high percentages of Low Birth Weight and Preterm births, 14.4% & 13.5%, 12.5% & 14%, 12.5% & 13%, and 12.9% & 12.1%, respectively.

Figure 5 shows the distribution of TRI releases and Blacks in South Carolina. Unlike the distribution of TRI facilities, the highest amount of TRI releases was found in the Eastern coastal region of the state (mainly Georgetown, Berkeley, and Richland counties). We observed in Georgetown (6,348,662 lbs) & Berkeley (10,398,993 lbs) large amounts of TRI releases, as well as above average rates for Preterm births (11.7% & 11.2%) and Low Birth Weight (11.2% & 8.6%). This trend, along with the relatively high concentration of Blacks in the area shows the co-occurrence of high disparities and environmental injustice. Counties with high concentrations of Blacks not only had high percentages of Preterm births and children with Low Birth Weight, but also a higher burden of TRI releases.

Figure 6 shows the distribution of poverty in South Carolina. For example, Allendale, Williamsburg, and Bamberg had the highest levels of poverty (30.9%, 27.7%, and 26.4%, respectively) in the state, but also rank high in levels of percent African-American (71%, 66.3%, and 62.5%, respectively). These same counties also share disparities among Preterm and Low

Birth Weight infants. For example, in Williamsburg County, 13.5% of all infants are born preterm and 14.4% of all infants born were considered Low Birth Weight.

Pearson coefficients between TRI releases and preterm delivery were insignificant for all periods. Total number of facilities were only significant for the 2000 to 2005 time-period ($p=0.0395$) and not the 1995 to 2000 time-period. The correlation between the number of facilities and low birth weight were significant for all three periods: 1995-2000 ($p=0.0217$), 2000-2005 ($p=0.0061$) and 1995-2005 ($p=0.0094$). Pearson coefficients between population-facility ratio and low birth weight were not significant for any time-period.

Table 2 also shows the results from linear regression analyses between preterm delivery and covariates across all three periods. From 1995-2005, only race ($p=.004$) and median housing value ($p=.004$) were significant. From 2001-2005, race ($p=.0003$), income ($p<.0001$), median housing value ($p=.0008$), and percent below poverty ($p=.0008$) were all significant. Regression analyses from 1995-2005 showed that all covariates except mother's education were significant. Mother's education (less than high school completed) was insignificant for all three periods. Regression analyses for low birth weight and covariates again showed mother's education was insignificant for all three periods. All other covariates were highly significant, yielding positive associations.

Overall, the total waste release and number of facilities increased from 1995 to 2005, while the number of preterm infants and infants with low birth weight increased as well. Higher levels of TRI levels were seen in highly populated areas of Richland (location of state capital), Greenville, and Charleston counties. Counties along the coast, including Charleston, Berkley, Georgetown, made up 30% of the total TRI releases for the state during the study period. These

same counties also had high levels of preterm delivery and infants with low birth weight, as well as high concentrations of African-Americans.

Discussion and Conclusions

Aggregate data from the study has shown a differential distribution of TRI facilities and releases in South Carolina. TRI facilities and releases were higher along the coast, in the Midlands, and Upstate areas of the state. Counties with the highest population, also have the highest levels of toxic waste emissions. This problem was exacerbated when race was included in our analyses. Counties with the highest population of African-American mothers also had the highest concentration of total toxic chemical releases. These same areas also had the highest percentage of preterm infants in the state and had higher percentage of individuals living below poverty and lower median housing values than counties with higher SES populations.

Although this study did provide knowledge about linkages between preterm births, low birth weight and TRI distribution in South Carolina, there were several study limitations. Because of the ecological study design and the use of aggregate data, we cannot attribute the county level findings to individual level factors (ecological fallacy). The study design also made it difficult to conduct stronger analyses, which would have benefited from the ability to categorize data. In addition, because the data was extrapolated and manually entered from multiple data sets, there could be bias resulting from human error. This bias could have lead to non- differential misclassification and weakening these associations, when in fact these correlations are stronger. There is also missing data on the mother, such as diet, pregnancy behaviors, and socioeconomic status. This could have contributed to potential misclassification as well.

Another limitation is the use of county data, instead of census block group and census tract data, which we were unable to use due to the ecological study design. Use of census tract data would have provided a more precise and accurate measures of TRI emissions and residential exposure.

To date, there has not been a study of this type conducted in South Carolina. Most of the studies have been conducted in the Northeast or Western region of the United States. With the number of preterm births in South Carolina and potential for increased TRI releases and toxic emissions due to manufacturing and shipping development along the coastal region of the state, higher health risks may be possible.

Health Policy and Programs Analysis

The growing problem with preterm birth and low birth weight in the United States not only creates emotional strain on the immediate families affected, but also creates an economic strain and negatively impacts current health policies and programs. Preterm births account for more than 26 billion dollars a year (The National Academy of Sciences & Committee on Understanding Premature Birth and Assuring Healthy Outcomes, 2007), with the largest portion (40%) of these costs paid by Medicaid (Russell et al., 2005). Other federal and state programs, such as State Children's Health Insurance Program (SCHIP) and Title V Maternal & Child Health Programs, also consume significant portions of health costs related to birth outcomes. The increase in preterm birth and low birth weight rates will add more strain to existing federal and state programs that not only account for immediate birth problems, but chronic health conditions that surviving children are likely to endure. This also creates an additional strain on the existing status of healthcare as the number of children in poverty (18%) and without health insurance (12%) continues to increase (U.S.Census Bureau, 2007).

Although Medicaid has gone through great expansions to ensure more women are covered and increase insurance coverage of health costs, these improvements have not reduced preterm birth rates and low birth weight rates (Piper et al., 1990; Haas et al., 1993; Ray et al., 1997). Much of this failure can be attributed to the fact that prenatal care does not focus much of its efforts on preterm birth, due to the uncertainty of exact causes. Many of these programs focus on risk factors that are more behavior driven (i.e., smoking, alcohol) and not on greater societal impacts (i.e., socioeconomic status, access to adequate healthcare).

Several other national and state programs, such as March of Dimes, Preterm Birth Prevention Program, and South Carolina Black Infants Better Survival (SCBIBS), have been implemented to provide prenatal education and address problems with preterm and LBW births, yet these programs are limited in their outreach and have not been as effective as they should be. Many of these programs offer hospital based interventions and have a negative stigma among those with limited access to healthcare. These programs need to focus more on community-based interventions that work with religious institutions and female-based businesses (i.e. beauty salons, nail shops)

There is also policy reform needed in the regulation of toxic wastes in underserved communities, especially among minorities and pregnant women. This study has shown the existence of environmental justice issues in South Carolina. Even though the state is not very large in land area, population size and waste emissions, these issues exist. Lawmakers should use evidence from this study and future studies to help develop statewide plans for better monitoring of waste disposal and decrease the burden of toxic emissions on EJ communities. These plans should incorporate the development of a statewide geographic information systems (GIS) tracking database of newborns and residential proximity to toxic waste facilities. This will

show cases of preterm and LBW births and their distance to nearest facility and allow us to spatially examine exposure risks. All “hot spot” areas should be defined and once confirmed, residents should be notified about their potential risk.

Community involvement is very important in planning effective environmental interventions. All statewide and national initiatives must include representation from residents of the most affected areas, as they have a vested interest to ensure the safety and health of their communities. Community input must begin in the dialogue stage of solutions and must continue through the legislative and enforcement process to ensure effective follow-through.

Recommendations

As we journey to achieve Healthy People 2010’s goal of reducing health disparities, several changes and improvements to existing research, policy and programming must be made in order to bring us closer to those goals. Listed below are three major recommendations:

1. Additional research on birth outcomes that utilizes innovative techniques is needed to clarify exposure-outcome relationships. More research on birth outcomes is needed to provide better information on all pregnancy-related exposures. Specifically, more longitudinal studies are needed to not only provide information on 9 months of pregnancy, but before conception and after birth. Knowing the great influence of maternal behaviors on birth outcomes, it is very important to gather information on all maternal exposures and behaviors before conception. Equally important is the need to follow infants into adulthood and not only understand the effects of preterm birth and low birth weight on adult health, but to understand the possible repetitious cycle across multiple generations.

In addition, database usage must be improved to increase efficiency and effectiveness of scientific research. State and national birth records need to be linked to adult health records and provide a more holistic view of an individual's health. Subsequently, this data should be linked with existing environmental data to better understand environmental exposures and birth outcomes. Environmental data also needs to be improved to provide a more concise depiction of the state of environmental hazards. Although the use of TRI facilities was effective, they do not provide the entire picture. TRI facilities do not include all facilities that emit hazardous air pollutants (HAPs). Existing databases, such as the EPA's Aerometric Information Reporting System (AIRS) should be combined with state health data and other reporting systems to provide more information.

Limitations- As always with longitudinal studies, time and money become great problems. Follow up on individuals for at least 18 years will have an exorbitant cost and be a demanding task on researchers.

2. Improvements must be made in public health interventions and programs to address disparities in birth outcomes. Most interventions designed at addressing pregnancy outcomes focus solely on prenatal care and the 9 month pregnancy period. These interventions need to look beyond prenatal care and look at healthy child rearing strategies. This ensures that these children become healthy adults who produce healthy children.

Limitations- Finding appropriate and sufficient money and resources becomes problematic in order to address these concerns. Lengthy interventions require time and money to ensure they are executed properly.

3. Improvements to overall community health must be made to ensure the health of mothers and their children. Healthy communities are needed to promote healthy lifestyles and

improve social conditions that have negative effects on women and their children. Minority and socioeconomically disadvantaged neighborhoods have a greater exposure to negative living conditions that lead to higher burden of disease and disparities. Revitalization efforts are needed to improve these conditions. As long as these neighborhoods remain in their current state, health disparities will persist and widen. Creating healthy communities will require an evaluation of the existing infrastructure to understand the needs of underserved communities. In addition, revitalization efforts must take into account existing resources (i.e., jobs, schools, supermarkets) and pathogens (i.e. pollution, crime). After this evaluation, new zoning, planning, and development initiatives are needed to make these communities healthier and increase quality of life and opportunity structures.

Limitations-This will most likely require significant policy changes on the local, state, and federal level. Policy changes require both time and resources, two things that are scarce in minority and economically disadvantaged communities. For these types of changes to take place, they must first start within the community. Community organizations must build capacity in their organizations to mobilize the community around these concerns and work with other stakeholders to address these concerns. As the mobilization begins, the importance of time must be stressed, as it may take five years, ten years, or even longer for significant changes.

Acknowledgements: We would like to acknowledge the University of South Carolina's Institute for Families in Society for providing funding and other resources for this research.

Reference

- Ahern, J., Pickett, K. E., Selvin, S., & Abrams, B. (2003). Preterm birth among African American and white women: a multilevel analysis of socioeconomic characteristics and cigarette smoking. *J Epidemiol. Community Health, 57*, 606-611.
- Ahmad, S. A., Sayed, M. H., Barua, S., Khan, M. H., Faruquee, M. H., Jalil, A. et al. (2001). Arsenic in drinking water and pregnancy outcomes. *Environ. Health Perspect., 109*, 629-631.
- Bentov, Y., Kordysh, E., Hershkovitz, R., Belmaker, I., Polyakov, M., Bilenko, N. et al. (2006). Major congenital malformations and residential proximity to a regional industrial park including a national toxic waste site: an ecological study. *Environ. Health, 5*, 8.
- Berkowitz, G. S., Blackmore-Prince, C., Lapinski, R. H., & Savitz, D. A. (1998). Risk factors for preterm birth subtypes. *Epidemiology, 9*, 279-285.
- Berry, M. & Bove, F. (1997). Birth weight reduction associated with residence near a hazardous waste landfill. *Environ. Health Perspect., 105*, 856-861.
- Blackmore, C. A., Ferre, C. D., Rowley, D. L., Hogue, C. J., Gaiter, J., & Atrash, H. (1993). Is race a risk factor or a risk marker for preterm delivery? *Ethn. Dis., 3*, 372-377.
- Blackmore, C. A., Savitz, D. A., Edwards, L. J., Harlow, S. D., & Bowes, W. A., Jr. (1995). Racial differences in the patterns of preterm delivery in central North Carolina, USA. *Paediatr. Perinat. Epidemiol., 9*, 281-295.
- Bobak, M. & Leon, D. A. (1999). Pregnancy outcomes and outdoor air pollution: an ecological study in districts of the Czech Republic 1986-8. *Occup. Environ. Med., 56*, 539-543.
- Bowen, W. M., Salling, M. J., Haynes, K. E., & Cyran, E. J. (1995). Toward Environmental Justice: Spatial Equity in Ohio and Cleveland. *Annals of the Association of American Geographers, 85*, 641-663.
- Brauer, M., Lencar, C., Tamburic, L., Koehoorn, M., Demers, P., & Karr, C. (2008). A cohort study of traffic-related air pollution impacts on birth outcomes. *Environ. Health Perspect., 116*, 680-686.
- Brender, J. D., Zhan, F. B., Suarez, L., Langlois, P., Gilani, Z., Delima, I. et al. (2006). Linking environmental hazards and birth defects data. *Int. J. Occup. Environ. Health, 12*, 126-133.
- Brooks, A. M., Byrd, R. S., Weitzman, M., Auinger, P., & McBride, J. T. (2001). Impact of low birth weight on early childhood asthma in the United States. *Arch. Pediatr. Adolesc. Med., 155*, 401-406.
- Bullard, R. D. (2000). *Dumping in Dixie: Race, Class, and Environmental Quality*. Boulder: Westview Press.

- Bullard, R. D., Mohai, P., Saha, R., & Wright, B. (2007). *Toxic Wastes and Race at Twenty: 1987-2007- Grassroots Struggles to Dismantle Environmental Racism in the U.S.* New York: United Church of Christ.
- Cherkes-Julkowski, M. (1998). Learning disability, attention-deficit disorder, and language impairment as outcomes of prematurity: a longitudinal descriptive study. *J Learn.Disabil.*, 31, 294-306.
- Chiolero, A., Bovet, P., & Paccaud, F. (2005). Association between maternal smoking and low birth weight in Switzerland: the EDEN study. *Swiss.Med.Wkly.*, 135, 525-530.
- Choi, H. S., Shim, Y. K., Kaye, W. E., & Ryan, P. B. (2006). Potential residential exposure to toxics release inventory chemicals during pregnancy and childhood brain cancer. *Environ.Health Perspect.*, 114, 1113-1118.
- Curhan, G. C., Chertow, G. M., Willett, W. C., Spiegelman, D., Colditz, G. A., Manson, J. E. et al. (1996a). Birth weight and adult hypertension and obesity in women. *Circulation*, 94, 1310-1315.
- Curhan, G. C., Willett, W. C., Rimm, E. B., Spiegelman, D., Ascherio, A. L., & Stampfer, M. J. (1996b). Birth weight and adult hypertension, diabetes mellitus, and obesity in US men. *Circulation*, 94, 3246-3250.
- da Silva, A. A., Simoes, V. M., Barbieri, M. A., Bettiol, H., Lamy-Filho, F., Coimbra, L. C. et al. (2003). Young maternal age and preterm birth. *Paediatr.Perinat.Epidemiol.*, 17, 332-339.
- Dolinoy, D. C. & Miranda, M. L. (2004). GIS modeling of air toxics releases from TRI-reporting and non-TRI-reporting facilities: impacts for environmental justice. *Environ.Health Perspect.*, 112, 1717-1724.
- Downey, L. (1998). Environmental injustice: Is race or income a better predictor? *Social Science Quarterly*, 79, 766-778.
- Dummer, T. J., Dickinson, H. O., & Parker, L. (2003). Prevalence of adverse pregnancy outcomes around hazardous industrial sites in Cumbria, north-west England, 1950-93. *Paediatr.Perinat.Epidemiol.*, 17, 250-255.
- Elliott, P., Briggs, D., Morris, S., de, H. C., Hurt, C., Jensen, T. K. et al. (2001). Risk of adverse birth outcomes in populations living near landfill sites. *BMJ*, 323, 363-368.
- Faber, D. R. & Krieg, E. J. (2002). Unequal exposure to ecological hazards: environmental injustices in the Commonwealth of Massachusetts. *Environ.Health Perspect.*, 110 Suppl 2, 277-288.
- Grunau, R. E., Whitfield, M. F., & Davis, C. (2002). Pattern of learning disabilities in children with extremely low birth weight and broadly average intelligence. *Arch.Pediatr.Adolesc.Med.*, 156, 615-620.

- Haas, J. S., Udvarhelyi, I. S., Morris, C. N., & Epstein, A. M. (1993). The effect of providing health coverage to poor uninsured pregnant women in Massachusetts. *JAMA*, *269*, 87-91.
- Hultman, C. M., Sparen, P., & Cnattingius, S. (2002). Perinatal risk factors for infantile autism. *Epidemiology*, *13*, 417-423.
- Jackson, D. J., Batiste, E., & Rendall-Mkosi, K. (2007). Effect of smoking and alcohol use during pregnancy on the occurrence of low birthweight in a farming region in South Africa. *Paediatr.Perinat.Epidemiol.*, *21*, 432-440.
- Joseph, C. L., Ownby, D. R., Peterson, E. L., & Johnson, C. C. (2002). Does low birth weight help to explain the increased prevalence of asthma among African-Americans? *Ann.Allergy Asthma Immunol.*, *88*, 507-512.
- Kogan, M. D., Alexander, G. R., Kotelchuck, M., & Nagey, D. A. (1994). Relation of the content of prenatal care to the risk of low birth weight. Maternal reports of health behavior advice and initial prenatal care procedures. *JAMA*, *271*, 1340-1345.
- Krueger, P. M. & Scholl, T. O. (2000). Adequacy of prenatal care and pregnancy outcome. *J Am.Osteopath.Assoc.*, *100*, 485-492.
- Limperopoulos, C., Bassan, H., Sullivan, N. R., Soul, J. S., Robertson, R. L., Jr., Moore, M. et al. (2008). Positive screening for autism in ex-preterm infants: prevalence and risk factors. *Pediatrics*, *121*, 758-765.
- Maantay, J. (2001a). Zoning, equity, and public health. *Am.J Public Health*, *91*, 1033-1041.
- Maantay, J. (2001b). Zoning, equity, and public health. *Am.J Public Health*, *91*, 1033-1041.
- Maisonet, M., Bush, T. J., Correa, A., & Jaakkola, J. J. (2001). Relation between ambient air pollution and low birth weight in the Northeastern United States. *Environ.Health Perspect.*, *109 Suppl 3*, 351-356.
- Maroziene, L. & Grazuleviciene, R. (2002). Maternal exposure to low-level air pollution and pregnancy outcomes: a population-based study. *Environ.Health*, *1*, 6.
- Marshall, E. G., Gensburg, L. J., Deres, D. A., Geary, N. S., & Cayo, M. R. (1997). Maternal residential exposure to hazardous wastes and risk of central nervous system and musculoskeletal birth defects. *Arch.Environ.Health*, *52*, 416-425.
- Martin, J. A., Hamilton, B. E., Sutton, P. D., Ventura, S. J., Menacker, F., & Kirmeyer, S. (2006). Births: final data for 2004. *Natl.Vital Stat.Rep.*, *55*, 1-101.
- McDermott, S., Cokert, A. L., & McKeown, R. E. (1993). Low birthweight and risk of mild mental retardation by ages 5 and 9 to 11. *Paediatr.Perinat.Epidemiol.*, *7*, 195-204.

- McGrady, G. A., Sung, J. F., Rowley, D. L., & Hogue, C. J. (1992). Preterm delivery and low birth weight among first-born infants of black and white college graduates. *Am.J Epidemiol.*, *136*, 266-276.
- Mervis, C. A., Decoufle, P., Murphy, C. C., & Yeargin-Allsopp, M. (1995). Low birthweight and the risk for mental retardation later in childhood. *Paediatr.Perinat.Epidemiol.*, *9*, 455-468.
- Mitchell, J. T., Thomas D.S.K., & Cutter, S. L. (1999). Dumping in Dixie revisited: the evolution of environmental injustices in South Carolina. *Social Science Quarterly*, *80*, 229-243.
- Morello-Frosch, R. & Lopez, R. (2006). The riskscape and the color line: examining the role of segregation in environmental health disparities. *Environ.Res*, *102*, 181-196.
- Morello-Frosch, R. & Shenassa, E. D. (2006). The environmental "riskscape" and social inequality: implications for explaining maternal and child health disparities. *Environ.Health Perspect.*, *114*, 1150-1153.
- Morello-Frosch, R. A., Woodruff, T. J., Axelrad, D. A., & Caldwell, J. C. (2000). Air toxics and health risks in California: the public health implications of outdoor concentrations. *Risk Anal.*, *20*, 273-291.
- Parker, J. D., Schoendorf, K. C., & Kiely, J. L. (1994). Associations between measures of socioeconomic status and low birth weight, small for gestational age, and premature delivery in the United States. *Ann.Epidemiol.*, *4*, 271-278.
- Peacock, J. L., Bland, J. M., & Anderson, H. R. (1995). Preterm delivery: effects of socioeconomic factors, psychological stress, smoking, alcohol, and caffeine. *BMJ*, *311*, 531-535.
- Piper, J. M., Ray, W. A., & Griffin, M. R. (1990). Effects of Medicaid eligibility expansion on prenatal care and pregnancy outcome in Tennessee. *JAMA*, *264*, 2219-2223.
- Prysak, M., Lorenz, R. P., & Kisly, A. (1995). Pregnancy outcome in nulliparous women 35 years and older. *Obstet Gynecol*, *85*, 65-70.
- Pulido, L. (2000). Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers*, *90*, 12-40.
- Ray, W. A., Mitchel, E. F., Jr., & Piper, J. M. (1997). Effect of Medicaid expansions on preterm birth. *Am.J.Prev.Med.*, *13*, 292-297.
- Reynolds, P., Von, B. J., Gunier, R. B., Goldberg, D. E., Hertz, A., & Smith, D. F. (2003). Childhood cancer incidence rates and hazardous air pollutants in California: an exploratory analysis. *Environ.Health Perspect.*, *111*, 663-668.

- Rich-Edwards, J. W., Buka, S. L., Brennan, R. T., & Earls, F. (2003). Diverging associations of maternal age with low birthweight for black and white mothers. *Int.J.Epidemiol.*, *32*, 83-90.
- Ritz, B., Wilhelm, M., Hoggatt, K. J., & Ghosh, J. K. (2007). Ambient air pollution and preterm birth in the environment and pregnancy outcomes study at the University of California, Los Angeles. *Am.J Epidemiol.*, *166*, 1045-1052.
- Ritz, B., Wilhelm, M., & Zhao, Y. (2006). Air pollution and infant death in southern California, 1989-2000. *Pediatrics*, *118*, 493-502.
- Ritz, B. & Yu, F. (1999). The effect of ambient carbon monoxide on low birth weight among children born in southern California between 1989 and 1993. *Environ.Health Perspect.*, *107*, 17-25.
- Ritz, B., Yu, F., Chapa, G., & Fruin, S. (2000). Effect of air pollution on preterm birth among children born in Southern California between 1989 and 1993. *Epidemiology*, *11*, 502-511.
- Ritz, B., Yu, F., Fruin, S., Chapa, G., Shaw, G. M., & Harris, J. A. (2002). Ambient air pollution and risk of birth defects in Southern California. *Am.J Epidemiol.*, *155*, 17-25.
- Rowley, D. L., Hogue, C. J., Blackmore, C. A., Ferre, C. D., Hatfield-Timajchy, K., Branch, P. et al. (1993). Preterm delivery among African-American women: a research strategy. *Am.J.Prev.Med.*, *9*, 1-6.
- Russell, R., Green, N., Steiner, C., Meikle, S., Poschman, K., Potetz, L. et al. (2005). *The National Bill for Hospitalizations of Premature Infants in the United States, Working Paper* Washington,DC: March of Dimes.
- Savitz, D. A., Andrews, K. W., & Pastore, L. M. (1995). Drinking water and pregnancy outcome in central North Carolina: source, amount, and trihalomethane levels. *Environ.Health Perspect.*, *103*, 592-596.
- Schendel, D. & Bhasin, T. K. (2008). Birth weight and gestational age characteristics of children with autism, including a comparison with other developmental disabilities. *Pediatrics*, *121*, 1155-1164.
- Scholl, T. O. (2008). Maternal nutrition before and during pregnancy. *Nestle.Nutr.Workshop Ser.Pediatr.Program*, *61*, 79-89.
- Scholl, T. O., Hediger, M. L., Schall, J. I., Fischer, R. L., & Khoo, C. S. (1993). Low zinc intake during pregnancy: its association with preterm and very preterm delivery. *Am.J Epidemiol.*, *137*, 1115-1124.
- Scholl, T. O., Hediger, M. L., Schall, J. I., Khoo, C. S., & Fischer, R. L. (1996). Dietary and serum folate: their influence on the outcome of pregnancy. *Am.J Clin Nutr.*, *63*, 520-525.

- Scholl, T. O. & Johnson, W. G. (2000). Folic acid: influence on the outcome of pregnancy. *Am.J Clin Nutr.*, *71*, 1295S-1303S.
- Shaheen, S. O., Sterne, J. A., Montgomery, S. M., & Azima, H. (1999). Birth weight, body mass index and asthma in young adults. *Thorax*, *54*, 396-402.
- Sheppard, E., Leitner, H., McMaster, R. B., & Tian, H. (1999). GIS-based measures of environmental equity: exploring their sensitivity and significance. *J Expo.Anal.Environ.Epidemiol.*, *9*, 18-28.
- Spencer, N., Bambang, S., Logan, S., & Gill, L. (1999). Socioeconomic status and birth weight: comparison of an area-based measure with the Registrar General's social class. *J.Epidemiol.Community Health*, *53*, 495-498.
- The National Academy of Sciences & Committee on Understanding Premature Birth and Assuring Healthy Outcomes (2007). *Preterm Birth: Causes, Consequences, and Prevention*.
- Thompson, J. M., Irgens, L. M., Rasmussen, S., & Daltveit, A. K. (2006). Secular trends in socio-economic status and the implications for preterm birth. *Paediatr.Perinat.Epidemiol.*, *20*, 182-187.
- U.S.Census Bureau (2007). *Income, Poverty, and Health Insurance Coverage in the United States: 2006*.
- U.S.Census Bureau (2008). *2006 American Community Survey*.
- U.S.Environmental Protection Agency (2008). Toxics Release Inventory (TRI) Program. United States Environmental Protection Agency [On-line]. Available: <http://www.epa.gov/tri/>
- Wilhelm, M. & Ritz, B. (2005). Local variations in CO and particulate air pollution and adverse birth outcomes in Los Angeles County, California, USA. *Environ.Health Perspect.*, *113*, 1212-1221.
- Windham, G. C., Zhang, L., Gunier, R., Croen, L. A., & Grether, J. K. (2006). Autism spectrum disorders in relation to distribution of hazardous air pollutants in the san francisco bay area. *Environ.Health Perspect.*, *114*, 1438-1444.

Figure 1. SC Toxic Release Inventory (TRI) Releases and Facilities Trend (1995-2005)

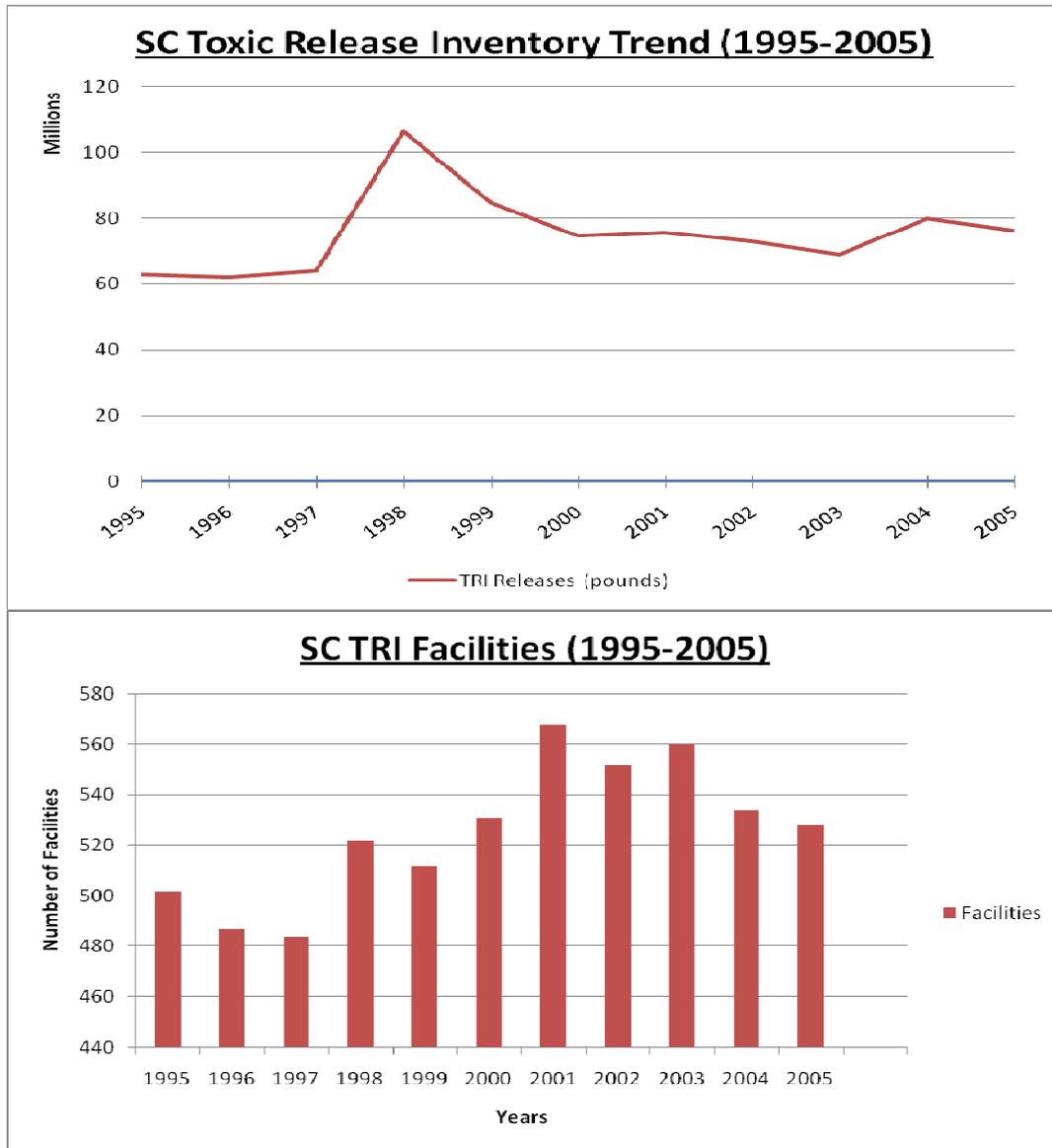


Figure 2: Distribution of Low Birth Weight in South Carolina

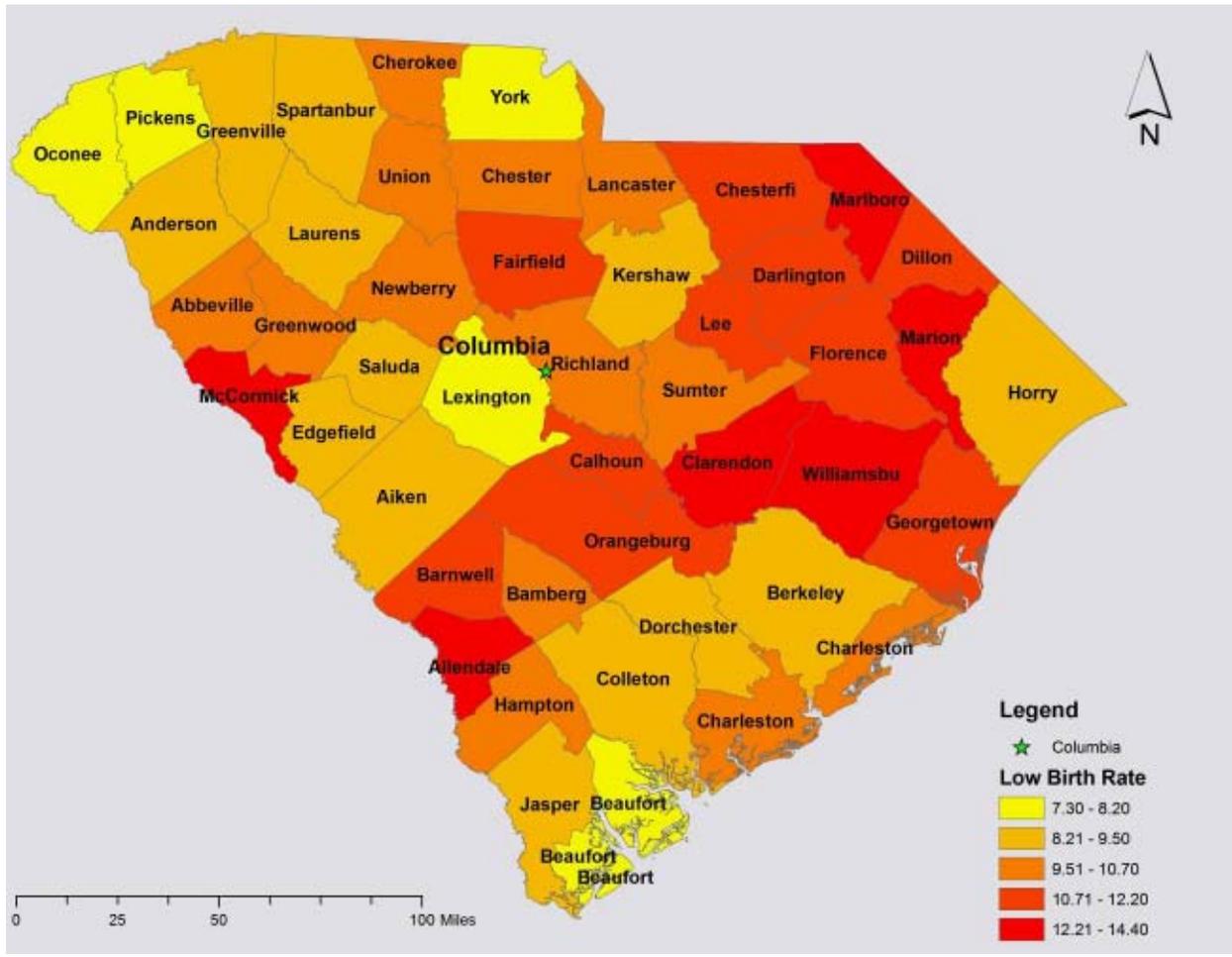


Figure 3: Distribution of Pre-Term Births in South Carolina

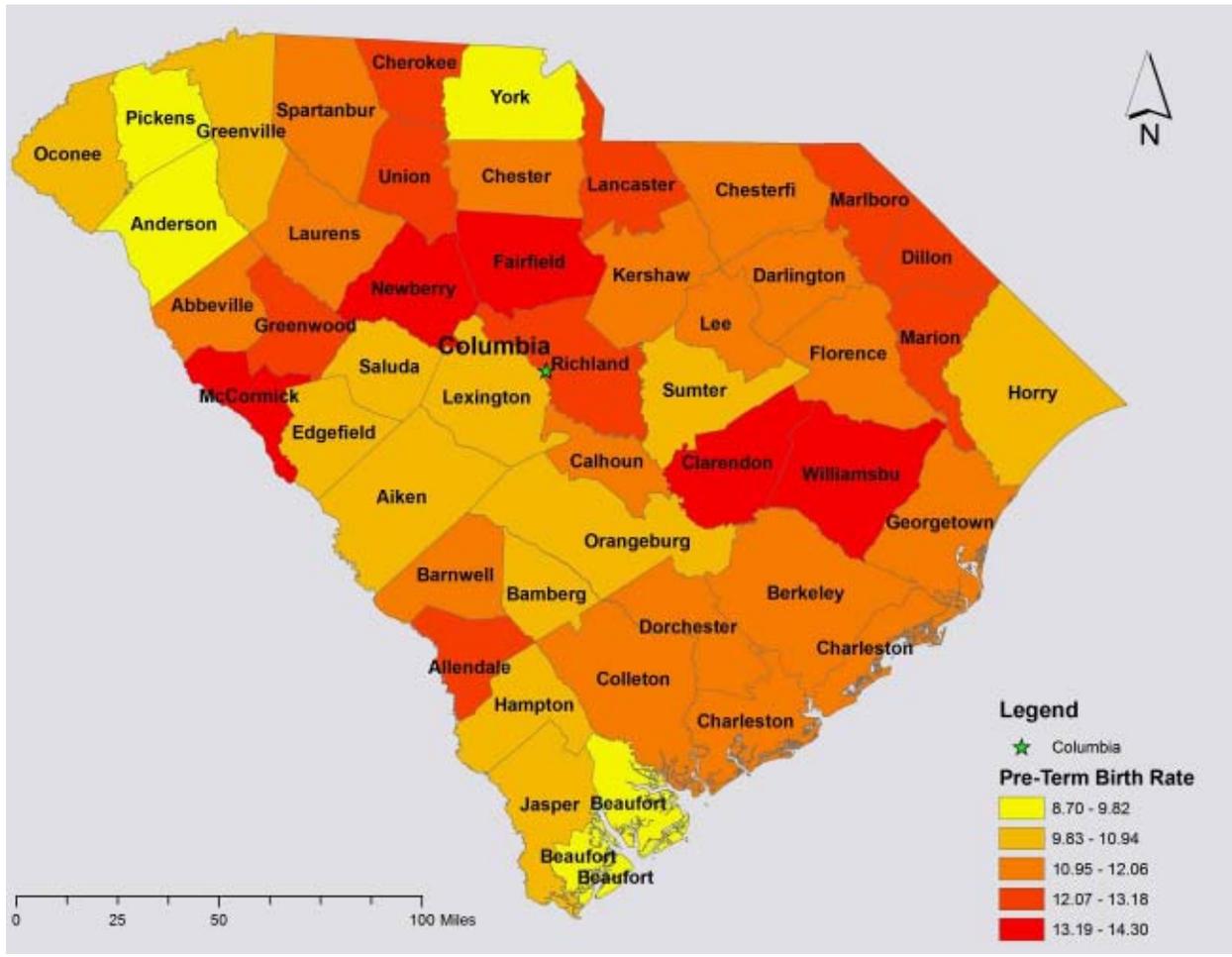


Figure 4: Distribution of TRI Facilities and Blacks in South Carolina

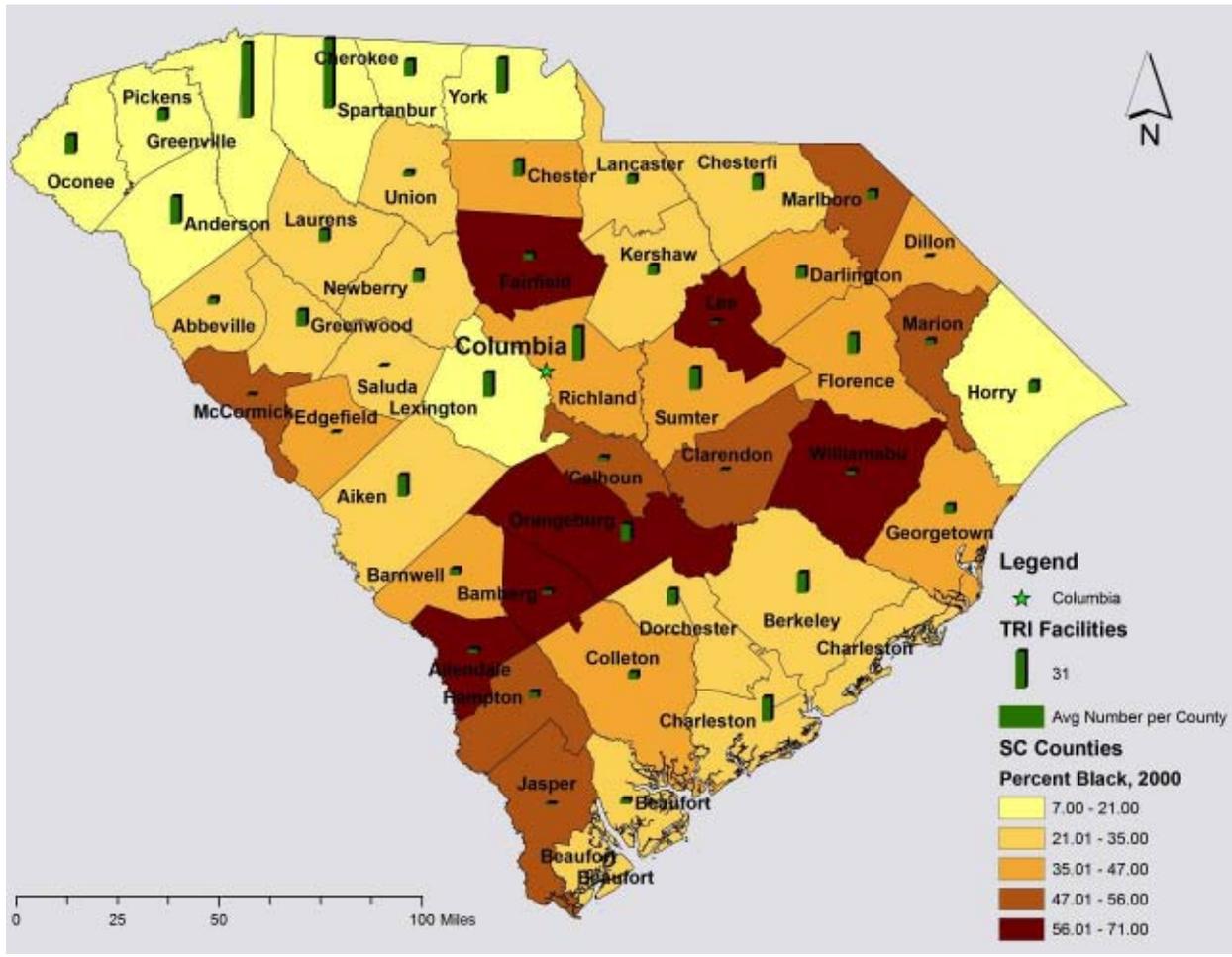


Figure 5: Distribution of TRI Releases and Blacks in South Carolina

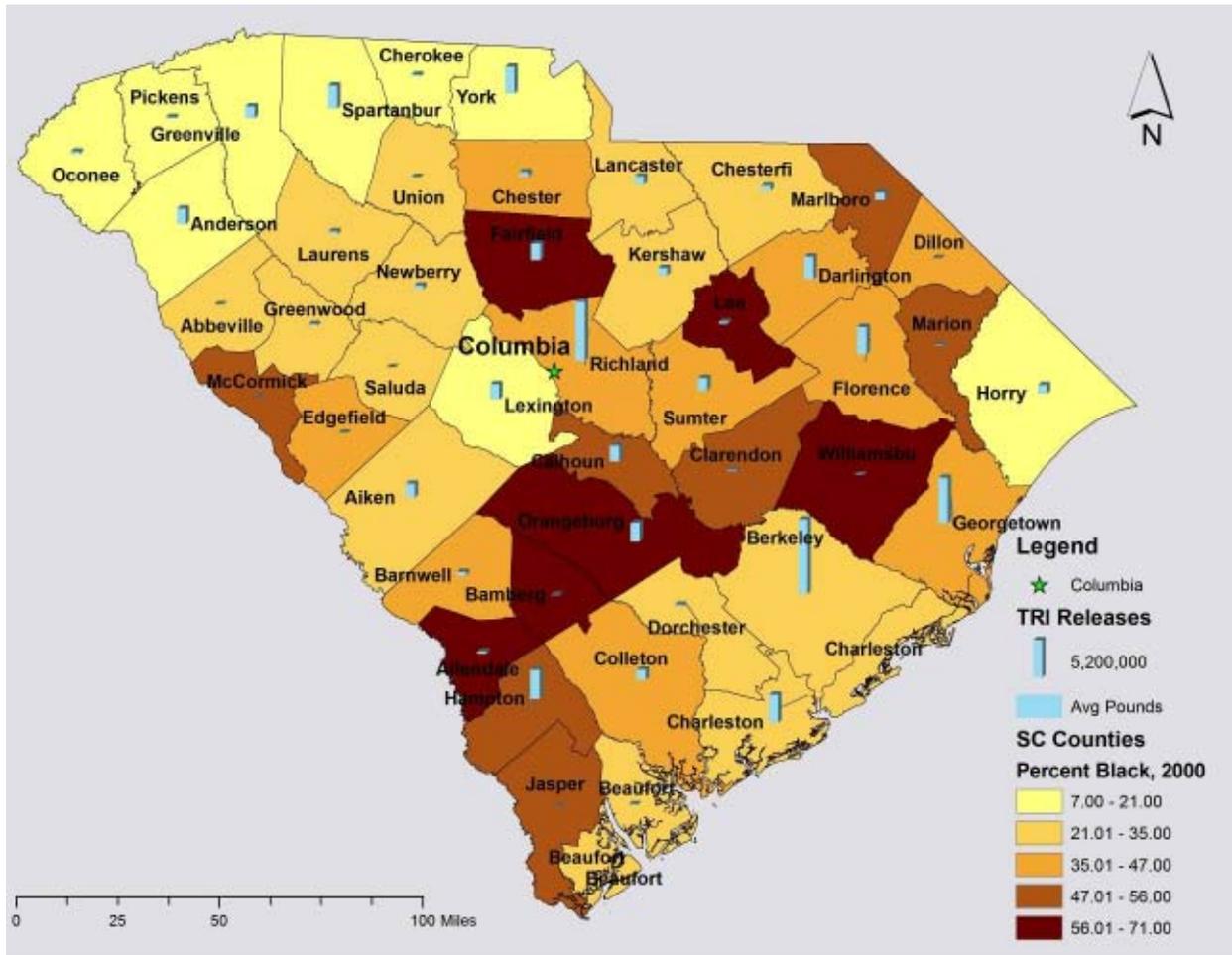


Table 1. Characteristics among Preterm and LBW Babies in South Carolina

	1995-2000	%	2001-2005	%	1995-2005	%
Preterm						
Maternal Race						
- White	16924	55.1	18363	57.1	35287	56.1
- Black	13408	43.6	13185	41.0	26593	42.3
- Other	407	1.3	522	1.7	959	1.5
Mother's Age						
- 18-34	27163	88.4	33238	87.7	55300	88.0
- 35+	3578	11.6	4689	12.3	7578	12.0
Birth weight						
- <2500 g	18673	60.8	18638	58.0	37311	59.3
- 2500 g +	12064	39.2	13481	42.0	25545	40.6
Low Birth Weight						
Maternal Race						
- White	13268	48.2	13075	49.7	26343	49
- Black	13846	50.3	12075	48.3	26554	49.3
- Other	388	1.4	497	1.9	885	1.6
Mother's Age						
- 18-34	24287	88.3	23133	87.9	47420	88.2
- 35+	3218	11.7	3175	12.1	6393	11.9
Gestation Age						
- Preterm	18673	68.5	18638	71.1	37311	69.7
- Term/Post	8616	31.5	7575	28.9	16191	30.3

Table 2. Associations between Preterm Delivery, LBW and Covariates (p-values)

	1995-2000	2000-2005	1995-2005
Preterm			
Population	0.2964	0.0133	0.0052
Race (% Black)	0.0043	0.0003	0.0004
Income	0.0680	<.0001	0.0030
Mother's Education (< High School)	0.677	0.1856	0.3035
Housing Value	0.004	0.0008	0.0012
Below Poverty (%)	0.1423	0.0008	0.0358
Low Birth Weight			
Population	0.0120	0.0014	0.0001
Race (% Black)	<.0001	<.0001	<.0001
Income	<.0001	<.0001	<.0001
Mother's Education (< High School)	0.4218	0.3087	0.3726
Housing Value	<.0001	<.0001	<.0001
Poverty (%)	<.0001	<.0001	<.0001

Teacher Education

NEW

White Teachers / Diverse Classrooms

A Guide to Building Inclusive Schools, Promoting High Expectations, and Eliminating Racism

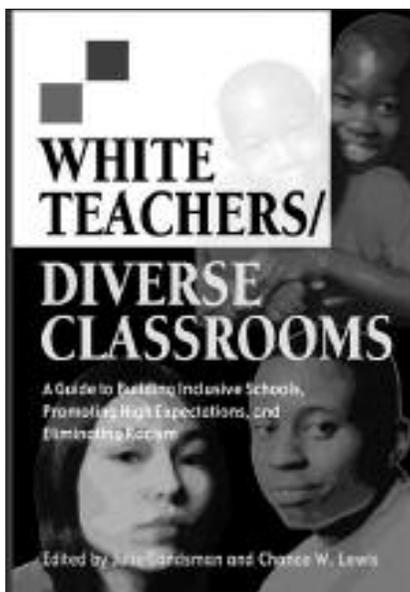
Edited by Julie Landsman and Chance W. Lewis

"This book is about one of the most persistent and well documented fault lines in our schools: the educational achievement gap between minority and non-minority students and the critical role of all teachers, particularly white teachers, in eliminating it. It is both a practical road map and an appeal to all teachers to re-dedicate themselves to ensuring that all students are prepared and can meet high educational standards."—**Mary H. Futrell**, *Dean of the Graduate School of Education & Human Development, The George Washington University and former president of the National Education Association*

"The preparation of a highly qualified teacher workforce has become a national priority. In an unusual turn, the discussion of 'quality' has centered solely on forms of knowledge and the ability to show the acquisition and demonstration of content and competencies. The place and importance of dispositions and clinical skill in teacher practice are largely absent from the national discourse. *White Teachers/Diverse Classrooms* is an intellectually rich conversation starter. This book explores the myriad considerations needed to create schools that serve all learners."—**Sharon P. Robinson**, *President and CEO, American Association of Colleges for Teacher Education*

By engaging in reflection and self examination, understanding how students can achieve and how to expect the most from them, and recognizing institutional racism when and where it occurs, teachers can transform the current state of education for African American students in the United States.

Both Black and White teachers here demon-



strate what's involved in terms of teachers recognizing often unconscious biases, surmounting stereotyping, adopting culturally relevant teaching, connecting with parents and the community, and integrating diversity in everything they do – and in so doing finding the path to leaving no child behind.

This book is replete with examples of practice and telling insights and will engage teachers in practice or in service. It should have a place in every classroom in colleges of education. Its empowering message applies not just to teachers of Black students, but will illuminate teaching in every racially diverse setting.

The Editors: Julie Landsman is a consultant and teacher in the Minneapolis Schools, and the author of *A White Teacher Talks about Race* (Scarecrow Press), acclaimed by *Publisher's Weekly* as "impressive" and "impassioned;" Chance W. Lewis is assistant professor at the School of Education, Colorado State University and founder and Chairperson of the African American Research Consortium.

320pp, 6" x 9"

Cloth, April 2006, 1-57922-146-7, \$45.00 (5)

Paper, April 2006, 1-57922-147-5, \$24.95 (3)

Stylus

Life Styles, Stressors and Health Status:
Differences among On-Campus and Off-Campus
African-American College Students

Terence Hicks, Ph.D.
Liwei Tang

Note: This study was supported by Grant Number P20 MD001089 from the National Center of Minority Health and Health Disparities, National Institutes of Health. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of National Institutes of Health

Life Styles, Stressors and Health Status: Differences among On-Campus and Off-Campus African-American College Students

The major purpose of this study was to conduct a baseline investigation of life-style, student life stressors and health status characteristics among on-campus and off-campus college students. The Health Behaviors, Self-Rated Health and Quality of Life (QOL) questionnaire was administered to 552 university college students. Results from this study determined that there were significant differences among life-styles, student life stressors and health status among on-campus and off-campus African-American college students. Most importantly this study documented compelling information regarding the risk for alcohol consumption, drug usage, student life stressors, physical and psychological problems and sexual behaviors among college students attending a university in North Carolina. Implications for university administrators and student affairs personnel, counselors and faculty are discussed.

Findings from the 1995 National College Health Risk Behavior Survey [NCHRBS] suggest that many college students engage in health risk behaviors including binge drinking, cigarette smoking, drug use, and unsafe sexual practices that increase their likelihood of serious health problems (i.e., unintentional and intentional injuries, unintended pregnancy, sexually transmitted diseases, HIV infection) (Douglas, K.A., Collins, J.L., Warren, C., Kann, L., Gold, R., Clayton, S., Ross, J. & Kolbe, L. (1997). Many health professionals have focused their efforts on the study of health issues and behaviors of college students (Dinger & Parsons, 1999; Page, Scanlan & Gilbert, 1999; Perkins, Meilman, Leichfiter, Cashin & Presley, 1999; Siegel, Klein & Roghmann, 1999; Wechsler & Dowdall, 1997). While these studies have provided valuable data about college health issues, each study has tended to emphasize a specific single set of behaviors

(i.e., tobacco use, sexual practices, alcohol and drug use). Nonetheless, it is important to emphasize that any single behavior is influenced by other health risk behaviors among young people and that there is an interrelationship among multiple behaviors (e.g., substance abuse and sexual practices) (Zweig, Lindberg & McGinley, 2001). In addition, college students' perceptions and opinions of the health risk behaviors have an impact on the way they ultimately behave. For example, students' perceptions of alcohol and drug use on college campuses have been associated with the student's own behavior (Page, et al., 1999; Perkins et al., 1999).

The university setting is not without its social problems as students have greater access to alcohol, Schall, Kemeny, and Maltzman (1992) have noted that students enrolled at a University are pressured by their friends and live in environments with licensed establishments that legitimize and make available alcohol substances. According to Valliant & Scanlan (1996), the peer influence is a known source of reinforcements that shapes behavior. Secondary school students enter the university setting and are subjected to social norms and expectations. For those who have high need for affiliation there is a tendency to seek out social groups. These authors' note that previously held beliefs and attitudes are adjusted to fit the social norm of university campus life. The present study sought to conduct a baseline investigation of life-style, student life stressors and health status characteristics among on-campus and off-campus college students.

Method

Participants

The college students were surveyed during the Fall 2005/Spring 2006 academic semesters. The majority of the 552 participants (81.2%) were college students between the ages of 18 and 23 years old and mostly African American (60.1%). Caucasian and Native American

participants made up 24.3% and 4.3% respectively. Sixty-four percent of the sample was female. Specific to university classification, there were freshmen (51.3%), sophomores (14.3%), juniors (17.6%), seniors (11.4%) graduate students (3.6%) and (1.8%) were just taking classes at that university. As far as living conditions, (60.1%) of the college students indicated that they were living on campus, (39.9%) lived off campus. Eighty-nine percent of the study sample was residents of North Carolina. Fifty-three percent of the participants were first-generation college students. A majority of the college students (37.7%) in this study indicated that they received student loans and support from their spouse or parents, 22.1% indicated that they received student loan and income from paid employment, 20.1% indicated that they received student loan and other source of income and 10.1% indicated they only received student loans.

Procedure

Students, who were enrolled in Fall 2005 and Spring 2006 courses at a participating 4-year public North Carolina universities, completed the QOL. After obtaining permission from the university Institutional Review Board (IRB), professors of both upper and lower level courses were contacted for an agreeable time to administer the survey. Before completing the survey, students signed an Informed Consent form. Each QOL answer sheet was assigned a number and entered into SPSS. Completed data sheets and signed consent forms were kept in separate locked cabinets.

Instrument

The 30-item questionnaire used in this study was the Health Behaviors, Self-Rated Health and Quality of Life (Vaez & Laflamme, 2004), also known as the Quality of Life (QOL) survey. For this study, six additional questions that addressed sexual behaviors and drugs were created by the researcher of this study and added to the original 30-item questionnaire. The authors of this study felt that the additional six questions could offer valuable information about the relationship of drugs and sexual behaviors as it relates to this unique group of on-campus and off-campus college students. In addition, a demographic section, which included questions, related to, for example, age, sex, race, and living conditions, was added to the QOL questionnaire. In addition to the questionnaire demographic section, the original QOL sections include Life-Style, Student Life Stressors, and Health Status.

Examples of health behavior variables assessed on the questionnaire included the frequency of alcohol consumed (never, once a month, 2-4 times a month, 2-3 times a week, 4 times a week or more) and, if they consumed, the typical amount of alcohol consumed on each occasion (1-2 glasses, 3-4 glasses, 5-6 glasses, 7-9 glasses, 10 glasses or more). To answer questions about cigarettes smoked, participants' response alternatives were "yes, daily," "yes, sometimes," or "no." Physical activity was assessed with a single question concerning the frequency of exercise on a 5-point scale (never, once a month, 2-4 times a month, 2-3 times a week, and 4 times a week or more). To answer questions related to life stressors over the preceding academic year, students chose between responses based on a 4-point scale (not at all stressed, slightly stressed, rather stressed, highly stressed). To answer questions related to perceived health status and quality of life, students rated their physical, psychological, and

overall health respectively on a 5-point scale (very good, good, neither good nor poor, poor, very poor). As a measure of psychological or psychosomatic problems, students responded to a 4-point scale (not at all, a little, quite a lot, and a lot). Three questions were “ladder questions.” A ladder question typically is introduced the following way: "Here is a picture of a ladder. At the bottom of the ladder, 1 is the worst life you might reasonably expect to have, and 10 at the top is the best life you might reasonably expect to have. Indicate where on the ladder your life is right now." According to Vaez and Laflamme (2004), this “ladder scale” is a widely recognized measure that has shown good validity. To answer questions about ever talking about HIV/AIDS infection with your parents or other adults in your family or ever taught about HIV/AIDS infection in any of your college courses, participants’ response alternatives were “yes,” “no,” or “not sure.” To answer the question ever had sexual intercourse, response alternatives were “yes,” or “no.” To answer the questions usage of alcohol or drugs before having sexual intercourse and the last time you had sexual intercourse, did you use a condom, response alternatives were “yes,” “no,” or “never had sexual intercourse.” To answer the question last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy, response alternatives were, “have never had sexual intercourse,” “no method,” “birth control pills,” “condom,” “diaphragm or sponge,” “withdrawal,” “some other method,” and “not sure.”

Results and Discussion

The data was analyzed question by question to determine the number and percent of responses for each choice by living conditions status. A chi-square test was conducted on all data using SPSS[®] (Statistical Package for the Social Sciences). All comparisons were made assuming an alpha = 0.05 significance level. Results from this study substantiated that there were significant differences among life styles, student life stressors and health status among

college students by living conditions. This study also presented compelling information regarding certain types of life styles, stressors, physical and psychological problems and sexual behaviors among college students at a North Carolina university.

Life-Style Characteristics by Living Conditions

As seen in Table 1, the “Life-Style” section of the questionnaire, question 11 – *if you do drink, what is the usual amount consumed on each occasion* revealed a significant difference between on-campus and off-campus college students ($X^2(4) = 11.696, p < .05$). A larger percentage of on-campus college students (12.8 percent) indicated that five or six glasses were consumed on each drinking occasion as opposed to 3.8 percent of the off-campus college students. In contrast, a similar study conducted by Valliant and Scanlan (1996) indicated that a greater number of students residing off campus in houses or apartments were at risk for alcohol addiction (20 out of 21, 95%); followed by those students residing on campus with 35 out of 45 (78%) students in the moderate or high category of risk for alcohol addiction. These authors noted that the least number of students at risk for alcohol addiction resided with their parents 7 out of 28 (61%) students in the moderate and high risk category. It was interesting to note that Valliant and Scanlan (1996) also found that when investigating male and female students residing in the three living arrangements, their study showed that male university students had a higher weekly consumption of alcohol than females. In addition, males were also found to be at greater risk for alcohol addiction. These findings were not consistent with the research of others when investigating male and female college students. Hicks and Miller (2006) findings showed that when consuming alcohol, more female college students (21.3 percent) reported that one or

two glasses were consumed on each drinking occasion. Only eight percent of the male college students indicated that just one or two glasses were consumed when drinking.

For question 12 - *do you smoke cigarettes* and question 13 - *do you use illegal drugs*, a larger proportion of on-campus college students (49.3 percent) and 50.2 percent responded they did not smoke cigarettes or use illegal drugs as opposed to (30.0 percent) and 35.2 percent of the off-campus college students respectively. These findings found on the on-campus college students not having an interest in smoking cigarettes and not using illegal drugs are consistent with a large health assessment national report. In an American College Health Association National College Health Assessment (ACHA-NCHA), Spring 2003 Reference Group Report, data collected on college students indicated that when investigating alcohol, tobacco, and other drug use; responses indicated that although 61.8% of students ($n = 11,978$) reported they never used cigarettes, 7.4% of students ($n = 1,416$) thought the typical student never used cigarettes. Whereas 17.5% of students ($n = 3,388$) reported never using alcohol, 1.8% of students ($n = 340$) thought the typical student never used alcohol. In addition, 63.7% of students ($n = 12,308$) reported they never used marijuana; by contrast, only 15.5% of students ($n = 2,973$) thought the typical student never used marijuana. In contrast, a Luquis (2003) indicated that substance use was seen as common among college students, with estimates of 80-90% of students using some type of drug. However, estimates of use were substantially lower (50-70%) when participants were asked to describe peer (i.e., friends) behaviors. Luquis noted that when asked to specify what substances students use, most agreed that alcohol, tobacco (i.e., cigarette), ecstasy, marijuana, and acid are the drugs of preference among students. Alcohol was identified as the most commonly used drug by students because of easy access and peer expectations.

Student Life Stressors Characteristics by Living Conditions

As seen in Table 2, the Student Life Stressors section of the questionnaire, a significant difference between on-campus and off-campus college students was found for question 15(e) – *poor housing*, ($X^2(3) = 31.395$, $p < .001$) and question 15(i) – *problems with friends*, ($X^2(3) = 17.481$, $p = .001$). When asked to rate the following potential sources of stress during the preceding academic year, more on-campus college students (19.3 percent and 23.2 percent) indicated that they were slightly stressed due to poor housing and problems with friends as opposed to the off-campus college students (6.4 percent and 10.3 percent) respectively. Even though not significant, similar differences were found for question 15(a) - *not coping academically*, 15(b) - *problems with professors* and 15(d) - *poor finances*. A larger percentage of on-campus college students than off-campus college students indicated that they were slightly stressed due to those problems.

It was interesting to find that for questions 15(c) - *problems with roommate*, 15(f) - *family problems*, 15(g) - *not having a relationship* and 15(h) – *relationship problems*, more on-campus college students responded that they were not at all stressed with these problems as opposed to the off-campus college students. It was somewhat interesting to note that the present study findings between on-campus and off-campus college students were consistent with a recent study conducted on gender and student life stressors. When investigating stressors along gender lines, Hicks and Miller (2006) found that a larger percentage of female college students as opposed to the male college students indicated that they were slightly stressed due to: trouble coping academically, poor finances and family problems. This finding on female and male college students is consistent with other researchers. Hudd, et al. (2000) found that the majority of females (63.8 percent) expressed feelings of higher levels of stress. In addition, Hudd et al. noted

that the vast majority (80 percent) of the students who did not participate in sports regularly reported high levels of stress. These findings on gender, levels of stress and exercising are consistent with the current study and quite consistent with the medical literature that suggests exercise serves to reduce stress.

Health Status Characteristics by Living Conditions

For question 17 – *rate your overall self-rated physical health status* and question 18 - *rate your overall self-rated psychological health status*, a larger proportion of on-campus college students (48.0 percent and 51.2 percent) responded on the questionnaire that their overall physical or psychological health status was very good and good as opposed to 33.4 percent and 34.5 percent of the off-campus college students respectively. A similar pattern can also be seen in the distribution of responses to question 19 - *how do you rate your general state of health*. A larger percentage of on-campus college students (51.1 percent) reported that their general state of health was very good and good as opposed to the off-campus college students (36.2 percent). Similarly, on question 20 - *what do you think about your own health condition compared with that of other people of your age*, 33.4 percent of on-campus college students indicated that their health conditions were much better or a bit better compared with that of other people of their age as opposed to 22.5 percent of the off-campus college students.

As seen in Table 3, a significant difference was found for question 21(a) – experiencing difficulty in concentrating during the preceding academic year, ($X^2(3) = 11.201, p < .05$) and question 21(g) - experiencing poor appetite during the preceding academic year ($X^2(4) = 23.483, p < .001$). More on-campus college students indicated that they experienced a little difficulty in concentrating and poor appetite during the preceding academic year than the off-campus

students. Though not significant, a similar pattern can also be seen in the distribution of responses to question 21(b) - experiencing irritation during the preceding academic year, 21(e) – experiencing depression during the preceding academic year, 21(f) – experiencing tiredness during the preceding academic year, question 21(h) - experiencing headache during the preceding academic year, and question 21(i) - experiencing upset stomach during the preceding academic year. More on-campus college students felt that they did experience those types of psychological and psychosomatic problems during the preceding academic year as opposed to the off-campus college students. These findings on this population of students, specifically on-campus college students seem to indicate that more health wellness programs are needed to combat these physical and psychological issues that students may have while living on campus. According to Hicks and Miller (2006), these finding on college students is an indication that more health wellness programs that encourage physical exercising and relaxation are needed in the academic setting. However, when investigating gender, these authors indicated that stress among college-aged females is well-documented. Hicks and Miller (2006) found that more female college students reported that they experienced more psychological and psychosomatic problems, such as irritation, depression, anxiety, headaches, and tiredness, than the male college students in this study, yet more female college students were willing to seek or ask for help than the male college students. In addition, Hudd, S.S., Dumlao, J. Erdmann-Sager, D. Murray, D., Phan, E., Soukas, N. & Yokozuka, N. (2000) findings on this population suggest that it may be useful to develop gender-specific programs targeted at reducing the general level of stress among college females.

It was interesting to note that a significant difference was found for question 28 – *where on the ladder was your life one year ago*, ($X^2(9) = 19.473, p < .05$). A larger percentage of on-

campus college students (10.9 percent) in this study ranked their life one year ago at the 8th level (from 1-10) on the ladder as opposed to 5.6 percent of the off-campus college students.

As seen in Table 3, significant differences were found for question 33 – *have you ever had sexual intercourse*, ($X^2(2) = 26.394$, $p < .001$); question 34 – *did you drink alcohol or use drugs before you had sexual intercourse the last time*, ($X^2(2) = 25.874$, $p < .001$); question 35 – *the last time you had sexual intercourse, did you use a condom*, ($X^2(2) = 37.252$, $p < .001$); and question 36 – *the last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy*, ($X^2(9) = 48.529$, $p < .001$). For question 33, a larger proportion of on-campus college students (13.6 percent) as opposed to 2.7 percent of the off-campus college students reported that they never had sexual intercourse. However, thirty-one percent of on-campus college students responded that they did use a condom the last time they had sexual intercourse as opposed to 17.5 percent of the off-campus. The present study findings on sexual behaviors among college students were consistent with previous research, Fennell (1997) administered the National College Health Risk Behavior Survey to 996 Black and unmarried students at 8 historically Black colleges and universities in 7 states. In Fennell's study, 17.5 percent of the sample indicated that they had no sexual intercourse; 49.6 percent reported that they used a condom the last time they had sexual intercourse; and 41.3 percent of the participants responded that they or their partners used a condom to prevent pregnancy the last time they had sexual intercourse. Similarly, the American College Health Association (2005, & 2007) found that 35.3 percent and 37.1 percent of the sample respectively reported to use condoms the last time they engaged in vaginal intercourse.

One possible reason for the sexual activity differences among on-campus and off-campus college students is that compared with off-campus students, on-campus students may have more

frequent contacts and communicate more with peer groups in college, which may have an impact on students' thoughts and behaviors. According to Lau, Quadrel and Hartman (1990), there is substantial change in the performance of health behaviors during the first three years of college and that peers can have a strong impact on the types and magnitude of these changes. Rittenour and Booth-Butterfield (2006) indicates that some of the topics most frequently discussed by college students include birth control, condoms, sexually transmitted diseases, and resources. They also substantiates that most students feel comfortable discussing sexual health-related topics with their peers, with females reporting a slightly higher comfort level than males.

In this present study, although not significant, 35.8 percent of the on-campus college students indicated that they had talked about HIV/AIDS infection with their parents or other adults in their family as opposed to 22.9 percent of the off-campus. It was interesting to note that 34.4 percent of the on-campus students reported to have been taught about HIV/AIDS infection in their college courses as opposed to 23.4 percent of the off-campus college students.

This study indicated that over 80 percent of the participants had had sexual intercourse, and less than half of the sample used a condom the last time they had sexual intercourse. To combat the unsafe sexual activity, the authors recommend that a comprehensive sexuality education program be provided by the surrounding community; which would examine the student's sexual values as well as sexual behaviors. Campus peer education programs, which can provide a solid knowledge base, but facilitate long-term behavior changes as well, may be an effective mechanism to deliver such information to college students.

Summary

The results of this questionnaire provided an important snapshot of the current life styles, college life stressors and health behaviors among on-campus and off-campus college students at an institution in North Carolina. Moreover, the findings contributed to the identification of subgroups of students at particular risk for certain types of stressors, physical and psychological problems and health issues university officials can address by implementing the appropriate interventions that are tailor-made for such groups. Special care should be taken not to generalize the findings of this study to other student populations. The findings may hold true only if the populations are similar in nature. Therefore, it is advisable to carry out a similar longitudinal study at other institutions. Future research could look at how well the self-reported health behaviors of other groups of college students are meeting the health objectives for the nation that are outlined in the *Healthy People 2010* publication.

Most importantly, responses to the questionnaires from on-campus and off-campus students could help determine how the life styles, physical and psychological stressors and health status of other university students living conditions compares with some of the national objectives outlined in *Healthy People 2010*. In addition, such information is needed to assess more fully the at risk potential of these on-campus and off-campus students for not completing college due to health behaviors, health habits, physical and psychological problems, life styles and health status. Hicks and Miller (2006) suggest that until more accurate methods are developed to identify which students are at risk of failing and leaving college, little can be done to intervene and avoid the undesired consequences of poor academic performance and attrition that affect both students and institutions due to health issues. These authors indicate that as the population of college-bound students grows and competition increases, to help students,

professionals on both sides of the desk should keep in mind common stress patterns and at-risk demographics. As advocates for students, those in the education field must conduct further research so they can accurately prevent future and more complex behavior problems. According to Hicks and Miller (2006), college should be an exciting time in students' lives. Researching and implementing effective intervention and counseling programs will help improve the quality of life for all on campus.

References

- Dinger, M. K. & Parsons, N. (1999). Sexual activity among college students living in residence halls and fraternity or sorority housing, *Journal of Health Education*, 30(4), 242-246.
- Douglas, K.A., Collins, J.L., Warren, C., Kann, L., Gold, R., Clayton, S., Ross, J. & Kolbe, L. (1997). Results from the 1995 national college health risk behavior survey, *Journal of American College Health*, 46(2), 55-66.
- Fennell, R.(1997). Health behaviors of students attending historically Black colleges and universities: Results from the National College Health Risk Behavior Survey. *Journal of American College Health*, 46(3), 109-117.
- Hicks, T. & Miller, E. (2006) "Life Styles, Student Life Stressors and Health Status among African American Male and Female College Students," *Journal of College Admission*, 192(1), 22-29.
- Hudd, S.S., Dumlao, J. Erdmann-Sager, D. Murray, D., Phan, E., Soukas, N. & Yokozuka, N. (2000). "Stress at College: Effects on Health Habits. Health Status and Self-Esteem." *College Student Journal* (34) 2, p.217, 11p.
- Lau, R.R., Quadrel, M.J., & Hartman, K.(1990). Development and change of young adults' preventive health beliefs and behavior: Influence from parents and peers, *Journal of Health and Social Behavior*, 31, 240-259.
- Luquis, R., (2003). A Qualitative Assessment of College Students' Perceptions of Health Behaviors, *American Journal of Health Studies*, Spring-summer 2003.
- Page, R. M, Scanlan, A. & Gilbert, L. (1999). Relationship of the estimation of binge drinking among college students and personal participation in binge drinking: Implications for health education and promotion, *Journal of Health Education*, 30(2), 99-104.

- Perkins, H. W., Meilman, P. W., Leichfiter, J. S., Cashin J. R. & Presley C. A. (1999). Misperceptions of the norm for the frequency of alcohol and other drug use on college campuses, *Journal of American College Health*, 47(6), 253-258.
- Rittenour, C.E., & Booth-Butterfield, M.(2006). College students' sexual health: Investigating the role of peer communication. *Qualitative Research Reports in Communication*, 7(1), 57-65.
- Schall, M., Kemeny, A., Maltzman, I. (1992). Factors associated with alcohol use in university students, *Journal of Studies on Alcohol*, 53 (2), 122-136.
- Siegel, D. M., Klein D. I. & Roghmann, K. J. (1999). Sexual behavior, contraception, and risk among college students, *Journal of Adolescent Health*, 25, 336-343.
- The American College Health Association (2005). The American College Health Association National College Health Assessment (ACHA-NCHA), Spring 2003 reference group report, *Journal of American College Health*, 53(5), 199-210.
- The American College Health Association (2007). The American College Health Association National College Health Assessment Spring 2006 reference group data report (abridged). *Journal of American College Health*, 55(4), 195-206.
- Vaez, M. & Laflamme, L. (2004). "Health Behaviors, Self-Rated Health, and Quality of Health, and Quality of Life: A Study among First-Year Swedish University Students." *Journal of American College Health* 51(4), p. 156-162.
- Valliant, P.M., & Scanlan, P. (1996). Personality, Living Arrangements, and Alcohol Use by First Year University Students, *Social Behavior and Personality*, 24(2), 151-156.
- Wechsler, H. & Dowdall, G. W. (1997). Changes in binge drinking and related problem

among American college students between 1993 and 1997, *Journal of American College Health*, 47(2), 57-69.

Zweig, J. M., Lindberg, L. D. & McGinley, K. A. (2001). Adolescent health risk profile: The co-occurrence of health risks among females and males. *Journal of Youth and Adolescence*, 30(6), 707-728.

Table 1

Summary of Life-Style Characteristics by Living Conditions

Question	On-Campus	Off-Campus
11. If you do drink, what is the usual amount consumed on each occasion?		
1-2 glasses	25.9%	21.5%
3-4 glasses	15.8%	13.6%
*5-6 glasses	12.8%	3.8%
7-9 glasses	2.5%	1.9%
10 glasses or more	1.6%	.5%
12. Do you smoke cigarettes?		
yes, daily	4.6%	5.5%
yes, sometimes	6.4%	4.2%
no	49.3%	30.0%
13. Do you use illegal drugs?		
yes, daily	3.7%	1.8%
yes, sometimes	5.9%	2.9%
no	50.2%	35.2%
not applicable	.2%	.2%

Chi-square significant at * $p < .05$

Table 2

Summary of Student Life Stressors Characteristics by Living Conditions

Question	On-Campus	Off-Campus
15. My Stress over the preceding academic year has been based on the following issues.		
a. Not coping academically slightly stressed	29.5%	18.8%
b. Problems with professors slightly stressed	25.5%	14.0%
c. Problems with roommate not at all stressed	39.4%	24.8%
d. Poor finances slightly stressed	22.9%	14.5%
e. Poor housing *slightly stressed	19.3%	6.4%
f. Family problems not at all stressed	28.9%	19.4%
g. Not having a relationship not at all stressed	43.5%	28.9%
h. Relationship problems not at all stressed	30.1%	22.0%
i. Problems with friends *slightly stressed	23.2%	10.3%

Chi-square significant at * $p < .05$

Table 3

Summary of Health Status Characteristics by Living Conditions

Question	On-Campus	Off-Campus
21. During the preceding academic year, did you experience any of the following psychological or psychosomatic problems		
a. difficulty in concentrating		
*a little	34.8%	23.0%
b. irritation		
a little	32.4%	20.9%
e. depression		
a little	25.2%	13.4%
f. tiredness		
a little	26.5%	18.7%
g. poor appetite		
*a little	21.8%	10.0%
h. headache		
a little	26.3%	18.1%
i. upset stomach		
a little	23.9%	13.2%
33. Have you ever had sexual intercourse?		
**no	13.6%	2.7%
34. Did you drink alcohol or use drugs before you had sexual intercourse the last time?		
**never had sexual intercourse	10.9%	1.5%
35. The last time you had sexual intercourse, did you use a condom?		
**yes	31.3%	17.5%
36. The last time you had sexual intercourse, what method did you or your partner use to prevent pregnancy?		
**condom	24.3%	12.3%

Chi-square significant at * $p < .05$, ** $p < .01$

Dr. Terence Hicks is the Chair/Associate Professor of Research in the Educational Leadership Department at Fayetteville State University (NC). He teaches statistics, quantitative research and research methods and serves as a dissertation chair for students in the doctoral program at FSU.

Liwei Tang is a graduate student in the Educational Leadership Doctoral Program at Fayetteville State University (NC). She received a Master's of Education degree from Inner Mongolia Normal University (P. R. China).



HUMAN CENTERED COMPUTING LAB



"Innovative Solutions to Real
World Problems"

www.humancenteredcomputing.org

“A Formula for the Cure”: Does Arkansas’ revamped education funding formula provide for an “Adequate and Equitable” resource allocation system that is efficient?

Russell M. Frazier, M.P.A.

University of Arkansas

Public Policy Doctoral Scholar

Abstract

Major problems that persist in Arkansas' urban and rural school districts are low benchmark (ACTAAP) test scores, poor completion rates, and deficiencies in workforce competency. These problems stem from an "adequate and equitable" state funding formula that has proven itself to lack efficiency. This manuscript focuses on the educational funding policy within the State of Arkansas. Arkansas' current funding construct is based on a foundation formula. The foundation formula is comprised of two parts and is based on the minimum allowable expenditure per student in the state. The effect of Arkansas' state funding formula on rural and urban school districts relative to student funding equity, adequacy, benchmark test scores, and workforce competency was analyzed. Data from a longitudinal cohort study of school districts and sub groups within the cohort (small school districts and districts serving our most disadvantaged students) was used along with an employment shift share analysis to reach conclusions in this report. Data in terms of revenue, education spending, district characteristics and employment shifts were extracted from state, federal and secondary sources to supplement this research. Tables and charts are presented that depict equity of education funding, benchmark test performance, high school completion rates, and patterns of rural/urban employment shifts. The results show that as Arkansas passed legislation to address equity and adequacy in education funding: distribution of resources became more equitable, legislative budgetary allocations for K-12 legislation increased; benchmark test scores increased in all demographic categories; and the state experienced little to no progress in work force competency among rural and urban areas researched. While all demographic groups experienced incremental gains in testing, African Americans and

disadvantaged populations continued to function at a lower level than other demographic groups on benchmark exams. Evidence also shows that as African Americans and disadvantaged populations improved their proficiency on benchmark exams, so did other demographic groups, African Americans and disadvantaged populations slightly improving at a higher percentage than whites did.

Introduction

Arkansas students from rural and urban school districts continue substandard performance on state benchmark tests (Arkansas Comprehension Testing Assessment and Accountability Program –ACTAAP-), and possess inferior workforce competency skills compared to those students from districts that enjoy more efficient educational funding (NORMES 2007; U.S.B.L.S 2003 & 2006). Numerous amounts of research has been conducted to enhance student competency by examining best pedagogical practices, funding and teacher accountability (Cremin, T., Burnard, P. and Craft, A. 2006; Dillon, P. and Tearle, P. 2006; Janofsky, Michael 2005; Holland, Robert 2005; Ritter and Burnette Joshua 2007). Unfortunately, most of this research has proven inconsistent, inconclusive or both (Briggs 2007). These studies have not accounted for the most important variable that may serve to improve student competency and retention, “efficiency”. Efficiency meaning that legislators and education stakeholders must strategically direct already scarce resources to categories of funding that directly address achievement disparities within rural and urban districts(i.e., instruction, programming etc.).

Though numerous legislative acts have been passed in Arkansas to address educational funding issues, major problems remain in urban and rural school districts.

These problems stem from a continued “adequate and equitable” state funding formula that lacks efficiency. State funding formulas are designed to provide school districts adequate per pupil educational funding. States utilize dissimilar funding methodology to determine funding policy. This research will focus on the educational funding policy in the State of Arkansas. This manuscript will demonstrate how the state funding formula affects rural and urban school districts.

Educational funding issues are a critical, yet frequently ignored component of student success. Efficiency relative to educational funding has pervasive implications for test success rates, high school graduation and workforce competency. While preceding research focuses on incremental gains on benchmark test scores and other categorical variables, the purpose of this study is to determine whether Arkansas’ revamped education funding formula provides for an “adequate and equitable” resource allocation system that affects student success positively. Education stakeholders can use findings to improve on disparities in resource distribution, and to find a more comprehensive funding policy solution.

An investigation of following questions will be used to reach a conclusion for the research question posed:

Research Questions

- 1 Has district funding become more equitable in Arkansas since the 2004 implementation of the foundation funding formula?
- 2 Is the Arkansas public school system funded adequately?
- 3 Have Arkansas’ state benchmark test scores (ACTAAP) improved since the 2004 implementation of the foundation funding formula?

- 4 And, has workforce competency improved in urban and rural districts since the 2004 implementation of the Arkansas foundation funding formula?

Methodology

Participants

A longitudinal cohort study (2004-2007) of Arkansas public school districts and sub groups within the cohort (small school districts, districts serving our most disadvantaged students) will be used in conjunction with an employment shift share analysis of a selected rural and urban county to reach conclusions in this study.

Procedure

Data in terms of revenue, education spending, district characteristics and employment shifts will be extracted from state, federal and secondary sources and compared.

Results

Charts that depict and explain comparisons of the equity and adequacy of education funding, district test score performance, and patterns of rural/urban employment shifts will be presented. The goal of this paper is to determine whether Arkansas' revamped education funding formula provides for an "adequate and equitable" resource allocation system that affects student success positively. Results will be used to provide Arkansas and national education stakeholder's possible best practices for future education funding policy.

An Ephemeral Background on School Funding

Federal funding for state education initially began in 1965 with the enactment of

the Elementary and Secondary Education Act (*ESEA*). The ESEA outlines the following (as cited by the U.S. Department of Education 2005):

ESEA authorizes grants for elementary and secondary school programs for children of low-income families; school library resources, textbooks and other instructional materials; supplemental education centers and services; strengthening state education agencies; education research; and professional development for teachers.

The ESEA of 1965 attempted to subsidize educational programs in an attempt to close student achievement gaps. The ESEA ultimately did not achieve the desired success legislators wished due to the states' lack of adequate and equitable education funding. Funding and consistency in teaching pedagogy have long served as the weakness of education reform, and will continue if equitability and adequacy is left out of our state educational funding initiatives.

“The No Child Left Behind act of 2001 (NCLB) is a reauthorization of the ESEA” (as cited by the U.S. Department of Education 2005). The purpose of the NCLB is to boost K-12 student academic success and to decrease disparity in scholarship attainment. Through the NCLB, states are required to meet specified criteria in order to continue to receive Federal funding in the form of (U.S. Department of Education 2005):

- *ESEA*, Title I: \$13.3 billion
- *IDEA*, Part B, Grants to States: \$11.1 billion
- Improving Teacher Quality: \$2.9 billion
- 21st Century Community Learning Centers: \$991.1 million
- English Language Learners: \$675.8 million
- Impact Aid (schools impacted by military bases and other facilities): \$1.2 billion

In 2004-05, the Federal government was responsible for 8.3 percent of state educational funding, 45.6 percent derived from state sources, 37.1 percent derived from

local taxes, and 8.9 percent is from private resources (U.S. Department of Education 2005).

The United States is one of the only countries that does not have a universal educational system, and with trends in education success spiraling downward in almost every measurable category, one would think to ask the question: “When is the United States going to move in the direction of a universal education system that provides consistency, adequacy and equity”?

One could only imagine how education stakeholders would benefit if the Federal government stepped in and created a universal education system. A universal education system would undoubtedly help streamline teaching pedagogy and more importantly assure efficient funding, “wishful thinking”.

Constitutional law provides a general overview of the “right to education”, but explains that public education is not a fundamental right under the Federal Constitution. The Law provides that states are responsible for establishing the rights of a fundamental education, and is responsible for reasonable regulation under such state police authority. 16 C.J.S. Constitutional Law § 736 (2008).

The question of this Constitutional provision came into question in 1973 during the U.S. Supreme Court case of *Rodriguez v. San Antonio*. In *Rodriguez v. San Antonio*, the Supreme Court ruled, “access to free public education is not a fundamental right under the equal protection clause of the 14th amendment”. *San Antonio Independent School Dis. v. Rodriguez*, 411 U.S. 1 (1973), U.S. This landmark case fundamentally upheld U.S. Constitutional provisions concerning jurisdiction, and succinctly placed the responsibility of educational resource distribution on the states. *Rodriguez v. San*

Antonio has served as a catalyst in promoting litigation as an effective tool for solving funding formula/policy issues with states. The following segment apprises the reader of Arkansas' efforts to meet Federal criteria.

Litigation in Arkansas School Funding

Arkansas' K-12 public school funding formula has undergone massive overhaul over the past four years, and is not alone in its efforts to better its funding formula.

Arkansas' Constitution provides that. (Ark. Const., Art. 14, § 1, Amendment 53). :

Intelligence and virtue being the safeguards of liberty and the bulwark of a free and good government, the State shall ever maintain a general, suitable and efficient system of free public schools and shall adopt all suitable means to secure to the people the advantages and opportunities of education.

The Arkansas Constitution also provides that. (Ark. Const. Art 2, § 18). :

The general assembly shall not grant to any citizen, or class of citizens, privileges or immunities, which, upon the same terms, shall not equally belong to all citizens.

Since *DuPree v. Alma School Dist. No. 30 of Crawford County* (1983), when it was determined by the Arkansas Supreme Court that the current state funding formula violated the state equal protection clause, other districts began to take a closer look at their funding positions. In 1992, a group of districts became disgruntled with the inequitable distribution of educational funding in the state. The outcome of district frustration resulted in *Lake View v. Tucker*. *Lake View* is the defining case of multiple lawsuits filed against the state of Arkansas, claiming that it had not been equitable in its distribution of funding districts. *Lakeview View vs. Tucker et al.*, No. 92-5318 slip op. at

46-50. In 2001, Chancery Court Judge Collins Kilgore ruled that Arkansas had failed in its constitutional responsibility to provide a general, suitable, and efficient system for free public schools. Ultimately, in 2002, the Arkansas Supreme Court substantially upheld the ruling and said that the state legislature bore the responsibility of fixing the system. *Lake View II School District No. 25 of Pulaski County, Arkansas, et al. vs. Mike Huckabee, Governor of the State of Arkansas*, et al. 340 AR. 481 10 S.W. 3d 892.

How Arkansas Subsidizes Its Public Schools

Arkansas operates on a vertical equity system. Vertical equity “assumes that students who are not equal should receive unequal resources” (Thornson & Edmondson 1998). Arkansas funds its schools through various categories of aid. The basic state revenue and local general education tariff makes up the majority of subsidy for public schools in Arkansas. According to Ark. Const., Art. 14, § 3, Amend. 74:

“ the foundation amount is comprised of two parts, the minimum local contribution, which is defined as the amount generated by the uniform rate of taxation (25 mills), and the state equalization amount. Citizens pay an amount based on their property assessment each year. This amount is used to create the per pupil local contribution. Then, the state subtracts the per pupil local contribution from the foundation amount and pays the remaining amount to the districts” (as cited by Ritter, Gary and Burnette Joshua 2007, p. 5).

In 2004-2005, the foundation amount was equal to \$5,400. Since 2004-2005, the required foundation amount has risen to \$5, 789. This total consists of revenue from state and local sources. According to the Arkansas Public School Computer Network-APSCN (2006-2007), per-pupil funding for public schools averaged \$7,992.00 in 2006-2007.

Funding inconsistency derives from local districts taxing at a higher mill than the state minimum (e.g., 25 mill-minimum/ state avg. 35.87) (APSCN 2007). The inconsistency also stems from supplemental categorical funding. The following captures aspects of Arkansas' categorical education funding initiatives that are outlined in Arkansas Legislative Acts 272, 273, 461, 811, 1052 and 1590 (as cited by the Arkansas Department of Education 2007-2009):

- Alternative Learning Env. (ALE) \$4,063
- Secondary Vocational \$3,250
- English Language Learners \$ 293 per ELL student
- Poverty (NSLA) \$1,488 per NSLA student for schools with 90%+ NSLA students \$ 992 per NSLA student for schools with 70-89% NSLA student
- Declining Enrollment: Schools with declining enrollment will receive funding that is either:
 - a. Equal to the difference between the average of the two immediately preceding years' average daily memberships and the average daily membership for the previous school year multiplied by the amount of foundation funding per student for that fiscal year

OR

- b. Special needs isolated funding, which is provided to schools that meet the state's criteria of "isolated"
- Growing Enrollment: Student growth funding is calculated as the sum of the following:
 - c. One quarter of the per student foundation funding for the school district multiplied by the increase, if any, of each of the following:
 - i. The school district's quarterly average daily membership for the first quarter of the school year over average daily membership of the previous school year;
 - ii. The school district's quarterly average daily membership for the second quarter of the current year over the average daily membership of the previous school year;
 - iii. The school district's quarterly average daily membership for the third quarter of the current school year over the average daily membership of the previous school year;
 - iv. The school district's quarterly average daily membership for the fourth quarter of the current school year over the average daily membership of the previous school year; and Excluding any increase resulting solely from consolidation or annexation with another school district.

These subsidies merely serve to “reimburse school districts directly for expenditures such as transportation, school lunches, and English Language Learner programs” (Edmonson and Thorson 2007, p. 7).

What do the statistics tell us?

Research statistics on education funding suggests that there is a correlation between an adequate and equitable education funding formula and student success (Carey, 2008; Burnette and Ritter, 2007; Sanchez, 2008). Researchers (Payne & Biddle, 1999; Berliner & Biddle, 1995) argue that without sufficient resources, districts/schools cannot hire qualified teachers, purchase adequate materials, or offer sufficient services.

Nationally, “in 2005-06, approximately 18% of districts had schools in improvement, a similar share to the 20% of districts that reported having schools in improvement in 2004-05” (CEP 2007). Schools in improvement are required to show adequate yearly progress in order to be absolved of state sanctions based on NCLB provisions. “As in previous years, significantly more urban districts (47%) had schools in improvement than suburban (22%) or rural districts (11%) (CEP 2007)”. A smaller student to teacher ratio may serve as the reason for rural districts having a smaller percentage of schools in improvement.

Urban school districts argue that they do not have the resources to subsidize programs that have been used by more affluent districts to enhance student scholarship attainment (e.g., mentor or coach for the principal, distinguished principals, additional full-time school-based staff to support teacher development, before-or after-school,

weekend, or summer programs, distinguished/qualified teachers) (CEP 2007). Casserly (2007) argues that the primary reason for the urban disparity is more subgroups having to meet AYP targets.

Unlike urban and suburban districts, rural areas suffer from a declining agricultural market, thus reducing the population of the region. Rural populace decline has a dramatic effect on the ability to provide adequate quality education opportunities (Dayton 1998).

Rural school districts in Arkansas face unusual funding challenges. According to Garms, Guthrie, & Pierce (1978), rural schools are subject to funding disparities due to their small student enrollments and poor local tax base. State educational funding policies have historically been designed to subsidize school districts based on student enrollment, and only recently have states been forced by courts to address these funding disparities.

Whatever the cause for achievement disparity, there is a need for an efficient funding formula that will sufficiently and efficiently subsidize rural and urban districts (Haas & Nachtigal, 1998). While Arkansas is to be applauded for its move from a horizontal equity-funding model, policy makers must review the process and revise funding strategies to ensure that adequacy and equity equate to efficiency.

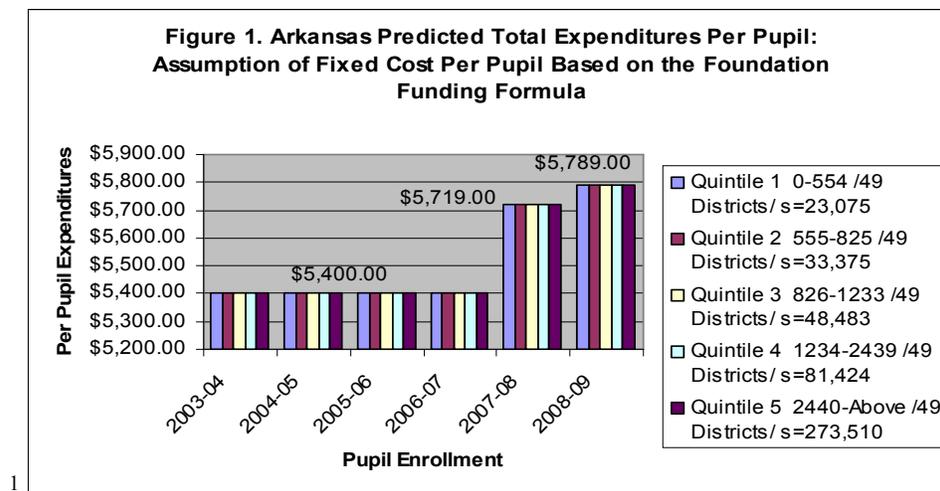
For the purpose of clarity, the manuscript will further seek to understand if the disparities of Arkansas' rural and urban areas have truly dissipated relative to Arkansas benchmark test scores and workforce competency skills since the passing of ACT 59 (2003-04). The results segment of this study will illuminate Arkansas' funding policy

impact by answering the research questions posed in the introductory section of this report.

Results

Has district funding become more equitable in Arkansas since the 2004 implementation of the foundation funding formula?

The basic rationale behind this research question is to ascertain whether the basic Arkansas foundation funding formula, approved by the state of Arkansas, impartially funds the states' K-12 public school districts. The state formula presumes that regardless of the size or location of the school district, the resources per pupil that are required to subsidize basic education will be unvarying. Figure 1 illustrates this presumption.

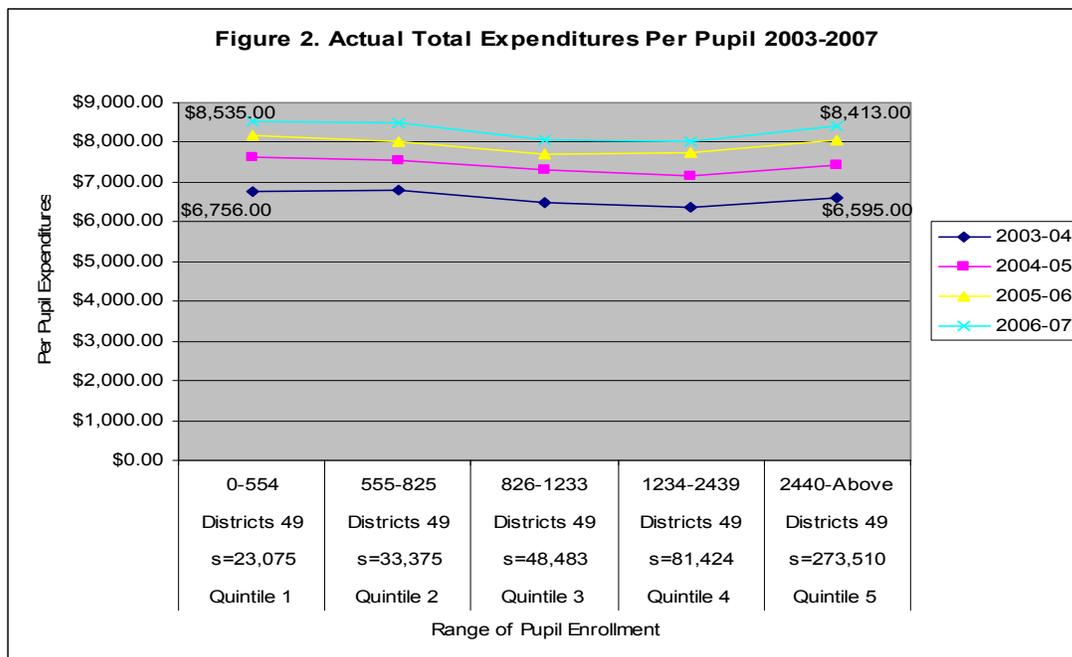


Is the per pupil funding assumption accurate? Does it fit with actual total per student expenditures? Figure 2 suggests that, in truth, the funding construct is unsound. The evidence suggests that enrollment influences the fluctuation of total per pupil expenditures, and does not support the idea that funding remains level no matter what the average daily membership of the district. The evidence also suggests that it costs more to

¹ Data cited: Secondary data consists of quintile divisions that were compiled by Barnett, Joshua H., Ritter, Gary W., and Riffel, Brent E. (2008). Web site: http://www.uark.edu/ua/oep/AER/OEP-AER_2008-1_funding_fullreport.pdf

educate students attending schools in smaller districts than students that enroll in larger districts. The per pupil spending difference fundamentally tells us that larger school districts are able to deliver educational services to their community at a reduced cost.

In general, the evidence answers the question of equity. The data in Figure 1 suggests that no matter the size of the district, every locality will receive a foundation subsidy to equalize its resources with other school districts. Funding has been equitable across the



state since 2003, but an increase in funding was required to address categorical issues within smaller and urban districts. The data in Figure 2 suggests that the state of Arkansas has taken the initiative to provide additional subsidies to districts that require necessary categorical funding.

² Data cited: Secondary data consists of quintile divisions and funding for quintile divisions. Data compiled by Barnett, Joshua H., Ritter, Gary W., and Riffel, Brent E. (2008). THE STATE OF ARKANSAS EDUCATION IN 2008: HOW MUCH ARE ARKANSAS SCHOOLS SPENDING? Web Site: http://www.uark.edu/ua/oep/AER/OEP-AER_2008-1_funding_fullreport.pdf. Data confirmed through: Arkansas Department of Education web site: <http://arkansased.org/>.

Is the Arkansas public school system funded adequately?

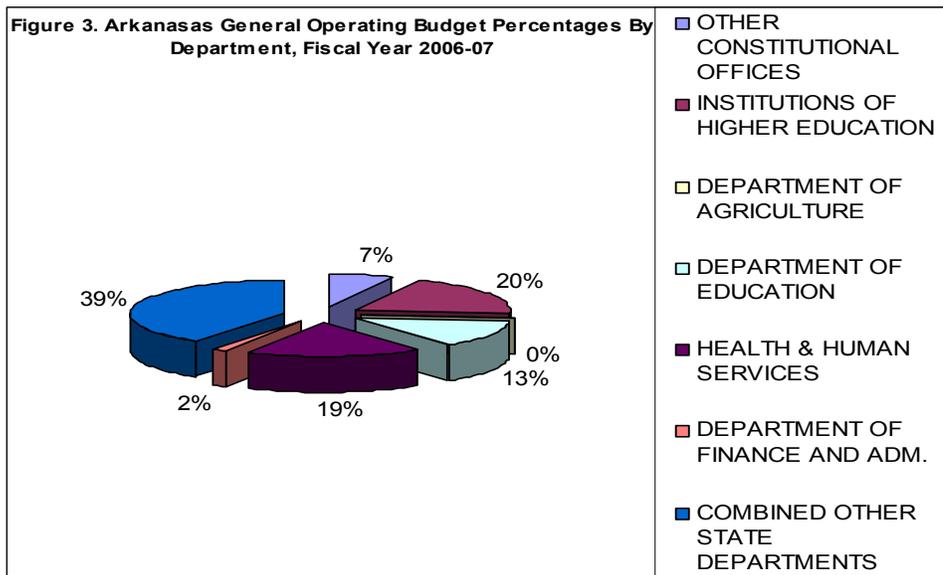
Funding adequacy will be investigated in this segment by determining how much of the state resources are dedicated to the Arkansas Department of Education. While other studies have concentrated on the combined expenditures of higher education and general education, this study focuses specifically on the Arkansas Department of Education. The Department of Education along with local tax levies, directly fund K-12 public education. While 50 cents of every dollar allotted by the state go towards general education, not all revenues end up in the Department of Education’s pocket book (see Table 1). The Arkansas Department of Education ranks third in funding behind the Department of Health and Human Services. The Department of Education ranks in the top five funded State Departments, accounting for 12.44% of the states budget. The Department of

Education falls less than 6% behind the highest funded Department (higher education 18.66%) (State of Arkansas Funded Budgets 2006-07). Funding commitments show that the state is directing a large portion of its resources to the area of education. Figure 3

Table1. Total Operating Expenditures 2006-07

Budget Category	State of Arkansas Total Operating Budget 2006-07	% of Budget By Categorical Expenditures
TOTAL CONSTITUTIONAL OFFICES	\$1,726,336,682	6.49 %
INSTITUTIONS OF HIGHER EDUCATION	\$4,964,577,506	18.66 %
DEPARTMENT OF AGRICULTURE	\$54,942,677	0.21 %
DEPARTMENT OF EDUCATION:	\$3,310,090,196	12.44 %
FINANCE AND ADMINISTRATION, DEPT OF:	\$391,431,752	1.47 %
HEALTH & HUMAN SERVICES, DEPARTMENT OF:	\$4,707,519,987	17.69 %
TOTAL STATE BUDGET:	\$26,604,643,506	61.56 %

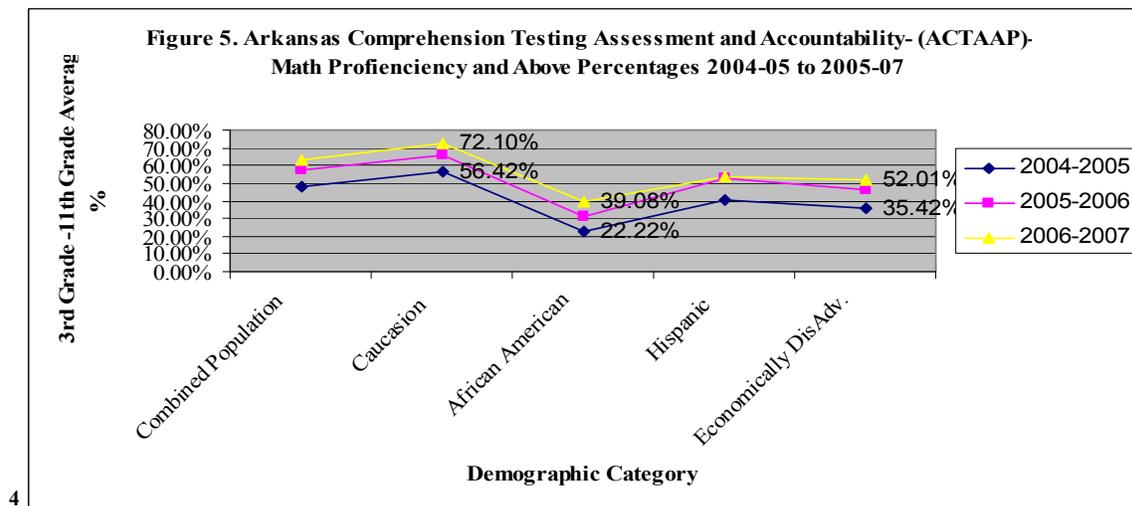
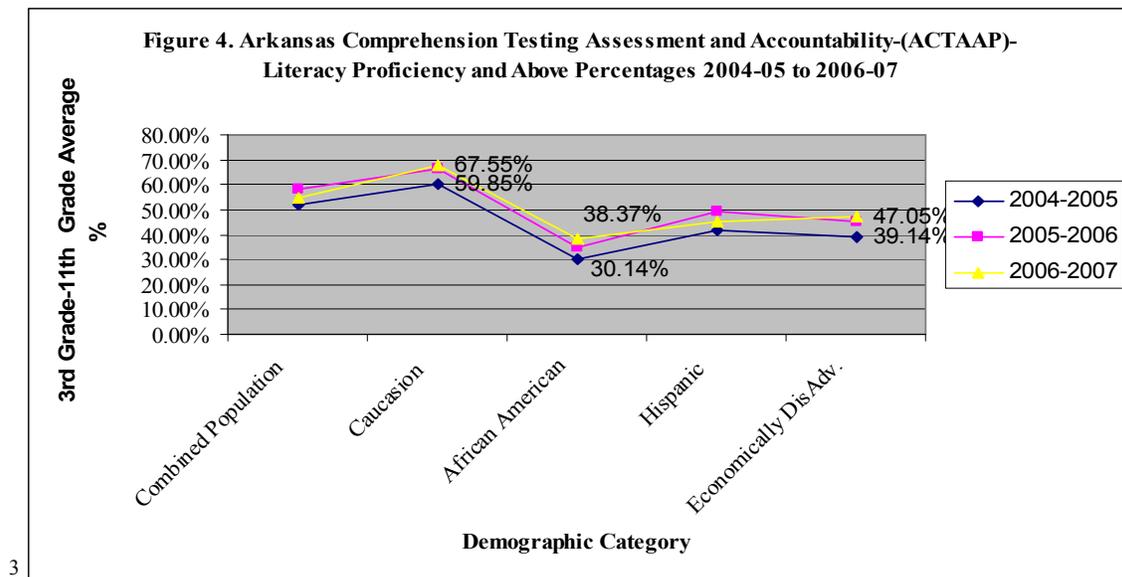
denotes the percentage of funding allotted to the top five funded departments. The Department of Agriculture is also shown due to its significance to the study.



Have Arkansas' state benchmark test scores (ACTAAP) improved since the 2004 implementation of the foundation funding formula?

The ACTAAP tool is Arkansas' device for gauging proficiency in six academic areas. According to ArkansasEd.Org (2007), "the assessments serve as benchmark exams in the form of six criterion-referenced tests that are administered to students in Grades 3-8. End-of-Course exams in algebra I, geometry, and literacy are administered in the 11th grade. End-of Course exams determine whether a student demonstrates attainment of the knowledge and mastery of that subject." "These criterion-referenced tests (CRT) are customized around the Arkansas curriculum frameworks" (ArkansasEd.Org 2007). The data measured in this segment denotes percentages of proficiency and above for demographic categories that cover the combined population, Caucasians, African Americans, Hispanics, and the economically disadvantaged. Figure 4 examines literacy proficiency and above and Figure 5 examines math proficiency and above. As noted in Figure 2 of this research, per pupil funding for districts exceeded the equalization amount of \$5,719.00. In fact, per pupil expenditures at its lowest level was \$2, 281.00 more than the equalization amount. This funding fact fundamentally establishes an idea of sufficient subsidy.

The evidence in Figure 4 establishes that there has been a steady incremental percentage increase in literacy proficiency and above each year, over a three-year period, in each demographic category. Figure 5 establishes the same for math benchmark results. Aside from the incremental gains for each demographic, a large disparity in percentage of proficiency and above exists between the demographic groups.



³ Data cited: (NORMES) (2004-05/2005-06/2006-07). Arkansas <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages for proficiency and above were averaged for each demographic category for grades 3rd-11th for each respective year

⁴ Data cited: The data used for this chart derived from -The National Office for Research on Measurement and Evaluation Systems (NORMES) (2004-05/2005-06/2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas. Web Site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages for proficiency and above were averaged

Has workforce competency improved in urban and rural districts since the 2004 implementation of the Arkansas foundation funding formula?

A comparison of employment shifts will be used to provide an example of workforce competency in a county that consists of rural public school districts, and a county that consists of urban public school districts. Pulaski County, a region that encompasses large urban districts, and Phillips County, a region that encompasses small rural school districts will be the focus of this analysis.

Table 2 provides us with an overview of school districts that exists within Pulaski County. Pulaski County school districts are some of the largest school districts in Arkansas, and in fact, house the largest school district in Arkansas (Little Rock School District). Pulaski County school districts average a graduation rate of 82%, which is about 10% higher than the national average of 72% (Greene, Jay P.; Winters, Marcus A. 1991-2002). Table 3 shows that Phillips County's school district graduation average is 75%, which is fairly low, but still higher than the national average. Statistics in both tables may provide evidence for the disparities between the two areas. It is likely that poverty plays a part in high school completion. In most cases, individuals in rural areas may have to leave school to help with the family agricultural trade. Table 2 shows that Pulaski County's average daily membership (ADM) qualifies at 56% for the Federal Reduced Lunch Program (FRLP), while Phillips County qualifies at a rate of 76%.

Graduation is a basic marker of whether or not the nation's education structure is accomplishing its rudimentary task. High school completion is more vital than ever in ensuring that one obtains a descent job, and secures the expertise necessary to succeed in

for each demographic category for grades 3rd-11th

the workforce. An employment shift share analysis for Pulaski and Phillips Counties is provided in the following section.

Table 2. Pulaski County 2007 Academic Report and Averages

⁵ Pulaski County- Urban	#Schools	ADM	Graduation Rate	Per Pupil Funding	FRLP
Academic Plus District	2	346	91.3	\$5,807.00	54.20%
Little Rock School District	39	25,500	74.1	\$10,239.00	62.20%
N. Little Rock School District	14	9,333	83	\$8,928	58%
Pulaski County Special School District	26	17,756	81.9	\$8,638.14	51%
Total	81	52,935	330.3	\$33,612.14	2.254
Average			82.57	\$8,403	56.35%

Table 3. Phillips County 2007 Academic Report and Averages

⁶ Phillips County- Rural	#Schools	ADM	Graduation Rate	Per Pupil Funding	FRLP
Lakeview School District	Consld.	Consld.	Consld.	Consld.	Consld.
Marvell School District	3	814	67.60%	\$9,677.00	95.10%
Barton/Lexa School District	1	802	86.90%	\$8,083.00	61%
Elane School District	Consld.	Consld.	Consld.	Consld.	Consld.
Helena/West Helena School District	6	2,884	73.40%	\$9,612.00	73.40%
Total	10	4,500	227.90%	\$27,372	2.295
Average			75.96%	\$9,124.00	76.50%

What do the employment trends tell us about rural and urban education preparation in Arkansas?

A snap shot of two counties employment shifts will be used to measure workforce competency. An employment shift share analysis decomposes employment growth or decline in a region over a given time period into three components (Barff, R..A. and P.L. Knight III 1988):

⁵ Data cited: The data used for this chart derived from -The National Office for Research on Measurement and Evaluation Systems (NORMES) (2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas. Web Site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages and averages were calculated cross-districts for the respective county.

⁶ Data cited: The data used for this chart derived from -The National Office for Research on Measurement and Evaluation Systems (NORMES) (2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas. Web Site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages and averages were calculated cross-districts for the respective county.

(1) a national growth effect, which is that part of the change in total employment in a region ascribed to the rate of growth of employment in the nation as a whole,

(2) an industry mix effect, which is the amount of change the region would have experienced had each of its industries grown at their national rates, less the national growth effect, and

(3) a competitive effect, which is the difference between the actual change in employment and the employment change to be expected if each industrial sector grew at the national rate. The sum of these three effects equals the actual change in total employment within a region over a prescribed period.

As reported in Table 4, this area's biggest employer, the education and health services sector, had the highest national growth component. The 4.7 percent national growth component led to this sector's employment growing by 2,539 jobs (i.e., 4.7 percent times the sector's base employment, 54,083, equals 2,539 jobs). Overall, the national growth component was responsible for 11,113 jobs in this county.

An understandable goal of some local leaders is to make their economy more "recession proof". Economies with more employment in government, military and education will experience less fluctuation because those sectors are not directly related to the business cycle.

After adding up across all eleven sectors, it appears that the industrial mix component was responsible for increasing the area's employment by 220 jobs. Thus, the area has a concentration of employment in industries that are increasing nation-wide, in terms of employment. The majority of these jobs can be attributed to growth in the professional and business services sector.

The top three sectors in the competitive share were public administration, information, and the leisure and hospitality sector. Across all sectors, the competitive

share component totals to -2,934 jobs. This indicates that the area is not competitive in securing additional employment. A positive competitive share component would indicate that the area has a productive advantage. This advantage could be due to local firms having superior technology, management, or market access, or the local labor force having higher productivity. A negative competitive share component could be caused by local shortcomings in all these areas.

So, have the educational institutions served this area well? While there has been a gain of employment in some sectors over the three year period, the answer in the researcher's opinion is no. As noted in the evidence contained in the chart, the area has a negative competitive or local share. A negative competitive share affects the areas productive advantage, or possibility of additional future employment. As outlined above, this may be due to the sectors shortcomings in technology, management and poor labor force productivity. The research infers that shortcomings may equate to lack of labor force expertise and or skill.

⁷Table 4: Shift-Share Analysis for Pulaski County, 2003-2006.

Sector	National Growth Component, Percent	National Growth Component, Jobs	Industrial Mix Component, Percent	Industrial Mix Component, Jobs	Competitive Share Component, Percent	Competitive Share Component, Jobs
Public Administration	4.7	797	-3.6	-605	3.7	633
Information	4.7	413	-8.8	-774	7.1	629
Leisure and Hospitality	4.7	889	2.4	458	2.0	374
Manufacturing	4.7	762	-7.2	-1,174	-0.3	-44
Education and Health Services	4.7	2,539	0.9	472	-0.1	-49
Natural Resources and Mining	4.7	34	2.6	19	-8.1	-58
Other Services	4.7	343	-2.2	-159	-5.1	-374
Financial Activities	4.7	758	-0.5	-83	-3.6	-575
Professional and Business Services	4.7	1,533	5.4	1,756	-3.0	-978
Trade, Transportation, and Utilities	4.7	2,533	-1.2	-648	-1.8	-979
Construction	4.7	512	8.8	958	-13.9	-1,513
		11,113		220		-2,934

The evidence in Table 5 outlines that Phillips County's biggest employer, the education and health services sector, had the highest national growth component. The 4.7 percent national growth component led to this sector's employment growing by 113 jobs (i.e., 4.7 percent times the sector's base employment, 2,410, equals 113 jobs).

⁷ U.S. Bureau of Labor Statistics' Census of Employment and Wages (U.S.B.L.S 2003 & 2006).
 Web Site: <http://www.bls.gov/cew/home.htm>.

Overall, the national growth component was responsible for a total of 327 jobs in Phillips County

The highest industrial mix component was 8.8 percent in the construction sector, and it was responsible for 21 jobs (i.e., 8.8 percent times this sector's base employment, 237, equals 21 jobs). If this area's employment were concentrated in these sectors with higher industrial mix components, then the area could expect more employment growth. It appears that the industrial mix component was responsible for decreasing Phillips County's employment by -8 jobs. Thus, the area has a concentration of employment in industries that are decreasing nation-wide, in terms of employment. The majority of these jobs can be attributed to decreases in the manufacturing sector.

The top three sectors in the competitive share were leisure and hospitality, information, and the natural resources and mining sector. Across all sectors, the competitive share component totals to -783 jobs. This indicates that Phillips County is not competitive in securing additional employment.

The evidence of the shift share clearly points to the fact that jobs requiring advanced skill sets have rapidly diminished in Phillips County. The lower skills sector, leisure and hospitality, has grown. The manufacturing industry is moving towards advanced technology and the local industry does not have a trained labor pool to support industry labor requirements. Other sectors of employment that require higher skill sets are also in decline.

Even though the national share has influenced positive employment trends for Phillips County, the areas overall employment has declined by 499 jobs during the period

Table 5: Shift-Share Analysis of Phillips County, 2003-2006.

Sector	National Growth Component, Percent	National Growth Component, Jobs	Industrial Mix Component, Percent	Industrial Mix Component, Jobs	Competitive Share Component, Percent	Competitive Share Component, Jobs
Leisure and Hospitality	4.7	18	2.4	9	7.2	28
Information	4.7	3	-8.8	-6	-20.5	-14
Natural Resources and Mining	4.7	22	2.6	12	-3.8	-17
Other Services	4.7	5	-2.2	-2	-23.3	-25
Financial Activities	4.7	14	-0.5	-1	-10.7	-31
Education and Health Services	4.7	113	0.9	21	-2.0	-48
Professional and Business Services	4.7	12	5.4	14	-19.8	-51
Construction	4.7	11	8.8	21	-54.4	-129
Manufacturing	4.7	26	-7.2	-40	-24.5	-135
Public Administration	4.7	20	-3.6	-15	-33.1	-141
Trade, Transportation, and Utilities	4.7	83	-1.2	-21	-12.4	-220
		327		-8		

of

2003-2006.

After reviewing the evidence, it can be concluded that the graduation rate in this County is indicative of a poorly skilled labor pool. With or without a diploma, students are leaving the Phillips County public school system lacking the necessary skills to support the local economy.

Policy Implications

Given the evidence, it is difficult to identify one specific factor that is responsible for disparities in achievement among, rural, suburban and urban public school districts. The evidence has identified that while there has been incremental success on benchmark tests and funding equalization since the establishment of Arkansas' "adequate and equitable" funding formula (ACT 59), large disparities still exist on benchmark exams between minorities, the economically disadvantaged and whites. The evidence also illuminated how graduation rates in rural areas affect the local economy negatively. The policy implications for attaining student success are clear:

- ❖ The funding formula is working, but achievement and graduation disparities still exist. Legislators must re-visit the equalization amount each year and set the minimum to the peak. Fundamentally, set the equalization amount at the highest point of total funding/achievement success. This would require a mill increase at the state level. The school districts are already taxing at a higher rate than the legislated amount of 25 mills due to debt service and other categorical assessments. Simply adding another categorical assessment would not cause much political friction. The state must recalculate how they arrive at the base equalization amount (see appendix A). The formula does not account for exorbitant facility issues, neither does it account for excessive transportation costs. Vertical categorical subsidies should be distributed additionally, according to a districts needs.
- ❖ Rural districts collectively receive more per pupil resources than any other type of district. This funding reality is due primarily to transportation costs and poverty. The state government must invest more resources into the agricultural sector as to support rural economies. The Arkansas State Legislature budgeted less than 1% to the agricultural sector in 2007 (Figure 3). If the populace of rural Arkansas continues to diminish, so will the rural school system. The property value assessment of rural Arkansas is low and without a sufficient local tax base the resources will remain minimal and additional state categorical subsidy will only be useful for school district reimbursement.
- ❖ Urban school districts house a majority of Arkansas' minority students. African Americans lead this pool of students. Of all minorities measured in the competency segment of this report, African Americans were the least proficient or

above in subject mastery. The largest school district (Little Rock) spends an average of \$10,239 per pupil to educate its students. This figure leaves a question un-answered: More money, less results? The state must re-evaluate its hiring of qualified teachers, costs for facility maintenance, and most importantly, address teaching pedagogy in urban districts. If throwing resources at a problem has not worked, more stringent accountability levers must be incorporated.

- ❖ Education is the cornerstone of economic development. Though rural areas suffer more with regard to lack of skills and job loss, urban areas are not far behind. In order to break this cycle of poverty and increase workforce competency, education stakeholders should pursue initiatives that address disadvantaged populations due to socioeconomic status (SES). Initiatives should strive to increase access to computers and telecommunications technology (e.g., the internet) for residents in low-income areas, thereby ensuring equal opportunity to the benefits of technologies and technology-related employment. K-16 educational institutions must collaborate with each other and local business firms to develop consistent curricula that provide students with the capacity to endure rigorous four/two year college curricula and meet the demands of workforce positions that may be available directly out of high school. These efforts would require a consorted effort from the governor, economic development leaders, business and industry, and educators.

Conclusion

The existing K-12 funding formula for schools is obviously serving as a tool for competency improvement among all demographics. The formula also provides rural and urban schools funding that in most cases exceeds the funding per pupil in wealthy districts. The problem is not with the “per pupil subsidy”, it is with where the money is being spent, “efficiency”. As stated earlier, efficiency meaning that legislators and education stakeholders must strategically direct already scarce resources to categories of funding that directly address achievement disparities within rural and urban districts(i.e., instruction, programming etc.).

Rural communities are already suffering economically due to lack of state agricultural funding, but are required to pay excessive transportation costs. Rural districts, like the urban school districts, also suffer from dilapidated facilities that require

an exorbitant amount of resources to maintain.

Urban districts suffer from similar issues as rural districts, but they must attend to an entirely different set of circumstances. Urban districts not only expend large amounts of resources on facility infrastructure, but they must also address the ever-growing population of immigrant students. Additional resources are supplied through English Language Learners (ELL) subsidies (\$293 per student). Other resources are directed towards the Federal Reduced Lunch Program (FRLP) and after school tutorial programming.

The evidence from this report succinctly concludes that much of the “additional funding” for rural and urban districts are not directed specifically toward student instruction. The assertion from this conclusion is that more funding spent specifically toward student instruction would greatly close the achievement disparity that exists in the Arkansas educational system.

References

- 16 C.J.S. Constitutional Law § 736 (2008)
- Act 59 of the 84th Arkansas General Assembly Second Extraordinary Session of (2003)
- Ark. Const. Art 2, § 18
- Ark. Const., Art. 14, § 1, Amend. 53
- Ark. Const., Art. 14, § 3, Amend. 74
- Ark. Code Ann. § 19-5-1227 (c) (1) (2007)
- APSCN-Arkansas Public School Computer Network (2006-2007). Annual
Arkansas Department of Education.
Web site: <http://www.k12.ar.us/reports/caja/asr/caja/0607/caja/StateDistrictTotals.pdf>
- ArkansasEd.Org: Testing.
Web site: <http://arkansased.org/testing/definitions2.html#Exams>
- Arkansas Department of Education (2007-2009). Legislative Session: Public School
Funding Acts- Regular Session 2007/ School District Funding Formula and
Explanation
Web Site: <http://arkansased.org/legislative/funding.html>
- Barff, R. A. and P.L. Knight III (1988). “Dynamic Shift-Share Analysis”, *Growth and
Change*, vol. 19, pp. 2-10.
- Barnett, Joshua H., Ritter, Gary W., and Riffel, Brent E. (2008).
*THE STATE OF ARKANSAS EDUCATION IN 2008: HOW MUCH ARE
ARKANSAS SCHOOLS SPENDING?* Office for Education Policy, University of
Arkansas.
Web site: http://www.uark.edu/ua/oep/AER/OEP-AER_2008-1_funding_fullreport.pdf
- Berliner, D. & Biddle, B. (1995). *The manufactured crisis*. Addison-
Wesley: Reading, MA.
- Briggs, Derek. *CONFLICTING STUDIES ABOUT SCHOOL REFORM ARE
INCONCLUSIVE*. Great Lakes Center for Education Research and Practice
May 7, 2007
- Carey, Kevin, (2008). *The Equity Gap in State Funding. Inside Higher Education*. April

14. Web site: <http://www.insidehighered.com/views/2008/04/14/carey>

Casserly, M. (2007). *No Child Left Behind in America's great city schools: 5 years and counting*. Washington, DC: Council of Great City Schools.

Center for Education Policy (CEP) (2007). *A report in the series From the Capital to the Classroom: Year of the No Child Left Behind Act*. July 2007

Web site: <http://www.cep-dc.org>

Cremin, T., Burnard, P. & Craft, A. (2006). Pedagogy and possibility thinking in the early years. *International Journal of Thinking Skills and Creativity* 1(2), 108-119.

Dillon, P. & Tearle, P. (2006). Educational Research in a Distributed Community. [Special journal issue edited by Patrick Dillon & Penni Tearle.] *Technology, Pedagogy and Education* 15(1), 2-5.

DuPree v. Alma School Dist. No. 30 of Crawford County

Garms, W.L., Guthrie, J.W., & Pierce, L.C. (1978). *School Finance: The economics and politics of public education*. Englewood Cliffs, NJ: Prentice Hall. Dayton OH.

Greene, Jay P.; Winters, Marcus A. (1991-2002). *Public High School Graduation and College-Readiness Rates: Education Working Paper No. 8* Authors:
Web site: <http://www.uark.edu/ua/der/EWPA/index.html>

Haas, T. & Nachtigal, P. (1998). *Place value*. ERIC Clearinghouse on Rural Education and Small Schools. Charleston, WV.

Holland, Robert, "Merit Pay for Teachers: *Can Common Sense Come to Public Education?*" The Lexington Institute. October 2005.
Horkheimer 1982. *Critical Theory*. New York: Seabury Press.

Janofsky, Michael, "Teacher Merit Pay Tied to Education Gain", *The New York Times*, October 4, 2005.

Lakeview View vs. Tucker et al., No. 92-5318 slip op. at 46-50

Lake View II School District No. 25 of Pulaski County, Arkansas, et al. vs. Mike Huckabee, Governor of the State of Arkansas, et al. 340 AR. 481 10 S.W. 3d 892.

Livingston, Kari, (2007). Arkansas Public Schools' Benchmark Scores Prove Money Isn't Everything. *Associated Content*. April 20, 2007.

Web site:

http://www.associatedcontent.com/article/211544/arkansas_public_schools_benchmark_s_cores.html?cat=37

NORMES (2007): Arkansas School Performance Report. University of Arkansas

Arkansas Department of Education

Web site: <http://ArkansasEd.org>

NORMES (2004-05/2005-06/2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas.

Web site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>.

Payne, K. & Biddle, B. (1999). Poor school funding, child poverty, and mathematics achievement. *Educational Researcher*, 28, 4-13.

Ritter, Gary and Burnette Joshua (2007). *Expenditure Analysis for Arkansas Adequacy Study*. The Office for Education Policy, University of Arkansas

Web site: <http://www.uark.edu/ua/oep>

Ritter, Gary (2006). *School Reform and School Funding in Arkansas*. Office for Educational Policy. University of Arkansas

San Antonio Independent School Dis. v. Rodriguez, 411 U.S. 1 (1973), U.S

Sánchez, George B. (2008). State next to bottom nationally in per-pupil spending, report

says. *Arizona Daily Star*

Web site: <http://www.azstarnet.com/metro/219900>

State of Arkansas Funded Budgets (2006-07).

Web Site:

http://www.arkansas.gov/dfa/budget/documents/fy07_funded_budget_schedule_093006.pdf

Thorson Gregory R. and Edmondson Jacqueline (1998). *Making Difficult Times Worse: The Impact of Per Pupil Funding Formulas on Rural Minnesota Schools*. Minnesota State University, Mankato.

U.S. Department of Education, 10 Facts About K-12 Education Funding, Washington, D.C., 2005.

U.S. Bureau of Labor Statistics' Census of Employment and Wages (U.S.B.L.S 2003 &

2006).

Web site: <http://www.bls.gov/cew/home.htm>.

Appendix A

Adequacy Construct

A Report on Legislative Hearings for the 2006 Interim Study on Educational Adequacy
 (Act 57 of the Second Extraordinary Session of 2003)
 Bureau of Legislative Research (as cited by Ritter, Gary 2006):

- \$3,415 per student is based on personnel factors:
 - Personnel ratios
 - 20:1 Kindergarten
 - 23:1 Grades 1-3
 - 25:1 Grades 4-12
 - 2.9 Special Education teachers per 500 students
 - 2.5 Instructional Facilitators per 500 students
 - 0.7 Librarian/Media Specialist per 500 students
 - 2.5 Guidance Counselors per 500 students
 - 1 Principal per school
 - Salaries
 - Average rate for 25 teachers & 9 staff members is \$48,750, which is \$1,635,675 per school.
 - Average principal salary is \$71,837
 - Total School Salaries = \$1,707,512 divided by 500 = \$3,415 per pupil
- More Assumptions: School Size (n=500)
 - 8% Kindergarten students (40 kids)
 - 23% Grade 1-3 students (115 kids)
 - 69% Grade 4-12 students (345 kids)
- Other school factors and costs per student = \$789 per pupil
 - Teacher contract for 5 additional days (\$101)
 - Technology (\$250)
 - Instructional materials (\$250)
 - Extra teacher duty (\$60 middle school; \$120 high school)
 - Supervisory Aids (\$35)
 - Substitutes: 10 days/teacher * \$121 per day / 500 students (\$63)
- Carry Forward: Administrative Costs, Equipment, Legal, Athletics, Food, Operations, etc. = **\$1,152** per pupil

3,415 +
 789 +
 1,152 +

= \$5,356 per pupil
 Or, \$5,400

NOTES

¹ Data cited: Secondary data consists of quintile divisions that were compiled by Barnett, Joshua H., Ritter, Gary W., and Riffel, Brent E. (2008). Web site: http://www.uark.edu/ua/oep/AER/OEP-AER_2008-1_funding_fullreport.pdf. Secondary data confirmed through Arkansas Department of Education web site: <http://arkansased.org/>. Original data includes the state funding equalization amount, data obtained from Arkansas Department of Education (2007-2009). Web Site: <http://arkansased.org/legislative/funding.html>.

² Data cited: Secondary data consists of quintile divisions and funding for quintile divisions. Data compiled by Barnett, Joshua H., Ritter, Gary W., and Riffel, Brent E. (2008). THE STATE OF ARKANSAS EDUCATION IN 2008: HOW MUCH ARE ARKANSAS SCHOOLS SPENDING? Web Site: http://www.uark.edu/ua/oep/AER/OEP-AER_2008-1_funding_fullreport.pdf. Data confirmed through: Arkansas Department of Education web site: <http://arkansased.org/>.

³ Data cited: (NORMES) (2004-05/2005-06/2006-07). Arkansas <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages for proficiency and above were averaged for each demographic category for grades 3rd-11th for each respective year

⁴ Data cited: The data used for this chart derived from -The National Office for Research on Measurement and Evaluation Systems (NORMES) (2004-05/2005-06/2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas. Web Site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages for proficiency and above were averaged for each demographic category for grades 3rd-11th

⁵ Data cited: The data used for this chart derived from -The National Office for Research on Measurement and Evaluation Systems (NORMES) (2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas. Web Site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages and averages were calculated cross-districts for the respective county.

⁶ Data cited: The data used for this chart derived from -The National Office for Research on Measurement and Evaluation Systems (NORMES) (2006-07). Arkansas School Performance Reports: Arkansas State Report Card. University of Arkansas. Web Site: <http://normessasweb.uark.edu/schoolperformance/State/SRCy3.php>. Percentages and averages were calculated cross-districts for the respective county.

⁷ U.S. Bureau of Labor Statistics' Census of Employment and Wages (U.S.B.L.S 2003 & 2006). Web Site: <http://www.bls.gov/cew/home.htm>.



The University of Michigan
NATIONAL CENTER FOR INSTITUTIONAL DIVERSITY (NCID)
POSTDOCTORAL FELLOWSHIP PROGRAM
2009-2010 ACADEMIC YEAR

The National Center for Institutional Diversity (NCID) at the University of Michigan is accepting applications for its *Institutional Diversity Postdoctoral Fellowship Program* for the 2009-2010 academic year. This university-wide, interdisciplinary initiative seeks to advance the Center's national commitment to institutional diversity as well as its strategic agenda to bridge exemplary scholarship with multilevel engagement and innovation. This fellowship program is also designed to help recruit outstanding faculty with strong commitments to diversity within a range of academic units at U-M and beyond. A successful candidate will be attractive as both an NCID fellow and a tenure-track or research faculty member. For example, successful candidates could have the opportunity for a full-time fellowship at NCID before starting a tenure-track position within a UM academic unit. Applications will be evaluated by representatives from both NCID and a relevant U-M academic unit, including a potential faculty mentor.

The fellowship recruitment process will begin in July 2008 with an application deadline of November 15, 2008, for a possible Fall 2009 start date. We anticipate awarding at least one fellowship for a duration of one year. Applications are especially welcome from scholars with interests that reflect the NCID strategic agenda, including: (a) innovative scholarship, research, or creative work on some aspect of diversity in the broadest sense; (b) bridging interdisciplinary scholarship with innovation to address challenges and opportunities of diversity; and (c) building partnerships among scholars and policy-relevant leaders engaged in social change activities at campus/institutional, local/state, or national/global levels. We especially invite applications from outstanding candidates whose interests in diversity issues cross interdisciplinary boundaries in eight core NCID priority areas:

Basic Scholarship & Multilevel Engagement
Expressive Culture, the Arts & Media
Science, Technology, Engineering & Mathematics
Urban Revitalization & Community Development

Education & Institutional Transformation
Health Disparities & Human Development
Organizations & Sustainable Development
Politics, Public Policy & Social Justice

Information on these priority areas is available at www.ncid.umich.edu. In support of a broader university-wide interdisciplinary initiative, there is also a particular interest in candidates who can help develop greater campus capacity for national prominence in the critical area of **Diversity Issues in Urban Revitalization and Sustainable Development**.

Applicants may directly apply to the program. Senior faculty members from Michigan or one of its peer institutions are invited to nominate candidates who demonstrate outstanding scholarly promise and commitment to diversity. Nomination letters should include the candidate's curriculum vitae and contact information as we will ask nominees to submit application materials.

We are especially interested in attracting scholars who received doctoral degrees or postdoctoral training from institutions OTHER THAN the University of Michigan. ***Detailed information regarding the application process is available at www.ncid.umich.edu. Application materials and nomination letters should be sent to NCIDpostdoc@umich.edu***

Required application materials will include: (1) a letter (interest in the NCID fellowship and scholarly/professional achievements that demonstrate strong potential for success in a faculty position), (2) curriculum vitae, (3) a statement of proposed research to be conducted during the fellowship year, (4) a statement explaining how the applicant's research and/or teaching will contribute to both NCID and a related U-M academic unit or research center, and (5) three letters of recommendation.

The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

The Affectivity of Financial Illiteracy in Urban Communities

Katherine W. Causey, Ph.D.
Michael O. Minor

The Affectivity of Financial Illiteracy in Urban Communities

PROBLEM

Introduction

E. E. Cummings (2008) offered a quote that captures the financial plight of many, “I’m living so far beyond my income that we may almost be said to be living apart.” According to the American Bankruptcy Institute Journal (2003), a substantial number of Americans are financial illiterate. Nonetheless, a significant number of credit counselors and debt reduction agencies have developed within the last decade. These agencies provide consumers with a livable spending plan for becoming debt free and possibly achieving their financial goals (Credit Consumer Counseling, 2008). However, often times these agencies do not teach consumers how to become financial independent and how to accumulate wealth. In other words, these enterprises only look at fragments of the problem and not the problem holistically. Although research has demonstrated that credit counseling had a positive effect on creditworthiness and credit management, other research has shown that the link between broader financial knowledge and financial management skills were found to be more likely to balance their checkbooks every month, budget for savings and hold investment accounts (Hogarth & Hilgert, 2003; Bernanke, 2006).

Stuhldreher & Tescher (2005) suggests that large numbers of Americans lack the tools they need to save, build assets and become part of what President Bush calls “the ownership society,” a nation in which citizens—through saving their own money in safe and tax benefited accounts—enhance their ability to weather emergencies and to make their own decisions regarding college, retirement, homeownership and health care. Research has shown that the populous that falls prey to financial illiteracy are those who are defined as the un-banked and the

under-banked in urban communities. The Center for Financial Services Innovation (CFSI) (2007) offers the following definition of unbanked and underbanked:

“Unbanked” consumers and households are those that lack a transaction account at a mainstream financial institution. “Underbanked” consumers and households use a mixture of mainstream and alternative providers, such as check cashers and payday lenders, to satisfy their financial services needs.

Typically, the ranks of un-banked and under-banked are defined as people of color, have less education and low incomes (Stuhldreher & Tescher, 2005) amidst marginalized in socio-economic terms (Caskey, Duran & Solo, 2006). Moreover, female-headed households, particularly in Southern states are more likely to be unbanked than the general population (Stuhldreher & Tescher, 2005).

CFSI (2007) also cited the following facts about the unbanked and the underbanked:

1. About 20% of U.S. households are unbanked, equivalent to 22.2 million families in which no one has an account.
2. Approximately 19.4% of U.S. households are considered underbanked, representing an additional 22 million families.
3. Each year Americans spend at least \$13 billion on more than 340 million alternative financial services transactions.
4. Nonwhite families are four times more likely to be unbanked than white families.
5. About 35% of all Latinos in the U. S. are unbanked; 53% of Mexican immigrants are unbanked.
6. The underbanked tend to be younger, have lower incomes and have less education than the general population.

The lack of this knowledge will continue to erode our African-American communities and neighborhoods, may displace current residents through foreclosures and repossessions and citizens may fall prey to the economic recession we may be now facing. Moreover, researchers have resonated the dire need for additional research in financial literacy (Lucey, 2005).

For purposes of this study and the sample population, the researcher focused on those defined as the “under-banked. The “under-banked” are defined as those with bank accounts but still utilized check- cashing outlets to purchase money orders, pay bills, etc.

The purpose of this study was to assess the respondents’ knowledge and experiences relating to financial illiteracy through phenomenological methodology, specifically Interactive Qualitative Analysis (IQA). The researcher also intends to introduce strategic implications and suggest recommendations as to combat the acuteness of financial illiteracy. This study will not only introduce basic transaction accounts but also attempt to include environmental agencies that can make the public aware of the deleterious consequences of financial illiteracy.

Limitations to the Study

This study utilized a convenient sample population of 71, with 11 questionnaires incomplete. Therefore, the sample population (n=60) may not be representative of the general population in the urban community. Further, because of the type population sampled, there were more females present at the public forum than males.

REVIEW OF THE LITERATURE

The literature on access to financial services and economic growth begins with Walter Bagehot who noted in 1873 the important role of the financial sector in England’s economic growth when financial markets were able to mobilize savings to finance the implementation of new technologies in England (Caskey, Duran & Solo, 2006). Earlier and more recent empirical

studies have demonstrated not only that the development of financial sector accompanied economic development (Goldsmith, 1969; King & Levine, 1993; Caskey, Duran & Solo, 2006). Hernando de Soto has argued that access to capital and to financial services is the key to economic growth both in advanced economies and in the developing world (de Soto, 2000; Caskey, Duran & Solo, 2006).

Historically, research postulates that the decline of urban communities developed with new immigrant city populations who had larger families, were undereducated, underemployed and poor (Pomeroy, 2006). Recent research has centered on the impact of access to credit on microeconomic development, suggesting that improving the access of microenterprises to financial services could have an important positive impact on a country's income distribution (Westley, 2001; Caskey, Duran & Solo, 2006).

Knowledge of Personal Finance and Financial Literacy

Do adults have a good command of personal finance and investments? Results of several studies suggest they do not (Chen & Volpe, 1998). Princeton Survey Research Associates (1997) surveyed 1,770 households nationwide on their financial knowledge and find an average correct score of 42 percent (Chen & Volpe, 1998). In another study of 522 adult women, 56 percent were found not very knowledgeable about investing (Oppenheimer Funds/Girls Inc., 1997; Chen & Volpe, 1998). Although financial planning dates back for nearly 100 years (Godwin, 1990a; Muske & Winter, 2004), studies continue to show low usage of the recommended practices and concern continues about the financial preparedness of Americans (Braunstein & Welch, 2002; Bankruptcy Filings, 2003; Muske & Winter, 2004). Based on 1992 data, the research division of the Federal Reserve Bank Board of Governors concluded in 1997 that 151 percent of families in the United States do not have any type of bank transaction accounts.

Is Bankruptcy a Means to an End?

What about financial literacy in the sample urban area? In Memphis, many are struggling financially from a lack of financial literacy leading, in part to Memphis being labeled the “Bankruptcy Capital” of the United States. As early as June 2004, Memphis ranked No. 1 in personal bankruptcy filings for one year compared with 331 other metropolitan statistical areas in the United States. The total personal bankruptcy filing rate of the Memphis MSA was 26.11 per 1,000 adults, compared with the United States rate of 7.51 filings, according to SMR Research Corporation, a Hackettstown, New Jersey, based business research firm that studies loan markets and lenders. More than four percent of the population in Memphis has gone bankrupt, the highest rate of any city in the country (Marino, 1997).

Moreover, according to the *University of Memphis Magazine* (2005), the reasons behind bankruptcy rates are copious: poverty, divorce, home foreclosures, and the perception of Memphians as an easy way to climb out of financial woes. Bankruptcy provided these citizens a short term solution to a long term problem. A Chapter 13 trustee stated that some people may file bankruptcy prematurely (Marino, 1997). The primary solution is to deflate the predisposed perception of bankruptcy filers and educate communities on financial wellness/literacy that will eventually lead to economic self-sufficiency.

Predatory Lending and Check Cashing Outlets

According to the *New York Times* (2001), citizens are frequently lured by the overwhelming number of predatory lenders in Memphis, exacerbating the city’s already dangerous financial status. These lenders outnumber traditional financial institutions 261 to 249 in Shelby County alone.

Financial institutions often rely on credit scoring systems to determine creditworthiness of their customers (Weissbourd & Bodini, 2005) although sufficient credit data are often unavailable to apply strong scoring models to low income consumers. Partly because of the lack of accurate data, financial institutions tend to not loan much to this demographic group. As a result, many low income individuals rely on payday loans and predatory lending with their exorbitant rate of interest, possibly the only option in these low income urban communities.

More data is needed for these low-income urban communities so that more relevant credit scoring systems can be developed. Current credit scoring models rely heavily on major loan repayment especially mortgage payment history, which is a good indicator in the case of homeowners who have paid off mortgages but not useful for many lower-income people who rent. Although these factors are rarely included in credit scores (Weissbourd & Bodini, 2005), rent or utility payments would be a better metric.

METHODOLOGY

This exploratory and descriptive research employed the qualitative approach. The qualitative methodology will follow what Merriam (1996) defines as an umbrella concept covering several forms of inquiry that will aid the researcher to understand the social phenomena and the social behavior from the point of view of the participant engaged in that behavior.

Respondents were asked to give detailed responses relating their experiences regarding financial literacy. The detailed responses may have reflected personality characteristics which may determine the way in which their culture may have an impact on financial wellness. It was our intent to utilize a homogenous population in the urban communities of Memphis. The homogenous population consisted of majority African Americans, low-income, and predominately female. The different populations utilized were that of single-parent families,

college students, senior citizens, and blended families who are not satisfied with their overall financial situations. The above populations in the urban areas of Memphis, Tennessee, suggest the limitations of the generalizability of the findings.

DATA COLLECTION AND ANALYSIS

Data Collection

Semi-structured interviews were conducted on 60 completed participants (n= 60). These participants were part of a public forum who was asked to voluntarily participate in a survey on the impact of financial illiteracy. Though the researcher intended for 100 participant responses, 71 (71 % responses rate) responded and 11 incomplete surveys. The data collected came from a judgment and convenient sample. This sampling technique was utilized to ensure the concept of trustworthiness and openness thereby alleviating bias in the sample. Although 67% of the participants were at the same public forum, these participants reside in the urban communities of Mississippi and Memphis and/or as referred to the “Mid-South.” The zip codes ranged from 38002, 38016, 38017, 38018, 38103, 38108, 38109, 38111, 38115, 38117, 38125, 38126, 38128, 38141, 38632, 39651, and 38671.

Sixty-six percent of the instruments were handed out at the public forum and proctored by the researcher. The completion of the survey handed out ranged from fifteen to thirty minutes. Ten percent of the instruments were conducted by face-to-face interview. This strategy was to aid in the completion of the survey and to answer questions participants may have had. Twenty-four percent of the surveys were conducted by phone. Again the strategy was utilized for those who had attended the forum but did not have time to complete the survey at the forum. Therefore, the researcher with the participant’s permission was allowed to complete the instrument by telephone, again to facilitate in the completion of the survey.

The questionnaire consisted of 19 questions which included six open-ended questions and thirteen closed ended questions. When assessing the assets that the participants may possess, three questions were asked that required the participant to check all responses that applied to their current financial situation. Internal validity of the findings was ascertained through presentation to the co-author, constant dialogue between both researchers for critiques and illustration of themes.

Data Analysis

The researcher utilized the Interactive Qualitative Analysis (IQA). IQA is a phenomenological approach in which focus groups produce affinity diagrams describing a shared phenomenon, an affinity that involves both open and axial coding (Northcutt & McCoy, 2006).

Table 1 list the demographics and the mode of the population sampled. The descriptive statistics includes the gender, age range and educational level. Although not noted, because of the sampling technique (convenient) utilized, the majority (96%) of the population sampled were African Americans, two percent was Pacific Islander and two percent was European American.

Table 1.

Demographic Characteristics for the Financial Literacy Questionnaire Participants

Variable	% of sample
Age range	
18 – 24 years	8
25 – 31 years	12
32 – 38 years	17
39 – 48 years	22 (mode years)
49 – 57 years	13
58 – 64 years	10
Over 65	18
Gender	
Male	30
Female	70
Education	
Some high school	7
High school graduate	18
Some college	30
Associate degree	18
Four-year degree	22
Graduate degree	5

Table 2 lists the demographics to include the income range and employment status. Although not statistically determined, there appears to be a high correlation between college degree and the income range of \$15, 000 - \$30,000 possibly indicating the mean salary for the “Mid-South” urban community is between \$15,000 - \$30,000. According to the U.S. Census Bureau (2005), the median income for 2004 in Tennessee and Mississippi was \$38,550 and \$33,659 respectfully. Therefore, the income reported appears to be below the median income for these urban communities.

Table 2.

Demographic Characteristics for the Financial Literacy Questionnaire Participants

<u>Variable</u>	<u>% of sample</u>
Income	
0 - \$15,000	28
\$15,000-\$30,000	38
\$30,001-\$50,000	22
Over \$50,000	12
Employment Status	
Employed	78
Unemployed	3
Not working (i.e. retired, SSI, state, federal benefit)	19

Table 3 represents whether or not the sample population had transactions with a financial institution. Respondents were asked to check all accounts that were applicable to their household.

Table 3.

Transactions at a financial Institution (types)

<u>Variable</u>	<u>% of sample</u>
None	5
Checking	90
Savings	66
Money Market	3
Certificate of Deposit	1

These findings indicate that this sample population has awareness of common accounts that financial institutions offer (checking and savings accounts). However, they are not aware of all types of accounts that are available to them where they can earn more interest on funds deposited. These findings also indicated that this population should be referred to the “under-banked.” Tens of millions of Americans have bank accounts but still use nonbanks such as check-cashing outlets for some services, such as paying bills and to purchase money orders. These services are often more affordable at check-cashing outlets or may not be offered by some banks (Stuhldreher & Tescher, 2005). Recent research disclosed that the banked/unbanked dichotomy that underlies the popular understanding of this problem misses the subtleties of consumer behavior (Berry, 2004; Stuhldreher & Tescher, 2005).

Table 4 postulates money set aside for emergencies. These funds set aside could be in the form of financial institution transaction accounts, at home under a mattress or in a coffee can, or family or friend holding the money for them. It should be noted that more than one-fourth of the sample population (although working) did not have any funds for emergencies. It is also hypothesized that direct deposit enables consumer to save more (see Table 6). Further, there was a high correlation between those aged 58-64 years of age and those over the age of 65 to have more than \$1,000 set aside for emergencies although they had lower incomes.

Table 4.

Money set aside for emergencies

<u>Variable</u>	<u>% of sample</u>
None	29
\$1.00 - \$500	30
\$501 - \$1,000	13
\$1,000 or more	28

Table 5 illustrates awareness of investments particularly at a nonbank institution. Respondents were asked to check off all that applied to their current situation. Forty-eight percent of the respondents stated that they did not have investment accounts. This was a strong indicator that these respondents may not have been familiar with various types of investments, afraid to invest based on history and economics or part of their culture (parents and immediate family members do/did not participate in investment accounts). Further, this was an alarming statistic that this sample population is not fiscally prepared for retirement, unforeseen health expenses and/or college tuition for their children.

Table 5.

Investments (types)

Variable	% of sample
None	48
Individual Retirement Account (IRA)	18
401k, 403B, TSA, Caf� Plan	32
Roth IRA	0
Mutual fund	10
Real Estate	23

Table 6 illustrates what method the respondents used to cash their check. Note that 78 percent of the sample was employed and 18% did not work but received some type of federal/state pension or retirement benefit. Most employers offer direct deposit benefit and some mandate direct deposit. According to the 1996 Debt Collection Improvement Act, federal benefit payments must be made electronically as of January 1999. In a 2000 survey of Earned Income Tax Credit (EITC) recipients in Chicago, the unbanked were more likely than banked respondents to believe that it is easier for people to save when they have a bank account and that direct deposit is a good idea (Beverly, Tescher & Marzahl, 2000; Stuhldreher & Tescher, 2005)

Table 6.

Cash check (types)

<u>Variable</u>	<u>% of sample</u>
Direct deposit	60
In-person banking	23
Check cashing outlet	17

Table 7 illustrates those respondents that possessed credit card debt. Respondents were asked to check all those that apply to their current situation. Forty-three percent indicated that they possess a debit card. This was probably due to the financial institution where they had a checking account that offered those services. Forty-two (42%) percent stated that they possessed a major department store credit card.

Typically, major department store cards carry an interest rate from 18% to 25%. If one owes \$3,900 at a rate of 18% and pays only the minimum. It could take up to 35 years to pay the bill in full and the consumer would end up paying over \$10,000 in interest plus the principal amount of \$3,900 (Keown, 2007).

Only one (1%) of the population possessed an American Express card. This might have occurred because of several reasons. The population sampled

1. did not understand the difference between a charge account and a credit account,
2. did not qualify for an American Express account because of debt-to-income ratio,
3. had a low credit score,
4. was unable to pay the balance in full at the end of grace period or
5. was unable to pay the annual fee.

Table 7.

Credit card debt (types)

<u>Variable</u>	<u>% of sample</u>
None	17
Debit card	43
Visa	33
MasterCard	27
American Express	1
Discover	7
Major department store	42

Table 8 illustrates the method of housing the respondent resides in. It was apparent in this sample that participants understood the “American Dream” of homeownership. However, it should be noted that some of these respondents became homeowners through inheritance from parent or spouse.

Table 8.

Housing (types)

<u>Variable</u>	<u>% of sample</u>
Live with parents	7
Apartment	15
Rental house	10
Homeowner	62
Dorm	3
Live with other relative	3

Table 9 denotes whether or not the respondents heard of financial literacy and whether or not they would like information about becoming financially independent.

Table 9.

Financial literacy

<u>Variable</u>	<u>% of sample</u>
Heard of Financial literacy	
Yes	26
No	74
Would like info on financial independence	
Yes	80
No	20

The following analysis provided the respondent with several open-ended questions. The researcher provided a summation to the respondent for clarity and accuracy and also answered any questions. This analysis process involved the compilation and re-reading of responses to categorize and unify the data. This strategy may serve to identify validity threats, biases and flaws in the logic of category developed (Maxwell, 1998). The researcher clustered the response for interpretive and contextual congruence.

When asked how they spent their extra money each month, the respondents' answers varied. However, the majority or 33 percent of the responses were a resounding "none available." Table 10 represents the response/comments applicable to how they spent their extra money each month. The number in parentheses indicates the number of times those responses were told to the researcher by the respondents.

Table 11 illustrates those responses to the question, "*How does your budget help you save money?*" An astonishing sixty-five percent (65%) stated that they did not have a budget. The mere fact that these respondents did not have a budget was an indication that they needed exposure to financial management techniques or a detailed course in personal finance to augment their knowledge on financial literacy. Budgeting takes planning and as the old adage states, "*If you fail to plan, you plan to fail.*"

Table 12 illustrates those responses to the question, "*Describe a typical week of spending in your life.*" Twenty-two percent (22%) gave the same responses of gas, food and bills. The researcher was trying to assess the respondent's spending habits and/or behavior by inquiring on that may influence their spending habits in Table 13. Sixty percent (60%) responded that they were not influenced by anyone. Table 14 denotes the responses to the question, "*How would you spend ten million dollars?*"

Table 10.

Open-ended questions/assessment

Question	Responses
How do you spend you extra money?	Gas Activities w/children Savings Family entertainment (3) Shopping for clothes for self and children (3) Shopping (3) Food, clothing Eat out w/friends None available (20) Unnecessarily Self, daughter on clothes Sending money to son away in college On children (3) Helping others Church, eating out, hair done Keep for a rainy day Savings and shopping Do not spend extra money

Table 11

Open-ended questions/assessment

Question	Responses
How does your budget help you save money?	<p>Don't have budget (39)</p> <p>Just learning how to budget</p> <p>Don't know</p> <p>Knowing what money have at all times</p> <p>Sticking to it</p> <p>Banking</p> <p>For emergencies</p> <p>Keep from owing extra bills</p> <p>Only \$5 or \$10 left</p> <p>Giving myself a certain amount w/o using credit cards</p> <p>Sticking to bare necessities</p> <p>Not overspending</p> <p>See where money is going</p>

Table 12

Open-ended questions/assessment

Question	Responses
Typical week of spending	Necessary items needed Getting something to eat Eating out, paying bills (2) Gas, groceries, bills, movies Gas, food, bills (13) Lunch and dinner out, gas (3) Buying things want and not need Gas, eating out, bills Needs (2) Shopping Groceries, household supplies, gas (5) Bills, bills, and more bills Children needs Bills and gas (2) Food, gas (4) Over budget (2) Bills, groceries, Vacation Gas, good lunch on Friday's

Table 13

Open-ended questions/assessment

<u>Question</u>	<u>Responses</u>
Family, friends influence your Spending?	Do not influence (36) Mom shows how to budget Help in making wise decisions with spending Birthdays, holidays Clothing Helping when in need

Table 14

Open-ended questions/assessment

Question	Responses
How would you spend 1 million dollars	<p>Buy house, car</p> <p>Tithes, bills, trip, savings account</p> <p>Church, family friends, St. Jude</p> <p>Quit job, pay bills and travel</p> <p>Little investing and pay bills</p> <p>Tithes, bills</p> <p>Donate, St. Jude, trip, food, clothing and whatever</p> <p>Trust fund for children, help Family</p> <p>Pay bills, invest, open own business, mom, savings account</p> <p>College for 3 kids, home, transportation, savings account</p>

Regarding Table 14, none of the respondents stated that they would enlist the services of a professional such as a Certified Financial Planner or an accountant, again a possible indication of the lack of knowledge of financial management. An aggressive strategy needs to be developed to help connect African Americans in urban communities with mainstream economic activity benefiting urban communities and overall economic stimulation.

Figure 1 represents a Financial Decision Tree that could ultimately lead to wealth accumulation. Only one of the respondents indicated that they would open a business, none indicated about generating passive income or unearned income such as capital gains from real property.

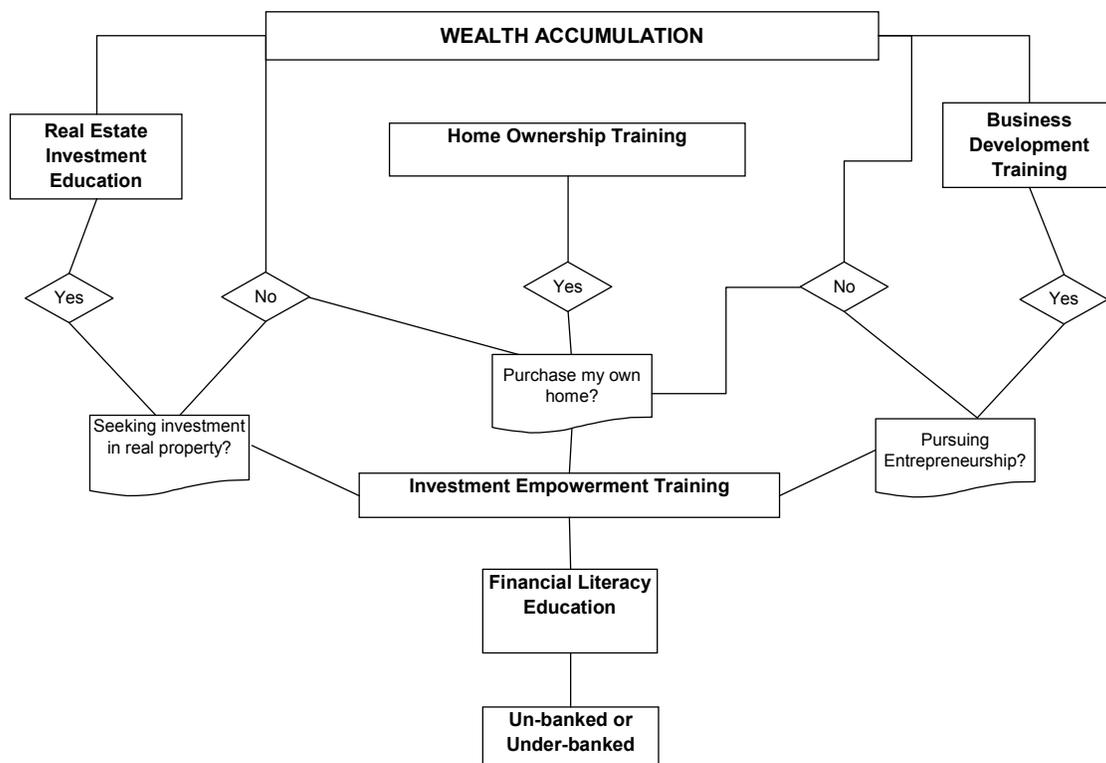


Figure 1.
Financial Decision Tree

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study found that financial illiteracy is a serious problem in our convenience sample, possibly so for the greater urban area of this study. In many cases, it was not that participants were averse to practicing sound financial literacy principles. To the contrary, many had household incomes that barely covered monthly expenses precluding them from saving, investing, and the like. Additionally, there was a positive relationship between age and savings accumulation. The older participants were the more likely it was that they had accumulated substantial savings.

It was our intent to (1) examine the degree of financial illiteracy in our sample (2) illustrate the negative effects of financial illiteracy and (3) develop and introduce our decision-tree model that leads to financial wellness/literacy to our participants. It is also intended that this model be user friendly so that it can be replicated and utilized amongst the general urban population in Memphis. This lack of education has resulted in serious financial literacy found in the American public (Chen & Volpe, 1998). The illiteracy and its costly consequences have made individuals worry about their finances to the extent that their productivity in the workplace is affected (CHRG, 1995; Chen & Volpe, 1998).

Research has shown that having a bank account is extremely important and provides a gateway to owning other assets (Stuhldreher & Tescher, 2005). When opening a major credit card account, one of the requirements is that you have both a checking and savings account.

Recommendations

Based upon our findings, we suggest the following strategic policy initiatives.

1. Policy makers and administrators mandates all those employed, receiving federal aid, retirement benefits obtain a transaction account at a bank and enroll in direct deposit. A transaction account could be defined as a checking, savings, or money market account. Financial institutions educate their consumers of all the services and investments (non-FDIC) accounts that are available to them to increase their wealth. Couple these low-income consumers with free advice from Certified Financial Planners and/or accountants.
2. Build and/or mandate strategic alliances with government, financial institutions, and community based organizations that will education these low-income un-banked and under-banked citizens on personal finance. This course should include the enrollment/development of a transaction account, insurance, credit and credit repair, homeownership and wealth building.
3. Each financial institutional account holder be educated or re-educated on personal finance.
4. Personal finance is included in the curriculum Pre-K through 12th grade.

According to Stuhldreher & Tescher (2005):

- a. Sixty percent of preteens do not know the difference between cash, credit cards, and checks and 40 percent do not know that banks charge interest on loans
- b. Of those ages 16 to 22, only 21 percent say that they have taken a personal finance course in school.
- c. While students typically do not understand basic aspects of finance, high school seniors do far better at answering questions about income (62.9 percent) and spending (55.4 percent) compared to questions about money management (45.4 percent) and saving (41 percent)

5. There needs to be opportunities for intergenerational dialog about good financial literacy techniques. Younger individuals would hear first hand stories and/or tips about good and bad financial planning decisions in the context of persons for which they respect like parents, grandparents, people from their communities, etc.
6. Many participants listed “church” as one of the beneficiaries if they won \$10 million. Since faith-based institutions are prevalent and very influential in an urban community, a faith-based financial literacy initiative is recommended including the appropriate collateral material.
7. Given the responses to the survey instrument, quantitative factor analysis and peer reviews should be conducted to determine if the instrument should be modified in any way. The revised instrument should then be administered to another sample for comparison and contrast.

Appendix

Financial Literacy Questionnaire

Zip Code of Your Primary Residence: _____

Circle the appropriate response(s) below.

1. Ethnicity: African American Asian Latino White Other: _____
2. Gender: Male Female
3. Age Range: 18-24 25-31 22-38 39-48 49-57 58-64 65 and older
4. Highest Level of Education: Some High School High School Some College Associates Degree College Degree Masters Post Graduate Doctorate
5. Income Range: 0-\$15,000 \$15,001-\$30,000 \$30,001-50,000 over \$50,000
6. Employment Status: Employed Unemployed Not Working by Choice
7. Bank Accounts: None Checking Saving Money Market CD
Other: _____
 - For an answer other than “None” in Question 6, circle the type of banking relationship:
Bank Credit Union
8. Money set aside available for emergencies: \$0 \$1-\$500 \$501-\$1000 \$1000 or more
9. Investments: None IRA 401k Roth IRA 403b TSA Mutual Fund Real Estate
Other: _____
10. Cashing Payroll Check: Direct Deposit In Person Bank Deposit Check Cashing Establishment Corner Grocer/Liquor Store Other: _____
11. Credit Cards (Circle all that apply.): None Debit Debit/Visa Visa Master Card American Express Discover Diners Club Major Department Store Other: _____
 - If you answered “None” in Question 10, do you need assistance in obtaining a credit card due to credit issues? No Yes
12. Housing: Live with Parents Apartment Rental House Homeowner Live with Other Relative Dorm Other: _____
13. Have you ever heard of financial literacy? No Yes
If you answered yes in Question 12, describe what financial literacy means to you.

14. Would you like information about becoming financially independent? No Yes

Use the back of this sheet or another sheet(s) to answer the questions below.

15. Describe how you spend your extra money each month.
16. In what ways does your budget help you save money?
17. Describe a typical week of spending in your life.
18. In what ways do your friends, family, and others influence what you buy?
19. Think about winning \$10 million. Now describe what you would do with the money?

References

- American Bankruptcy Institute Journal (ABIJ) (2003). Financial literacy bills advance in Senate. *American Bankruptcy Institute Journal*, 2003.
- Bankruptcy filings increase to record (2003, August 19). *The New York Times*, pp. C2.
- Bernanke, B. (2006). Testimony: Financial literacy. *Board of Governors of the Federal Reserve System (U.S.) Proceedings*, 2006.
- Berry, C. (2004). *To Bank or Not to Bank? A Survey of Low-Income Households*. Joint Center for Housing Studies Working Paper Series. Cambridge, MA: Joint Center for Housing Studies.
- Beverly, S., Tescher, J., & Marzahl, D. (2000). *Low cost bank accounts and the EITC: How financial institutions can reach the unbanked and facilitate savings*. Mimeo presented to the Symposium on Asset Building Policies. (St. Louis, MO, September 2000).
- Braunstein, S. & Welch, C. (2002). Financial literacy: an overview of practice, research, and policy. *Federal Reserve Bulletin*, 87, pp. 445-457.
- Cambridge Human Resource Group Inc (CHRG). (1995). *Latest workplace issues Survey*. Chicago, IL: CHRG.
- Caskey, J., Duran, C. & Solo, T. (2006). The urban unbanked in Mexico and the United States: World Bank policy research working paper 3835. Retrieved September 10, 2008 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=922961.
- Center for Financial Services Innovation (2007). Underbanked fact sheet. Retrieved September 10, 2008 from www.cfsinnovation.com/underbanked-fact-sheet.php.
- Chen, H. & Volpe R. (1998). An analysis of personal financial literacy among college Students. *Financial Services Review*, 7, 2, pp. 107-128.

- Credit Consumer Counseling (2008). About us. Retrieved September 15, 2008 from <http://www.consumercredit.com/about.htm>.
- De Soto, H. (2000). *The mystery of capital*. New York: Basic Books.
- Godwin, D. (1990). Family financial management. *Family Relations*, 39, pp. 221-228.
- Goldsmith, R. (1969). *Financial structure and development*. New Haven, CT.: Yale University Press.
- Hogarth, J. & Hilgert, M. (2003). Patterns of financial behaviors: Implications for community educators and policy makers. *The Board of Governors of the Federal Reserve System (U.S.) Proceedings*, 2003.
- Keown, A.J. (2007). *Personal finance*. Pearson Education, Inc. Upper Saddle River, New Jersey.
- King, R. & Levine, R. (1993). Finance, entrepreneurship, and growth: theory and evidence. *Journal of Monetary Economics*, 32, 3, pp. 513-42.
- Lucey, T. (2005). Assessing the reliability and validity of the jumpstart survey of financial literacy. *Journal of Family and Economic Issues*, 26, 2, pp. 283-294.
- Marino, J. (1997, December 22). We do bankruptcy right. *Memphis Flyer*.
- Maxwell, J. (1998). Designing a qualitative study. *Handbook of applied social research methods*. Thousand Oaks, CA: Sage.
- Merriam, S. (1996). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Muske G. & Winter, M. (2004). Personal financial management education: An alternative paradigm. *Association for Financial Counseling and Planning Education*, 15, 2, pp. 79-88.

- Northcutt, N. & McCoy, D. (2006). *Interactive Qualitative Analysis: A systems method for qualitative research*. Thousand Oaks, CA Sage Publishers.
- Oppenheimer Funds/Girls Inc. (1997). *Girls, money and independence*. New York: Oppenheimer Funds/Girls Inc.
- Peters, J. (2005). The ABC's of dollars and cents. *The University of Memphis Magazine*, 23, 1.
- Pomeroy, S. (2006). *Was Chicken Little right? Case studies on the impact of expiring social housing operating agreements*. Ottawa: Canadian Housing and Renewal Association.
- Quoteworld.org (2008). E. E. Cummings. Retrieved May 1, 2008 from <http://www.quoteworld.org/quotes/3303>.
- Stuhldreher, A. & Tescher, J. (2005). *Breaking the savings barrier: How the federal government can build an inclusive financial system. Issue brief 6*. Washington, DC: New America Foundation.
- U.S. Census Bureau (2005). Income 2004. Retrieved September 12, 2008 from <http://www.census.gov/hhes/www/income/income04/statemhi.html>.
- Weissbourd, R. & Bodini, R. (2005). Using Information resources to enhance urban markets. *Discussion paper for The Brookings Institution Metropolitan Policy Program*
- Westly, G. (2001). Can financial market policies reduce income inequality? Retrieved September 15, 2008 from info.worldbank.org/etools/library/latestversion.asp?128760.

2008
THINK TANK
FOR AFRICAN AMERICAN PROGRESS