THE IMPACT OF RACE ON CLASSROOM DYNAMICS IN THE ADULT EDUCATION CLASSROOM

by

SONYA LENATTE THOMAS

(Under the Direction of Thomas Valentine)

ABSTRACT

The percentage of degrees awarded to African Americans decreases drastically at the highest levels of the educational pyramid. This may be attributed to the negative impact of dominant culture classrooms for African Americans. The present study sought to determine the extent to which race impacts perceived classroom dynamics of African American and Caucasian American adult learners in graduate classrooms. The study sample consisted of 302 adult learners enrolled in graduate classes at one Predominately White Institution and 3 Historically Black Colleges & Universities in a southeastern state of the United States. Data were collected in 27 graduate classrooms using a self-completion, forced-choice survey instrument, the Classroom Dynamics Questionnaire (Valentine, Oliva, & Thomas, 2002). This instrument was designed to measure students’ interpersonal relationships with respect to four dimensions of classroom dynamics, Teacher Respect, Teacher Confidence, Learner Cohesion, & Learner Voice.

Statistical analyses were used to determine the explanatory power of three variables, students’ race, racial ratio (percent black) of class, and the race of the teacher relative to the race of the student on perceived classroom dynamics. Analyses revealed that students of both races rated items in each of the four dimensions of classroom dynamics highly. The various analyses
conducted in this study revealed that no statistically significant difference on the basis of race existed on any of the subscale measures. However, quantitative measures alone have been found to have limited power in explaining race in the context of education, especially at HBCU’s. These findings provide practical contributions to the field of adult education in the consideration of the complex nature of race and appropriate methodological considerations, as well as the measurement of interpersonal dynamics. Also, these findings provide a base for further research that examines the impact of race on classroom dynamics in adult education classrooms.

INDEX WORDS: Adult education, Social climate, Classroom social environment, Classroom interpersonal dynamics, Classroom Dynamics Questionnaire, African American Learners, Critical Race Theory
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by

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DOCTOR OF EDUCATION

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2004
DEDICATION

This dissertation is dedicated especially to my mother, Pier; to my cousins, Crystal & Teleshia; and to my friends, Charlette, Edlena, Jerri, & Sonya. You have all been a great support network for me throughout this entire process. Similar to the African proverb that states, "it takes a whole village to raise a child"; you have taught me that it takes an entire sisterhood to produce a dissertation.

I wish I could print a name in parenthesis outside of my own on my diploma. It was my mother who clipped the newspaper ad about this degree program and encouraged me to apply. But most importantly, she taught me to value education and pushed me towards self-determination and perseverance at a very early age. She has never accepted the words "I can't" from me. I can vividly remember crying as a child and saying, "I can't tie my shoe" and my mother replying, "Did you try?" "There is no such thing as I can't". This proved to be a very important character and confidence building lesson in my life. Mom, you have taught me that an element of success is failure. Thus, I refuse to embrace the notion of "I can't" in my life. I believe that I can do almost anything, all I have to do is try. Mom, even though only my name will be recognized, you are the true hero, for you are the "wind beneath my wings."

To the rest of my sisterhood circle, Crystal, Teleshia, Charlette, Jerri, Edlena, & Sonya, thank you for your support throughout this journey. We have truly traveled together. You were a source of encouragement or help in library research, proofreading, survey administration, and survey processing. I am looking forward to being able to hang out with each of you more, and not having to cancel plans or not make plans because I need to work on my dissertation.
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CHAPTER 1
THE PROBLEM

Background of the Study

Almost fifty years after the unanimous Supreme Court decision in Brown vs. Board of Education, which put an end to *de jure* school segregation in the South, educational attainment continues to be a significant problem for Georgia’s African Americans. Although, African Americans make up almost thirty percent of the total population in Georgia, according to the 2000 United States census data, current statistics suggest that the educational system in the state of Georgia is not meeting the needs of Georgia’s African Americans (see Table 1.1). Racists might use these statistics to point to an inferiority of ability among African Americans; however, given the history of slavery, racism, and oppression in the United States, one could argue that the major discrepancies in educational attainment between African Americans and Caucasians are a result of institutional failure.

Examination of the total population of Caucasians in Georgia over the age of 25 reveals that only 4.2% of the people have an education less than 9\(^\text{th}\) grade; whereas 8.7 % of the total population of African Americans over the age of 25 in Georgia have less than 9\(^\text{th}\) grade education. Moreover these data reveal that 34.1% of Caucasians have completed only high school compared to 33.3 % of African Americans (U.S. Census, 2000). High school completion levels appear comparable at the lowest level of the educational pyramid; however the inequity in educational attainment among African Americans and Caucasians becomes more apparent as one examines the method of completion.
Table 1.1

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>White</th>
<th></th>
<th>Black</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Cumulative Percent</td>
<td>Percent</td>
<td>Cumulative Percent</td>
</tr>
<tr>
<td>&lt;9th grade</td>
<td>4.2 %</td>
<td>4.2 %</td>
<td>8.7 %</td>
<td>8.7 %</td>
</tr>
<tr>
<td>Some High School</td>
<td>7.3 %</td>
<td>11.5 %</td>
<td>14.4 %</td>
<td>23.1 %</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>34.1 %</td>
<td>45.6 %</td>
<td>33.3 %</td>
<td>56.4 %</td>
</tr>
<tr>
<td>Some College</td>
<td>17.9%</td>
<td>63.5 %</td>
<td>20.2 %</td>
<td>76.6 %</td>
</tr>
<tr>
<td>Associates</td>
<td>8.4%</td>
<td>71.9 %</td>
<td>6.8 %</td>
<td>83.4 %</td>
</tr>
<tr>
<td>Bachelors</td>
<td>18.6 %</td>
<td>90.5 %</td>
<td>11.5 %</td>
<td>94.9 %</td>
</tr>
<tr>
<td>Graduate and Professional</td>
<td>9.5 %</td>
<td>100%</td>
<td>5.1 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>

The National Research Council asserts that nationally the narrowing of the black-white high school completion gap, in recent years, is due to a higher rate of completion of GEDs by African Americans (U. S. Department of Education, 2001). A recent report published by the National Center for Education Statistics supports this argument (National Center for Education Statistics, 2003). The state of Georgia is reported as having 6,716 “other high school completers” (individuals who receive certificates of attendance, GED, or other credentials in lieu of a regular diploma) for the 2000-2001 school year. An examination of these “other” completers by race/ethnicity reveals that 4,291 of the 6,716 students in this category were identified as Black/non-Hispanic. Thus, 63.9% of all students who did not complete the public high school diploma program for the 2000-2001 school term were African Americans who make up only 29% of Georgia’s total population. This disparity becomes even more apparent as one examines levels of higher education.
A greater percentage of the African Americans compared to the Caucasians in the state of Georgia appear to be pursuing education beyond the secondary level. Yet, educational attainment rates remain low for Africans Americans relative to the total number of students who attempt to achieve higher education credentials. Approximately, 20% of the total African American population over the age of 25 are reported as having completed some college as their highest level of education attained; compared to the completion of some college by 18% of the total population of Caucasians over the age of 25 (U. S. Census, 2000). However, Table 1.1 reveals that 18.6% of Caucasians in Georgia have bachelor’s degrees compared to only 11.5% of African Americans. In examining the percentage of the total population of African Americans and Caucasians, 9.5% of Caucasians have obtained graduate or professional degrees compared to only 5.1% of African Americans (U. S. Census, 2000). Subsequently, when one considers the number African Americans in Georgia with bachelors degrees and beyond, only 16.6% of African Americans have attained this level of education compared to 28.1% of Caucasians in the state of Georgia.

Moreover, in 1998, African American students were found to account for 27% of the total enrollment at colleges and universities in the state of Georgia (Southern Regional Education Board [SREB], 2001). Twenty three percent of Associate degrees and 22% of Bachelor’s degrees where awarded to African Americans. Furthermore, African Americans were awarded 16% of Master’s degrees, 11% of doctoral degrees and 10 % of first professional degree (SREB, 2001). This data further reveals that the percentage of degrees awarded to African Americans decreases drastically at the highest levels of the educational pyramid

Approximately 50% of the African American population in the United States can be found in the South; therefore, it is imperative that we become one of the leaders in examining
racial inequities in our educational system. Many scholars support the observation that racial inequity stems from power and resources that enforce the ideals of the dominant culture upon African Americans and other subordinate groups (Asante, 1991; Asante 1996; Banks, 1988; Carlson, 1997; Guy, 1999; Harris 1992; Harris, 1999; Hollins 1996; Shiele, 1994; Timm, 1996; Walters, 1996). The following has been made about the impact of race in the field of adult education:

. . . disparities based on race exist in the practice of adult education. . . Participation patterns alone have consistently borne out the fact that African Americans and other people of color are underrepresented in all types of adult education. Amstutz (1994) has suggested three reasons that racism (and sexism) persist in adult education despite well-intentioned efforts. First, she sees a discrepancy between the rhetoric of adult education that speaks of empowerment and equal access, and actual behaviors that more often than not are “unempowering” and “traditional”. Second, most adult educators are themselves white and middle class, have had little interaction with minorities of any kind, and have failed to examine their own beliefs, assumptions, prejudices, and biases. Third, most adult educators have an unwarranted faith in institutions, believing “that institutional practices are well meaning and that the policies under which their institutions operate are not biased” (Merriam & Caferella, 1999, p. 343).

Many scholars contend that the educational inequity experienced by African Americans can be attributed to a lack of ownership in the American educational system as it is currently structured (Delpit, 1995; Esposito & Murphy, 2000; Gordon, 1999; Guy, 1999; Hale, 2001; Johnson et al., 2002; Ladson-Billings & Tate, 1995, 2001; Lee, 2001; Lynn, 1999; Schur, 2002; Sheared, 1999, Shujaa, 1994; Taylor, 2000). This idea can be found in Critical Race Theory
(CRT), which is deeply rooted in the ideas of “naming one’s own reality” or “voice”. The following appeal by supporters has been made with regard to education and CRT. “As we attempt to make linkages between Critical Race Theory and education, we contend that the voice of people of color is required for a complete analysis of the educational system” (Ladson-Billings & Tate, 1995). Failure to examine this ideology will allow dominant values and practices to continue to impact the education of African Americans in the following ways:

1. African American learners will not be supported in their need to understand themselves in relation to others (Hollins, 1996; Shujaa, 1994).

2. African American learners will be silenced in the educational process which leaves them feeling alienated, disaffected, and isolated (Gilyard, 1996; Watkins, Lewis & Chou 2001).

3. Instructional practices will fail to provide a way for African American learners to maintain their cultural integrity while succeeding academically (Hale, 2001; Shujaa, 1994).

4. The experiences and privileges of the dominant culture will be validated at the expense of promoting feelings of powerlessness, isolation, and alienation of African American learners (Allen, 2001; Gilyard, 1996; Hale, 2001; Hollins, 1996; Shujaa, 1994; Tatum, 1997; Watkins, Lewis, & Chou, 2001;)

It is imperative that adult educators examine and acknowledge ideologies, interconnected beliefs, and values associated with differences in races and ethnicity. Adult educators must seek alternative practices in the adult education classroom to prevent the educational environment from reproducing the disparities associated with the norms of the larger society. In the interest of social justice, there must be a concern not only for the equality in treatment of all members of society, but also the protection of the least advantaged members of society (Rawls, 1971). Gordon (2001) maintains the following concerning the education of African Americans and
social justice. “Equity requires that treatments be appropriate and sufficient to characteristics and needs of those treated. In pursuit of a just society, our nation has tended to hold equal treatment as its criterion. Yet for educational equity to be served, treatment must be specific to one’s functional characteristics and sufficient to the realities of one’s condition” (p.8).

In the interest of social justice, educational institutions must strive to provide students from diverse backgrounds with equal access to high quality education. Issues of race, class, culture, ethnicity, gender, religious background, and many other social divisions, to which learners are assigned, play an integral role in the current inequities that exist in educational environments. Still one feature of great importance is the environment in which learning takes place.

The concept of classroom social environment is used in current educational literature to examine differences in perceptions of the learning environment (Courtenay & Arnold, 1988; Darkenwald & Valentine, 1986; Darkenwald & Gavin, 1987; Fraser, 1989; Klecker, 2000; Moos, 1979; 1989; MacAuly, 1990; Miglietti & Strange, 1998; Schlossberg, Lynch, & Chickering.). Classroom social environments have been explored for decades in an attempt to understand how classrooms work, and what makes for fruitful learning. One important aspect of classroom social environments is classroom dynamics. Classroom dynamics studies generally examine relationships and how people interact as a social enterprise. Such studies hold the potential to make classrooms a more equitable and supportive place to learn.

Statement of the Problem

The instruments used in adult education (Darkenwald & Valentine, 1986; Moos, 1974) to measure dimensions of classroom dynamics and the data on which these findings are presented, represent dominant culture world views and give little understanding of what works
best for African American learners. Critical Race Theory studies suggest that race impacts how people experience the classroom. Yet, few studies have been designed to study classroom dynamics that consider race. In addition, teaching and learning has traditionally been defined and described in terms of a predominately teacher centered educational model. This model focuses on the characteristics of traditional college students and K-12 learners, but rarely considers the adult learner.

Many claims have been made about variations of how and what students observe in the educational environment on the basis of race (Ancis, Sedlacek & Mohr, 2000; Hendrix, 1998; Pigott & Cowen, 2000; Tettegah, 1996). There has been a variety of explanations; most of which focus on admissions rather than the interrelationships in the classroom. Adult learners may have markedly different preferences for classroom interactions based on racial or ethnic identities. Knowledge of theses preferences is paramount when one considers that classroom interactions mediate the learning process. Subsequently, a significant knowledge gap that emerges is our lack of knowledge of the impact of race on classroom dynamics. A systematic, empirical study to examine the impact of race on classroom dynamics in the adult education classroom is absent from the literature.

Purpose of the Study

The purpose of this study was to investigate the impact of race on classroom dynamics in the adult education classroom. In order to accomplish this purpose the following research questions were examined:

1. To what extent does a respondents’ race impact perceived classroom dynamics?
2. To what extent does the percent of African Americans to Caucasians in the classroom impact perceived classroom dynamics for students of different races?
3. To what extent does the teachers’ race in relation to the respondents’ race impact perceived classroom dynamics?

Although racial discrepancies could cover many races, one of particular interest is the discrepancy between Caucasians and African Americans. This interest is rooted in a long and sustained history of slavery, oppression, and denial of education forced upon African Americans. Moreover, 50% of the African American population in the United States can be found in the South and at present African Americans are one of the largest minority group in the United States. Consequently, in this study the impact of race in the adult education classroom was examined only between Caucasians and African Americans.

Significance

This study has the potential to inform state education agencies and program planners of the need to develop initiatives that address the persistent difference in educational attainment rates between Caucasians and African Americans. Initiatives that focus primarily on the African American educational experience are needed to help African Americans overcome the many institutional barriers they encounter as students. Furthermore, the knowledge from this study can be used in the training and professional development for educators to raise their consciousness. As educators become more aware of the experiences of African Americans in the educational environment, they may attempt to incorporate more Afrocentric approaches in their teaching. This has the potential to increase the educational attainment rates for African Americans.

Not only does this study have the potential to impact state education agencies, program planners, and educators, but also individual African American learners as well. They can use the knowledge gained from this study as a source of validation of their experiences and a source of encouragement to tell their individual stories. Many may find themselves in a position of being
able to engage in meaningful conversations of how race impacts classroom dynamics and the learning that takes place for them. These conversations have the potential to challenge the social construction of race in the classroom and raise the awareness of people in non-educator roles.

Finally, from a practical standpoint, the findings of this study can help adult educators develop more informed strategies in mediating classroom interactions. A better understanding of how race impacts classroom dynamics will possibly enable adult educators to better satisfy adult learners of various cultural backgrounds. This may help to meet their educational needs so that they may experience greater success in the learning environment.
CHAPTER 2
REVIEW OF THE LITERATURE

This literature review is divided into two major sections. The first section of this review focuses on African Americans and their educational experiences. This section begins with a discussion of Critical Race Theory as a tool for examining the educational experiences of subordinate groups of society. This discussion is followed by research and scholarly writings that focus on black racial identity and the effects of race on the educational experiences of African Americans.

The second section focuses on research and scholarly writings concerned with group learning and classroom dynamics. This section deals with the literature on classroom social environment in adult education. This concept was used as the guiding conceptual and operational framework for developing a more culturally inclusive instrument for measuring preferences for classroom social environment, as well as, studying different aspects of African American adult learner’s educational experiences with respect to classroom social environment.

African Americans and Education

If asked to describe who we are, most of us include information about the groups to which we belong. Memberships in groups may be prescribed, hopeful, marginal, intentional and/or non-voluntary. To a large extent, our memberships define who we are (Luft, 1984; Zastrow & Kirst-Ashman, 1997; Wheelan, 1994; Johnson & Johnson, 2003). This section discusses Critical Race Theory and reviews the most promising key concepts which have the potential to explain the impact of race on African Americans educational experiences.
Critical Race Theory

Critical Race Theory is considered to be an analytical tool for understanding and explaining racial inequities. Lynn (1999) notes that Critical Race Theory (CRT) “is a legal counter discourse generated by legal scholars of color who sought to inject the issue of racial oppression into the debate about the law and society” (p. 609). CRT spawned its origin as a critique of law and society, in the mid-1970s, as many lawyers, activists, and legal scholars became increasingly concerned about the lack of advancement of civil rights, since the 1960s. Although, writers such as Derrick Bell, Alan Freeman, and Richard Delegado are given credit for the formulation of Critical Race Theory, it has been argued that many of this theory’s fundamental principles can be traced to others, such as Sojourner Truth, W.E.B. Dubois, Fredrick Douglas and the Black Power and Chicano movements of the 1960s and 1970s (Delgado & Stefancic, 2001).

Critical race scholars expose ways in which current civil rights laws are subverted to benefit the majority instead of the minority for whom they were created. A number of CRT scholars have recognized several common themes relating to this theory (Ladson-Billings & Tate, 1995; Lynn, 1999; Outlaw, 1997; Wilson, 1999). These ideas commonly suggest that:
1. racism is deeply ingrained in everyday American life in our legal systems, social systems, and educational systems
2. current civil rights laws must be reinterpreted
3. claims of a colorblind society must be challenged
4. the voices of those who have been traditionally silenced must be heard

More recently Delgado & Stefancic (2001) have identified four large themes in Critical Race Theory literature which they consider “hallmark Critical Race Theory themes”: (1) interest
convergence or material determinism, (2) revisionist interpretations of history, (3) critique of liberalism, and (4) structural determinism. The theme of interest convergence, material determinisms, and racial realisms poses an issue that divides many who embrace the notion of Critical Race Theory. One group of scholars, idealists, believe that race is socially constructed and that “racism and discrimination are matters of thinking, mental categorization, attitude, and discourse….Hence we can unmake it and deprive it of much of its sting…” (p. 17).
Contrastingly, realists believe that “racism is a means by which society allocates privilege and status. Racial hierarchies determine who gets tangible benefits, including best jobs, the best schools, and invitations to parties in peoples homes….What is true for subordination of minorities is also true for relief of it: civil rights gains for communities of color coincide with the dictates of white self-interest” (p. 17). The second theme, revisionists’ interpretations of history, simply refers to the reinterpretation of historical events through the experiences of minorities opposed to a single majority interpretation of events. This reinterpretation is an attempt to express minority views of historical events. The third theme, identified by Delgado & Stefancic (2001), as a hallmark critical race theme, is critique of liberalism. This theme refers to the many writings on Critical Race Theory that challenge the color blind perspective that liberalism uses as a framework for addressing America’s racial problems. Critical race theorists hold that color blindness allows us to address only extremely overt forms of racisms and fails to consider if racism is embedded in our thought processes and social structures which will inherently keep minorities in subordinate positions. The final theme, structural determinism, is a means by which CRT scholars argue that our system by reason of its structure and monolithic perspectives cannot rectify certain types of wrong in its current state.
Even though CRT’s origin is in the area of law, it is now being used as an analytical tool to unearth the inequities in education. Critical Race Theory in education is like its antecedent in legal philosophy. Lynn (1999) asserts “that a major concern of a Critical Race analysis of education would be to look analytically at the failure of the educational system, in the United States, to properly educate the majority of culturally and racially subordinated students” (p. 611). CRT is a radical critique of both the status quo and the alleged reforms in educational practices that permit the hegemonic rule of the oppressor, while simultaneously claiming the intent of justice for the oppressed (Lynn, 1999). Since 1994 scholars of color in the field of education have been increasingly utilizing CRT in their research and practice.

The first noted use of CRT in education is found in an autobiography written by Tate (1994) in Urban Education in which he critically examines his feelings of marginality in the academy. Approximately, a year later much of the conceptual foundation for the use of CRT in education was delineated by Ladson-Billings and Tate (1995). Critical Race Theory has increasingly become more prevalent in educational literature as an analytical framework for examining a variety of issues in the arenas of both K-12 and adult learning (Aguirree, 2000; Gonzalez, 1998; Ladson-Billings, 1998, 1999, 2000; Lynn, 1999; Parker, Deyhle, & Villenas, 1999; Solarzano, 1997, 1998; Solarzano & Delgado Bernal, 2001; Solorzano & Villalpando, 1998; Solarzano & Yosso, 2000, 2001; Tate, 1997; Villenas & Deyhle, 1999). Moreover, supporting the growing use of CRT in educational research entire journal issues On CRT in education began to appear; between 1998 and 2002 the following journals all ran issues devoted exclusively to CRT in education: International Journal of Qualitative Studies, Qualitative Inquiry, and Equity and Excellence in Education.
While CRT is considered a dynamic analytical research tool, its use is also met with criticism. Harris (1999) cites Critical Race Theory’s troubles are “how to organize around the notion of shared identity and yet fully acknowledge and include the multiple identity claims of group members at the risk of centering or obliterating the very sense of collectively that brought the group together in the first place” (p. 316). Lentin (2000) uses the work of others to delineate what she terms as "the call for an end to the use of race as a critical concept." She states that:

the problem with invoking race as a critical concept and most likely the reason why culture seems to dominate racist discourse, is that we no longer so readily equate observable differences with consequential physical realities…. to develop useful critical concepts and to tentatively reformulate anti-racism, it is imperative to locate historically the unfurling of the notion of race (p. 97).

Moreover, Critical Race Theory has been accused of coating issues in black and white instead of color and excluding issues of sexuality as they intersect with race. LaCrit scholars, who focus on issues of marginality relating to Hispanics, have criticized CRT especially. “LaCrit scholars have called Critical Race Theory to task for being too focused on the “black-white paradigm” and for failing to deal with the relationship between race and sexuality” (Harris, 1999,p. 314). Asserting herself as an indoctrinated critical theorist, Harris observes that “within the community, attempts to explore the convergence of race and sexual orientation have been repeatedly sidelined, questioned , or rejected outright…this tension has contributed in large part to the dysfunctional micropolitics of Critical Race Theory spaces” (p. 319). In spite of the above perceived inadequacies, the literature on Critical Race Theory continues to flourish in both law
and education. This paradigm offers a critical way in which adult educators can assess the impact of race on the adult learning environment.

*Life Experience due to Black Racial Identity*

Omni & Winant (1994) defines race as a concept that takes into consideration physical characteristics, but has a socially constructed meaning that fluctuates. This “quasi-biological definition of race extends it to include the sociopolitical history and experiences of domination and/or subjugation” (Pope-Davis & Liu, 1998). African American and European Americans life experiences diverge so strikingly that race continues to reign supreme over all other interests and this understanding manifests itself across institutions in America (Allen, 2001). “Black self-consciousness is a hybrid of self-knowledge and social knowledge, influenced by personal perceptions as well as communal beliefs about race.” (Wilson, 1999, p. 206). “The matter of ethnic designation or group identity cannot be resolved until the question of identity is situated in its historical, cultural, and sociopolitical context. We must understand how the idea of race emerged and how it came to be associated with and embedded in education” (Hillard, 2001, p.13). Race has been identified as the single most factor that dominates the lives of African Americans due to its historical nature. Allen (2001) asserts the following perspective of being black in America:

The essences of this perspective is that being African in the United States carries a certain burden …because race continues to be a prominent social, economic, and political force in the United States, it is the major molder of African American lives and determines what it means to be African American (p. 137)

A critical factor that may affect African American adult learners educational experiences are past life experiences due to racial identity. Experiences due to racial identity can best be
described through the intellectual contributions of Dubois’ (1993/1903) in *Souls of Black Folk*. The “veil of race” has become a metaphor for structural racism, that segregates African Americans and Caucasians, and a means by which institutions sustain power over the oppressed (Wilson, 1999). Moreover, the “veil of race” represents the knowledge of one’s difference based on the actions and reactions of others based on physical signs of identity to which lived experiences is key and solidifies one’s racial identity. This is best explicated by Wilson (1999) who states: “The metaphor reveals that physical traits are unimportant until they are tied to a specific meaning and until they become a motive of symbolic action” (p. 206).

Findings of a recent research study of African American learners in a predominately white learning environment suggest that student perceptions of the congruence between themselves and their educational environment are critical for academic success (Chavous, 2000). Furthermore, it was found that the meaning of race and the importance of race were related to the extent to which African American students participated in group activities. “A critical factor …is prior experiences” (Chavous, 2000, 81). Life experience has been identified as an important factor that contributes to the way adults process and use knowledge in the learning environment (Guy, 1999; Sheared, 1999).

*Race & the Educational Experiences of African Americans*

An understanding of the racial effects associated with the teaching-learning transaction is essential for effective teaching. Many teachers operate on the premise that the adult education classroom is a neutral educational site free of the power structures that exist in the real world. A number of research studies have sought to examine this paradigm. Although many adult educators operate on the premise that the adult education classroom is a neutral educational site
free of the influence of race, there are many studies that discredit this position with their findings.

One such study that discredits this position, is a comparative qualitative study in which two adult education professors studied the power dynamics in teaching in learning practices in their classrooms (Johnson-Bailey & Cervero, 1998). It was their postulate that power relations that exist in the wider social context of our everyday lives, are present in the adult education learning environment. Additionally, ways in which these power relationships are played out in the classroom were investigated. Through a series of interviews and observations, with the students in these two classes; as well as, with other similarly situated faculty, it was ascertained that the成人 education classroom is not a neutral educational site. The investigators of this study discovered that positionality of the teachers and learners more so than any other factor affected classroom dynamics. As race was deconstructed, “whiteness” was found to be a significant element affecting classroom dynamics. This racial category of whiteness was found to be the key power relationship moderating classroom dynamics (Johnson-Bailey & Cervero, 1998).

Another study, using data from the national educational longitudinal study of 1988, examined student gain scores in each subject area based on the match between the student’s race and the teacher’s race (Ehrenberg & Brewer, 1994). Although this study concluded that there was little correlation between the teacher’s race and ethnicity and how much student’s learned, correlation was found in teacher’s subjective evaluations of students. A race, gender, and ethnicity match yielded higher subjective evaluations of the students. Although the author of this study concludes that race does not really affect how much students learn, the difference in subjective evaluations supports the notion that race is a key power structure that exists in the classroom just as in the real world.
Race has been found to be a key factor that influences teacher perceptions in the classroom. A study, which examines race from the perspective of white prospective teachers, reveals differential attitudes towards students on the basis of race. Three survey instruments, administered to prospective white teachers, revealed that teacher’s perceptions varied according to the race/ethnicity of students (Tettagah, 1996). Yet, another study that explores and supports the notion that teacher perceptions of students vary on the basis of race includes both white and black practicing teachers. This study involved a correlational analysis that examined the effects of teacher race, pupil race, and teacher-child racial congruence on teacher ratings of school adjustment. This study’s main finding was that child race was the strongest determinant of African American and White teacher’s judgment on all measures. A secondary finding was that African American teachers judged all pupils to have fewer problems, more competencies, and better educational futures than white teachers. For both teacher groups, the use of negative descriptors was more closely related to the adjustment ratings and future academic expectancies for African American students. The study’s strongest finding was that both groups of teachers judged African American students to have more serious school adjustment problems and fewer competencies than white students (Pigott & Cowen, 2000).

Students, as well as, teachers have varying perceptions of the educational environment on the basis of race. A study that illustrates this variation investigated student perceptions of general racial and ethnic climate, personal experience of campus racism, and racial-ethnic comfort at a large university in the United States. African American, Latino, and White student’s perceptions and experiences of the cultural climate were compared using the Cultural Attitudes and Climate Questionnaire (CACQ). This questionnaire was administered to 578 students to assess their perceptions and experience of the university racial and ethnic climate. African American, Asian
Americans and Latino students consistently reported more negative experiences compared with that of white students attending the same university (Ancis, Sedlacek, Mohr, 2000). Similarly student perceptions of the credibility of professors have been found to be influenced by race. Although most students in this study expressed that they did not personally believe any professor had automatic advantage over the other based on race, they simultaneously discussed a different set of criteria for evaluating black professors teaching particular subjects. For example a black teacher teaching ethnic studies is perceived to be initially more credible than a black professor teaching an engineering, math or science course (Hendrix, 1998). Whether these perceptions are accurate or not, they will inevitably affect interpersonal relationships in the classroom.

Race appears to be a significant descriptor in the classroom for African American students especially. One particular study that supports this sentiment is one that explores whether African American students are treated differently from Caucasian American students by Caucasian American teachers, on the basis of their race. A measure of the teacher’s behavior toward students revealed that African American students received more negative interactions from their Caucasian American teachers than the Caucasian American students did (Casteel, 1998). An examination of teacher ratings in school adjustment revealed that negative descriptors related more closely to the adjustment ratings and future academic expectancies for African American students than White students. Teachers judged African American students to have more serious adjustment problems and fewer competencies than white students (Pigott & Cowen, 2000). Likewise in a study that revisited whether teacher’s race along with verbal ability mattered, verbal ability was found to positively affect all students, however, race was found to make only a positive difference in African American students (Ehrenberg & Brewer, 1994).
Furthermore, the achievement of African American students has been shown to improve as a result of having a teacher of the same race. A study observing the race role-model effect supports these findings; a difference was only found to be evident among African American students when their role models were of the same race (Evans, 1992).

Not only is race a key descriptor in the classroom, but also the entire educational climate for African American students. An assessment of student perceptions of campus cultural climate by race revealed that African American students consistently have more negative educational experiences than other racial groups. In this study, they perceived and experienced more racial conflict on campus and racial-ethnic separation than Asian students and White students. African American students also perceived significantly more interracial tension in the residence halls than did White students. Moreover, they were significantly more likely than their white counterparts to experience pressure to conform to racial and ethnic stereotypes regarding their academic performance and behavior. Substantially, more faculty racism was also reported by African American students than their white counterparts in this study (Ancis, Sedlacek, Mohr, 2000). Race appears to manifest itself in the educational environment most negatively for African Americans.

**Group Learning & Classroom Dynamics**

Understanding group dynamics is central to education. Positive interpersonal relationships in the classroom have been found to maximize an individual’s learning, as well as the learning of his or her classmates. Cooperative learning has been found to produce higher achievement, more positive relationships, and greater psychological health than competitive or individualistic learning (Johnson & Johnson, 2003). Thus, the development of interpersonal relationships in the adult education classroom is paramount to educational success.
Although the existence of groups is acknowledged in most realms of society, there is little consensus on exactly what constitutes a group. Many social scientists continue to posit very different views and definitions of groups. The following are seven of the most common definitions describing the concept of a group:

1. A number of individuals who join together to achieve a goal.
2. A collection of individuals who are interdependent in some way.
3. A number of individuals who are interacting with one another.
4. A social unit consisting of two or more persons who perceive themselves as belonging to a group.
5. A collection of individuals whose interactions are structured by a set of roles or norms.
6. A collection of individuals who influence one another.
7. A collection of individuals who are trying to satisfy some personal need through their joint association (Johnson & Johnson, 2003).

The one consensus that all definitions seem to exhibit is that, in order to be a group, there must be some kind of mutual common relationship or degree of similarity among individuals.

*Origins of Concept of Classroom Environment*

Two personality theorists who have contributed to the understanding of group learning are Lewin (1936) and Murray (1938). They both support the position that human behaviors cannot be fully understood without knowing both the human being and the psychological environment. Lewin (1951) formed a theory known as the “field theory”. The field is defined as “the totality of coexisting facts which are conceived of as mutually interdependent” (p. 240). This theory views behavior as a function of person and environment. Lewin’s reasoning is that to understand and predict psychological behavior, one must determine every kind of psychological event,
momentary structure, state of person, and psychological environment (Lewin, 1936). Similarly, Murray’s (1938) needs-press model asserts that behaviors should be viewed as products of their relationships to the environment. This theory highlights interaction between personal and internal necessities (needs) and environment or external influences (press). Press is noted to function as an effective and significant determinant of human behaviors in any given environment.

In addition Murray (1938) identified two kinds of press, alpha press and beta press. Alpha press is the objective environment as seen by observers or outsiders, whereas, beta press is the perceived environment as seen by the person. Stern (1964, 1970) has further explicated the concept of beta press. He refers to beta press as “the phenomenological world of the individual, the unique and inevitably private precept which each person has of the events in which he takes part” (Stern, 1964, p. 164). Stern (1970) expanded the concept of beta press further by identifying two kinds: (1) mutually shared consensual beta press, and (2) idiosyncratic private beta press. Mutually shared consensual beta press is described as a shared interpretation of events or environment in which people participate together, while idiosyncratic private beta press represents the views of the individual that are not shared by the group.

Although Murray and Lewin have contributed greatly to our understanding of group learning & classroom dynamics, social learning theory is key to understanding these concepts as well. This theory regards the learner as an active contributor to his or her own learning. Social learning theory considers learning to occur in a social context rather than by simple conditioning. Cognitive response is considered central to learning opposed to reflexive response (Papalia, Olds, & Feldman, 1998). The social learning theory asserts that people vary their behavior extensively in different social and physical environments because the reinforcement
consequences for particular behaviors vary extensively. Social learning theorists attempt to identify the exact controlling stimulus conditions for particular behaviors (Bandura, 1969; Mischel, 1968). A more modern social learning theorist, Rotter (1989) asserts that to understand and control behavior one must take both the individual and the environment into account.

Although social learning theory provides many insights into understanding group learning and classroom dynamics, the concept of classroom social environment provides a more useful framework for studying adult classroom environments. Moos adapted Lewin’s and Murray’s theories to study the social environment of classrooms. “The social climate perspective is based on descriptions of environmental “press” obtained from an inferred continuity and consistency in otherwise discrete events” (Moos, 1979). Moos (1970) asserts that both members of a group and the immediate environment influence human behaviors. This assertion is illustrated by Moos as being influenced by the following: (a) personality and other personal characteristics partially account for human behaviors; (b) the environment can influence the extent and changes of human characteristics’ and; (c) the social-ecological setting can effect students attitudes, performance, self-concept, and sense of well being. This is evident in the following statements made by Moos (1979) that stress the importance of classroom social environment:

1. “The environment in which behavior takes place must be considered in order to predict individual functioning more accurately” (p. 2).

2. ”The environment can exert a potent influence on the extent and kind of change that occurs in human characteristic” (p. 3).
3. “The social-ecological settings in which students function can affect their attitudes and moods, their behavior and performance, and their self concept and general sense of well-being” (p. 3).

Two of the most notable works of Moos are the *Conceptualizations of Human Environments* (1973) and *Evaluating Educational Environments* (1979). In *Conceptualizations of Human Environments*, Moos outlines six categories of dimensions, which characterize human environment that have been related to indexes of human functioning. The six major divisions are: (1) ecological dimensions, (2) behavior settings, (3) organizational structure, (4) collective personal and/or behavioral characteristics of milieu inhabitants, (5) psychosocial characteristics and organizational climates, and (6) variables relevant to the functional or reinforcement analyses of environments. Moos asserts that “the common relevance of these six types of dimensions is that each has been conceptualized and shown to have an importance and sometimes decisive impact on individual and group behavior” (Moos, 1973, p. 653). However, these dimensions still depict personal and group behaviors that are expansive points of view.

Moos (1979) suggests that educational environments should be assessed from a social-ecological perspective that includes four domains, which consist of both physical and social variables: physical setting, organizational factors, human aggregate, and social climate. However, he considers classroom social climate as the “major mediator” in educational settings. Moos’s major focus was on the “extent to which the social climate is determined by and mediates the influence of the other 3 domains.” He conceptualized three broad areas for social environment through studies with colleagues in a variety of settings: secondary schools, community care homes, correctional institutions, psychiatric wards, and university student living arrangements. The three domains that characterize the social environments of varied settings are
relationship, personal development, and system maintenance and change. The relationship domain refers to “the extent to which people are involved in the setting, the extent to which they support and help one another, and the extent to which they express themselves freely and openly” (p. 14). Personal development refers to “the basic goals of the setting, that is, the areas in which personal development and self-enhancement tend to occur” (p. 16). The system maintenance and change domain indicates “the extent to which the environment is orderly and clear in its expectations, maintains control, and responds to change” (p. 16). Moos subsequently uses these three domains as a source for a general model of person-environment interactions, as well as, a conceptual and theoretical framework to conceive the elements of social environments in educational settings. This led to his development of the classroom environment scale (Moos, 1979).

*Classroom social environment in adult education.*

Moos (1979) defines classroom social environment as a “dynamic social system that includes not only teacher behavior and teacher-student interaction, but also student-student interaction” (p. 138). The concept of classroom social environment in the field of adult education is very similar in meaning to this literature that spawned its origin. Darkenwald and Gavin (1987), who assessed the social environment in adult classes, have further elucidated the concept of classroom social environment in the field of adult education. These authors describe classroom social environment as a concept that is “socially constructed by the teacher, students and their interactions, thus, leading to distinct attitudinal and behavioral norms” (Darkenwald & Gavin, 1987, p. 156). In the book *Improving Higher Education Environments for Adults* (1989), the following is asserted regarding adult learning environments. “We need to approach educational environments from a ecological perspective…The essence of the ecological
perspective is that the onus cannot be placed on either the individual or the environment; rather human behavior is a continuous interaction between the two” (Schlossberg, Lynch, & Chickering, 1989, p. 23). In 1987, Darkenwald and Gavin investigated classroom social environment in order to understand why adults drop out of educational activities. Seventy-seven adults enrolled in GED preparation classes were assessed concerning their expectations and actual classroom experiences using Moos’s classroom environment scale. Adult dropouts were found to score low on the affiliation dimension of the scale. “Dropouts anticipated finding themselves in a classroom in which they did not expect of presumably desire a climate high on friendly social relations and mutual support among students” (p. 160). This study also implied that there was a need for an adult version of the classroom environment scale because it was designed with regard to high school classroom environments.

Darkenwald and Valentine (1986) along with nine adult education doctoral students developed the Adult Classroom Environment Scale (ACES) at Rutgers University from 1984-1985. The instrument is comprised of 49 items and is a paper-and-pencil form. This group employed the use of interviews and existing environment instruments to guide the development of their adult focused instrument. Adult learners, as well as adult educators were included in the interview process. Although, existing instruments did not focus on adult populations, they offered a framework in which development could begin. (Darkenwald & Valentine, 1986).

The ACES was developed in two forms, form I and form R, ideal form and real form respectively. The ideal form encourages adult learners to envision the environment in which they would prefer to learn while the real form seeks to ascertain the characteristics of adult learners’ current learning environment. Although the goal of each form of this instrument is different, they
were both developed around seven dimensions: involvement, affiliation, teacher support, task orientation, personal goal attainment, organization and clarity, and student influence.

Courtenay and Arnold (1988, 1989) examined relationships between classroom social environment, achievement, and course satisfaction using the ACES. In 1988, the authors concluded that classroom social environment possibly influences course satisfaction for adults. One of the populations of students had higher interaction and commitment to the task, and higher involvement and task orientation dimensions on the ACES scale. Through employing the use of an additional instrument, Urdang Satisfaction Scale, the authors concluded that a definite statistical correlation existed between classroom social environment and course satisfaction. Yet, another study that addresses the concept of classroom social environment in the field of adult education involved gender differences in perceptions of classroom social environment. Female learners were found to rate higher in both the areas of affiliation and involvement than male learners (Beer & Darkenwald, 1989). Sullivan (1989) deduced that student feedback did affect classroom social environment through an experimental study, which involved revealing student perceptions of classroom social environment to teachers. Courtenay, Arnold, and Kim (1990) investigated the effects of program planning on classroom social environment and the effects of adult classroom environment on achievement and satisfaction. In this case, no significant relationships were found between classroom social environment, achievement, and satisfaction.

The repertoire of studies involving classroom social climate in adult education, that was extremely visible in the late 1980s and early 1990s, barely exist as we enter a new millennium. In 1994, Courtenay, Arnold, & Kim conducted a study to determine if including adult learners in planning their learning experiences affect learner achievement, learner satisfaction, and classroom environment. Additionally, they sought to determine to what extent classroom
environment correlates with learner achievement and learner satisfaction. Adult participants in this study were enrolled in a Basic English Review course. The study concluded “participation in planning does not appear to affect learning gain or satisfaction, even when the amount of participant input in planning is increased; participation in planning does not influence classroom environment; the relationship between classroom environment and achievement or satisfaction is inconsequential; and classroom environment, as defined by the ACES, may simply be a function of the satisfaction of the learner” (p. 297). Furthermore, in 1997, Carlson wrote a narrative describing her use of the theory of multiple intelligences in her graduate education classes to transform the classroom learning environment. Miglietti & Strange (1998) conducted a study of adults enrolled in remedial mathematics and English. The goal was to examine the relationship between students’ age and expectations of the classroom environment and learning styles as they relate to student academic achievement and satisfaction. The study yielded that there were no significant age main effects on classroom environment or learning style preferences. Additionally, no significant age by gender interactions effects were observed. A more recent investigation, involving adult populations and the concept of classroom social environment, is a study in which four classroom assessment techniques were used in a graduate-level course. These techniques were used in tests and measurements to explore the relationships between classroom climate and classroom assessment. Assessments that encouraged collaboration produced a more cooperative interaction filled classroom climate among graduate students (Klecker, 2000).

Towards a more culturally inclusive measurement of Classroom Environment

Although the ACES as well as other instruments have been used in the last decade to study adult classroom social environments, a more culturally inclusive instrument has been
sought. Since the early 1990’s, there have been very few instances in which the ACES has been used to assess classroom environment. Other instruments that been used to address perceptions of classroom social environment are the College Classroom Environment Scales, the Classroom Life Instrument, and the Individualized Classroom Environment Questionnaire (Abrami & Chambers, 1994; Wheldall et al.; 1999 Winston et al., 1994).

At the time that the ACES was developed, it was not designed to address differences that may exist based on race and gender. A majority of the participants, as well as, the developers of this instrument were white males; thus, it was created primarily from a dominant culture worldview. Other problematic issues with the ACES are instrument length, clarity of language, and subtle power notions. Extensive literature searches were conducted, as well as group critiques, focus group sessions, and interviews; each of which will be described in more detail in chapter three. At the conclusion of the above activities, four constructs were identified through which classroom environment could be studied: respect, confidence, voice, and cohesiveness.

To adequately measure the social interactions occurring within postsecondary classrooms, an understanding of the social interactions that occur between the teacher and students and among the students themselves was warranted. A review of applicable literature has been conducted to facilitate understanding of the conceptual framework of the study. The literature review addresses the respective content via the following sections: teacher respect for learners, confidence in teacher ability, learner voice, and learner cohesiveness.

Teacher Respect for Learners

A teacher demonstrates respect for learners via his or her interactions with the learners inside and outside the classroom. A teacher who respects learners, encourages class participation, and encourages students to express their opinions and ideas in a safe, and non-threatening
classroom atmosphere. These teachers value student opinions, assess student performance fairly, and provide student feedback in a consistent manner.

Teachers, who foster a sense of mutual respect between the students and themselves, facilitate a classroom environment conducive to learning. Knowles (1980) suggests that the self-concept of adult learners is generally affected by their perception from previous schooling experience that they are not very smart; at least, in regard to academia. Knowles states, “In the case of some adults the remembrance of the classroom as a place where one is treated with disrespect and may fail is so strong that it serves as a serious barrier to their becoming involved in adult-education activities at all” (p. 46).

The physical and social classroom environment can affect student involvement in educational activities. Knowles (1980) argues that the physical environment of the classroom should afford adult learners with a sense of comfort and allow them to feel at ease. Additionally, he proposes the following:

Even more importantly, the psychological climate should be one, which causes adults to feel accepted, respected, and supported; in which there exists a spirit of mutuality between teachers and students as joint inquirers; in which there is freedom of expression without fear of punishment or ridicule. People tend to feel more “adult” in an atmosphere that is friendly and informal, in which they are known by name and valued as unique individuals, than in the traditional school atmosphere of formality, semi anonymity, and status differentiation between teacher and student (p. 47).

Knowles argues, “But probably the behavior that most explicitly demonstrates a teacher really cares about students and respects their contributions is the act of really listening to what the students say” (p. 47).
Effective teachers generally possess adequate teaching skills, respect their students, and challenge them accordingly. Patrick and Smart (1998) conducted a study involving undergraduate students to clarify the nature of teacher effectiveness and to develop a measure for evaluating teacher effectiveness. Factor analysis revealed that teacher effectiveness is multidimensional in nature and is comprised of three factors: (a) respect for students, (b) ability to challenge students, and (c) organization and presentation skills. They suggest that tertiary students positively regard the teacher who genuinely respects students and treats them as equals. Organization and presentation skills also define teacher effectiveness, and ability to challenge students is characterized by setting high, but realistic, goals for students.

The classroom social environment or climate can affect these teacher-student interactions. Crain, Mahard, and Narot (1982) examined desegregation in schools and identified the means by which schools create social climate. They suggest the following:

Schools are commonly criticized for being rigid bureaucracies, which depersonalize students. We asked our tenth graders, “Have you ever talked to a teacher or other adult here about things you are doing outside of school . . .?” One-third of the white students and nearly half of the African Americans said they never had. It is easy to forget how little real interaction occurs between students and teachers. (p. 20)

Confidence in Teacher Ability

Learners generally trust the teacher to deliver course content adequately and effectively, and have confidence in the teacher accordingly. They expect the teacher to be knowledgeable, prepared, interesting, and cognizant of individual learning styles and needs. A capable teacher engages all students in the learning process, and encourages each student to succeed. The relationship between the teacher and students significantly affects student involvement.
Moos (1979) suggests that according to data obtained from studies of college and university impact on students; colleges that emphasized relationship dimensions, specifically faculty-student interaction, peer cohesion, and enthusiasm in teaching, positively impacted students. He states that the social climate of a classroom can be measured via specific social-environmental variables or sets of dimensions, which are conceptualized in three domains: relationship dimensions, personal growth or goal orientation dimensions, and system maintenance and change dimensions. According to Moos, relationship dimensions assess the extent to which people are involved in a setting, the extent to which they support and help one another, and the extent to which they express themselves freely and openly. He states, “Involvement in a classroom refers to the attentiveness of students to class activities and their participation in discussions” (p. 14).

Effective teachers who engage their students in the learning often utilize various teaching methods to maintain student interest and encourage class participation. According to the data collected by Crain, Mahard, and Narot (1982), high school students frequently consider school unnecessarily boring. Classroom instruction often exemplifies the concept of banking education; thus, described by Freire (1993), in which the teacher’s task is to “fill” students, the containers, with the contents of his or her narration. Education becomes an act of depositing information; students are the depositories and the teacher is the depositor. Freire argues that banking education should be replaced with problem-posing education, which resolves the teacher-student conflict; the teacher becomes a partner to his or her students. Thus, education is a social activity; specifically, adult education involves people and their interactions with one another (Merriam & Caffarella, 1999).
The teacher-student interactions that occur in the classroom can significantly impact student performance. Students entrust the teacher with their learning and rely on the teacher’s ability to effectively teach his or her students. Ehrlich and Frey (1996) argue, “Teachers should be held accountable for the performance of their students—along with the students themselves” (p. 5). They suggest seven principles of good teaching as follows:

1. Foremost, teaching is helping students learn for themselves. A good teacher is an enabler.
2. Superb teachers enjoy their students. They are interested and enthusiastic, and assume their students are too.
3. Outstanding teaching requires the firmest grasp on one’s subject matter, but not having all the answers. The great teacher wants students to leave the classroom full of questions, not answers.
4. Teachers must adapt their presentations to the abilities of their students. Teachers must cultivate a “layered mind”, and they must be sure that the layer with which they are communicating is at the level of their students’ minds at the moment.
5. Teaching is a two-way proposition, irrelevant of the setting, from the largest classroom to the individual tutorial. Some teachers perform better in a large class; others disparage lectures with four or five hundred students because of the belief that most students can read many times faster than a lecturer can talk and with a higher degree of comprehension.
6. Great teachers have great expectations about their students’ ability. They exhibit a real interest in students’ thoughts, ideas, etc.
7. Teaching, in its most important dimension, is a process of exploring connections. The great teacher, as connector, is a guide who helps students integrate knowledge and make the connections between different disciplines (Ehrlich & Frey, 1996).
Effective teachers continually evaluate their practice. Fox, Luszki, and Schmuck (1966) developed a teacher resource booklet to assist teachers in identifying discrepancies between their objectives and practices via diagnosing classroom learning environments. They examined classroom social relations and learning, and suggested that the teacher’s behavior in the classroom was influential in determining pupils’ responses to academic experiences. They suggested that the teacher could achieve his or her objectives more efficiently if he/she is aware of the effects of his/her interactions with pupils.

**Cohesiveness**

The third construct, cohesiveness, is also referred to in the literature as cohesion. Historically, cohesion is considered to be one of the most important group attributes. Cohesion has been defined as a process that results in the tendency of a group to unite and remain united to achieve collective and or individual goals and objectives. It entails shared feelings of loyalty, membership, closeness, and trust. A common definition of cohesion refers to it as “a dynamic process that is reflected in the tendency for a group to remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs” (Carron & Brawley, 2000; Heuze & Fontayne, 2002). A classroom group is thought to be cohesive when most of its members, including the teacher, are strongly attracted to the group as a group, and when most group members are highly accepted by others. Cohesion has been more explicitly described by Carron & Houseblass (1998) as a group

…who possess common identity, have common goals and objectives, share a common fate, exhibit structured patterns of interaction and modes of communication, hold common perceptions and group structure, are personally and instrumentally
interdependent, reciprocated interpersonal attraction, and consider themselves to be a group
(p.13-14).

An important aspect of cohesion that emanates current literature concerning cohesion is its
nature. It is frequently described as multidimensional, dynamic, instrumental, and affective. No
one factor is described as the sole contributor or equally responsible to the existence of group
cohesion. The existence of cohesion has been found to change over time contributing to its
dynamic nature. Moreover, all groups form for a common purpose supporting the instrumental
nature of cohesion. This common purpose fosters task unity and, thus, social bonding which
yields the affective dimension of cohesion (Carron & Brawley, 2000; Fraser & Russell, 2000;

Five elements considered to facilitate group cohesiveness are instructor modeling, course
structure, lack of competition, opportunities for self disclosure, and commonalities among all
participants (Fraser & Russell, 2000). Schmuck & Schmuck (1975), in an attempt to define
classroom social climate as a product of six group processes to include cohesion, describes
cohesion as a product of the other five elements: attraction, leadership, communication, student
norms of conduct, and individual expectations. More recently in a discussion of diagnosing
classroom cohesiveness, Schmuck & Schmuck (2001), offer the following insights as evidence
of cohesiveness:

- Classrooms in which “we” and “us” are frequently used
- Groups see themselves as part of the class and not as individuals set apart from other
  members of the class
- Students take pride in the group and can work with a variety of their peers
- Students often stand-in in the absence of others
Students participate with other class members in out-of-classroom activities

In as much as the above insights suggest there are many indicators of cohesiveness in a classroom setting. There are behaviors that undermine the development or existence of cohesion. Such things are divisive competition among individuals, development of student in-groups, and social cleavage (Vacha et al., 1979). Competition destroys the sense of working toward a common goal; whereas, development of in-groups leaves some members feeling left out and not a part of the group’s shared purpose. Likewise, social cleavage such as divisions based on gender, race, and sexual orientation creates a power struggle in the classroom based on societal hierarchy of group membership (Vacha et al., 1979).

A more recent explication of cohesion can be found in a four construct conceptual model proposed by Carron and Brawley (2000). It takes into consideration the social perceptions of each group member to the group as a whole; as well as, the manner in which the group satisfies personal needs and objectives. The two fundamental foci in this model are task (collective performance, goals, and objectives) and social concern (relationships within groups). Individual perceptions are referred to as Group Integration (GI) and individual’s personal motivations are referred to as Individual Attractions to Group (ATG). Carron and Brawley (2000) assert that the central beliefs of cohesion as a multidimensional construct as best represented by: GI-T, GI-S, ATG-T, and ATG-S. This conceptual model led to the development of the Group Environment Questionnaire, which measures the cohesion in sports teams (Carron, Widmeyer, & Brawley 1985). While this instrument offers great insight into the cohesive aspect of group dynamics focuses exclusively on athletics and the language does not lend itself to use in an academic learning situation.
Voice

An important concept that has the potential to help one more closely examine classroom climate is voice. Giroux (1981) brought the term of voice to education through the following definition. Voice is the multifaceted and interlocking set of meanings through which students and teachers actively engage in dialogue with one another. Individual voice is shaped by the learners’ cultural history and prior experiences. Thus, voice is an important andragological concept because it equips adult educators with the knowledge that all learning is situated historically, mediated culturally, and derived in part through interaction with others (Delpit, 1995; Guy, 1999; Hale, 2001; Ladson-Billings, 2001; Lee, 2001; Sheared, 1999, Shujaa, 1994).

Moreover, in order to ensure a more equitable learning environment all learners should have the right to speak and be heard as an equal. Educators are often viewed as representatives of dominant culture values and norms and not open to acknowledging cultures different from their own. This has been found to be especially true of the perceptions of low-income students and students of color (Johnson et al., 2002). The traditional role of the educator as the single voice of authority must be relinquished to allow the learners the necessary space to be heard in the learning environment. Moreover, adult educators must strive to validate the voices of those seldom heard on the basis of gender, socioeconomic status, sexual preference, disability, and race. The key to validating student voices is affirmation (Johnson et al., 2002). Educators should strive to promote affirmation in the following ways:

- Student participation should be encouraged in dialog through writing, speaking, and artistic expression.
- Learners should be allowed to use modes of communication with which they feel most comfortable with while they are taught other modes of communication as well.
Student should be encouraged to relate subject matter to their own realities and lived experiences.

The voices of students of color, low-income students, girls and young women, English language learners and students with disabilities must be highlighted (Johnson et al., 2002).

Sheared (1999) makes the following plea, concerning the use of dialogue, to give voice in the adult education classroom. “Dialogue is essential to being able to give voice to learners’ experiences. It is an avenue for uncovering and discovering the ways in which race, gender, class, and language have played a role in African American adult learners’ ability to succeed in the learning environment” (p. 42). The teacher must be willing to do the following in order to give voice (Sheared, 1999):

- Acknowledge the perceived power and control of the teacher in the classroom
- Examine how race, class and gender has privileged or oppressed them
- Share power and control in the classroom
- Create a space for both their and their students’ history and culture be examined as they relate to learning

Giving voice has the potential to provide an avenue through which learners and teachers can express and possibly develop an appreciation for a variety of worldviews. The acknowledgment of these worldviews is essential to creating a positive classroom social climate. Voice builds relationships among learners; as well as, between learners and teachers which fosters the solidarity needed to work towards the educational goals set forth in the learning environment. “As teachers and students participate in giving voice to each other they begin to recognize and
share power and control over what and how knowledge is explored and analyzed within the learning environment.” (Sheared, 1991, p. 43).
CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

The purpose of this study was to understand the impact of race on classroom dynamics in the adult education classroom. In order to accomplish this purpose, Critical Race Theory is used as a guiding conceptual framework in which the following research questions will be asserted:

1. To what extent does a respondents’ race impact perceived classroom dynamics?
2. To what extent does the percent of African Americans to Caucasians in the classroom impact perceived classroom dynamics for students of different races?
3. To what extent does the teachers’ race in relation to the respondents’ race impact perceived classroom dynamics?

The methodology chapter is divided into six major sections describing the study’s conceptual framework, instrumentation, study sample, data collection and preparation, data analysis, and limitations.

Conceptual Framework

The fundamental logic of this study is rooted in Critical Race Theory, which entails using counter storytelling to explain what we see. The theme of “naming one’s own reality, or voice is ingrained in the work of Critical Race Theory. As outlined in chapter two, Critical Race Theory, which was created by scholars of color, is born out of the legal scholarship that examines social inequalities in the law on the basis of race. It examines issues such as the social construction of race, the discriminating effects of race on social identity, and the intersectionality of gender and race (Aguirre, 2000; Lynn, 1999). Many scholars now argue for a critical race theoretical
perspective in education similar to that of Critical Race Theory in legal scholarship (Aguirre, 2000; Gordon, 1999; Ladson-Billings & Tate, 1995; Lynn, 1999).

Critical Race Theory in education is defined as a framework or set of basic perspectives, methods, and pedagogy that seeks to identify, analyze, and transform structural, cultural, and interpersonal aspects of education that maintain the marginal position and subordination of [African American and Latino] students (Lynn, 1999, 608).

This study explored Critical Race Theory as it relates to the centrality of race in the education of African American adult learners. This theory organized the study in several important ways as follows. First, in the development of the instrumentation pertinent literature was reviewed and several brainstorming sessions with groups of African Americans were held throughout the instrument development process to ensure that more than just dominant worldviews were expressed. Moreover, as all instrument items were constructed, their racial applicability was evaluated. Second, the dimensions included in the instrument were influenced by African American input. More specifically as the list of possible measures was compiled, African Americans were asked to evaluate the racial importance of each of the measures. Finally, and most important, the research questions themselves and the ensuing analyses all used race related variables as predictors.

Measurement Framework

The Classroom Dynamics Questionnaire (CDQ) (Valentine, Oliva, Thomas 2002) employed a measurement framework that covers two areas: relationships between teachers and students and relationships between students and students (see Table 3.1). The relationships are measured by four distinct dimensions: respect, confidence, cohesion, and voice.
Table 3.1

Relationships & Dimensions of Classroom Dynamics Questionnaire

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher-Student Relationships</strong></td>
<td><em>Teacher Respect:</em> The teacher respects the students as learners and as individuals.</td>
</tr>
<tr>
<td><strong>Student-Student Relationships</strong></td>
<td><em>Teacher Confidence:</em> The learners believe that the teacher is a competent and committed educator</td>
</tr>
<tr>
<td></td>
<td><em>Learner Cohesion:</em> Learners feel a sense of sharing, support, and affiliation with the other learners in the class.</td>
</tr>
<tr>
<td></td>
<td><em>Learner Voice:</em> Learners feel that they can express their ideas and true feelings with the other learners in the classroom.</td>
</tr>
</tbody>
</table>

Respect and confidence measure teacher-student relationships, where as cohesion and voice are used to measure student-student relationships. Thus the dimensions are referred to as follows: 

*Teacher Respect, Teacher Confidence, Learner Cohesion,* and *Learner Voice.*

The CDQ exists in both an Ideal and Real form. The Ideal form solicits responses for students’ preferred relationships in the classroom, while the Real form solicits responses for the status of relationships in the classroom at the current time. For the purposes of this study only the Real form (see Appendix A) will be used. Race is used as the causal variable in this study. These four dimensions were used to understand how race impacts perceived classroom dynamics of learners in individual classrooms.
Instrumentation

This study employs the Real version of the Classroom Dynamics Questionnaire (Valentine, Oliva, Thomas, 2002). The final instrument (see Appendix A) took eight months to develop. The following section describes our four major stages of survey development:

1. Background research
2. Identification of scale dimensions
3. Item pool development
4. Pilot Study

Background Research

In the early stages of the instrument development process, it was believed the modifications to the Adult Classroom Environment Scale (ACES) would be sufficient to develop a more inclusive instrument that focuses on the measurement of interpersonal relationships in the adult education classroom (Darkenwald & Valentine, 1986). A review of the existing dimensions (see Appendix B) of the ACES by a team of three (the dissertation author, another doctoral student, and their major professor) revealed that the ACES would not be sufficient.

The first problem that was recognized early on, with the help of an African American focus group session, was that the ACES ignores issues of safety and positionality that exist in the classroom environment. Moreover it supports the worldview of a teacher run classroom, where student power is restricted. The learner is conceived monolithically and the dominant culture rules. Furthermore, instrument ignores power struggles that take place in language, and although not explicitly, the ACES exhibits a rather normative view of the world. For instance, task orientation is viewed as a social construction; the instrument seems to fail to consider the
personal interests of the people involved. It is cumbersome theoretically and there are too many dimensions with conceptual overlap or conceptual ambiguity.

There were also many technical problems that we identified with the ACES. The first dealt with the number of items. Too many items existed which subsequently affected the instrument’s reliability; there was too much multicollinearity to allow for meaningful analysis and a non-independence of the dimensions of the ACES which was also pointed out by Langenbach & Aagaard (1990) in a factor analysis. Although technical problems exist for most instruments, the combination of both the ideological and technical problems prompted the development of an independent instrument.

Despite the number of items the ACES is not a very reliable instrument. Darkenwald and Valentine (1986) report the following Cronbach’s alphas (a measure of internal consistency for a test) for the ideal form of the ACES:

Table 3.2
ACES Reliability Coefficients for Subscales

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>.80</td>
</tr>
<tr>
<td>Affiliation</td>
<td>.70</td>
</tr>
<tr>
<td>Teacher Support</td>
<td>.74</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>.66</td>
</tr>
<tr>
<td>Personal Goal Attainment</td>
<td>.66</td>
</tr>
<tr>
<td>Organizational Clarity</td>
<td>.83</td>
</tr>
<tr>
<td>Student Influence</td>
<td>.71</td>
</tr>
</tbody>
</table>

Although the ACES is adequately reliable for research purposes, this reliability is not high considering the number of items that exist in each measure. Measures that have 7 or 8 items that yield reliability value of .66 raise questions about the internal consistency of the instrument.
Thus, the goal of the development of an instrument independent of the ACES to measure classroom dynamics was an attempt to address the following:

1. The scale contained more items than necessary.
2. The instrument items did not address the concept of voice for culturally diverse perspectives of adult learners.
3. The language used in wording of certain items made them unclear and inconsistent.

Identification of Scale Dimensions

In order to identify specific indicators for interpersonal relationships we concluded that a new formulation of classroom social climate was needed. Massive literature searches began among the three primary researchers to determine the essence of interpersonal relationships in the classroom. Relying on the literature base of classroom social environment as well as group dynamics and social psychology, many possible dimensions for this new formulation emerged. The first dimensions considered were teacher support for learning, teacher warmth, task orientation, personal goal attainment, and student influence. The first attempt continued to incorporate the language and ideas of the ACES. As this was recognized, group critiques were held to examine the clarity of the language as well as the possibility of these dimensions.

Our first major decision was to focus only on interpersonal relationships rather than the three domains proposed by Moos (1979): system maintenance and change, personal development, and relationships. The ideas from our group sessions as well as additional brainstorming sessions and literature searches led to the consideration of another set of possible dimensions: Teacher’s Respect for Learners, Trust in the Teacher’s Ability, Learner Voice, and Collaborative Learning among students. After identifying the above potential dimensions and examining other existing environmental scales a majority of the dimensions were observed to
involve interpersonal relationships within the classroom among students and teachers as well as students and students. We identified thirteen dimensions that could potentially be used to describe interpersonal relationships in the classroom (see Appendix C); we collectively reduced the thirteen potential dimensions to eight but were careful to maintain and insure that the key ideas from the original thirteen dimensions were maintained. The resulting tentative dimensions were as follows:

1. Teacher Domination
2. Teacher Support for Learning
3. Teacher Respect for Students
4. Teacher Fairness
5. Compatible Approach to Learning
6. Mutual Respect
7. Affiliation
8. Engagement

Following the reduction of possible dimensions from 13 to 8, informal semi-structured interviews were used to define these dimensions as well as get ideas for possible items for these constructs. My dissertation supervisor conducted an interview of with a group of six adult learners, while my co-researcher and I conducted individual interviews with three adult learners each. I conducted three individual interviews with African American adult learners as well as one group interview of nine African American adult learners. My co-researcher conducted three individual interviews with law enforcement officers. These questions encouraged participants to discuss classroom experiences that addressed each of the identified constructs. The interviews were conducted using a set of pre-determined questions for guidance (see Appendix E).
At the conclusion of the analysis of the data collected from the interviews further discussions and brainstorming sessions ensued prompted by the themes that emerged in the interviews. The constructs that emerged were: Teacher Respect, Teacher Confidence, Learner Voice, and Learner Cohesion. Each of the four dimensions became defined as in Table 3.1. Upon the selection of these final four constructs and a thorough review of the literature on group dynamics and classroom relationships followed. This ultimately aided in the selection of the final instrument title. Although many different names were considered, the final instrument became entitled the Classroom Dynamics Questionnaire (CDQ).

**Item Pool Development**

We identified fifty-three items related to each of the four constructs (see Appendix E). Each item was expressed in the form of a sentence or sentence fragment and examined for clarity, ambiguity, and overlap. The final items chosen for each construct were then critiqued by our research team and one other adult educator for validity. The critique session entailed placing proposed items randomly in an envelope and instructing individuals to place items according to operational definitions of the four constructs. At the conclusion of the session a summary report was prepared that reflected the frequency with which each item was assigned to a particular construct. This summary was prepared collectively to ensure clarity of items with each member discussing their rationale for the placement of particular items in a dimension. Items that were considered key descriptors for a particular construct but were confusing in nature due to language were revised to convey a more defined meaning. Only items sorted with the same construct by all four members were retained which resulted in a total of 35 items to be used to create a pilot instrument (see Appendix F).
The 35 items were randomized and two forms of the classroom Dynamics Questionnaire similar in format to the Classroom Environment scale (Moos & Tricket, 1987) and the Adult Classroom Environment Scale (Darkenwald & Valentine, 1990) were created: Ideal version, and Real version. The ideal version (see Appendix H) focuses on the preferences of individual students in an optimal situation; whereas, the real (see Appendix G) form seeks to gather what is occurring in the classroom at that given point in time. Each of the items was measured on a six-point Likert scale that ranges from strongly disagree to strongly agree respectively. The descriptor variables chosen for inclusion in the pilot instrument were race, gender, age, and education.

Each version of the instrument began with instructions for completing the form which were followed by three distinctly labeled sections: teacher-student relationships, student-student relationships, and background information. Section one, designed to measure teacher-student dynamics, consisted of 19 items. Student-student dynamics was to be measured in section two which consisted of 16 items. The real version of the instrument contained an additional item for rating the participants overall experience in the classroom. Four background variables, race, gender, education, and age collectively comprise section three of all versions of the questionnaire.

A prototype instrument was administered to approximately 10 individuals to determine the approximate time it takes to complete the survey. Participants were instructed to critique the instrument and offer suggestions for improvement. The directions were found to be confusing to some individuals and modified accordingly. Although a few individuals suggested the inclusion of additional items, after taking them into consideration we concluded that they had already been addressed. Thus, no further changes were made to the pilot instrument.
**Pilot Study**

The pilot study (see Appendix M) for the Classroom Dynamics Questionnaire (CDQ) was conducted for the following objectives:

1. To ascertain the capability of the instrument to be used in very diverse settings
2. To ascertain the reliability of the instrument and independence of items
3. To ascertain the sufficiency of administration procedures

The research team decided to conduct the pilot study in two very distinct settings in order to address our first objective. The dissertation author collected data at Historically Black University in the state while the other doctoral student collected data at a law enforcement training facility. It was decided that the classes should have met at least four times in order to allow for the establishment of relationships in the classroom.

Prior to the administration of the pilot instrument a research information sheet was developed for the instructor as well as the students who participate in the study. The research information sheet addressed the voluntary nature of study, anonymity, and provided participants with University contact information (Appendix I). Following the development of research information sheets, directions for administering the survey were discussed for each researcher collecting data to use as a guide.

Data were collected in 12 graduate level classrooms at the university, and five classrooms of new recruits at the law enforcement academy. Moreover only persons with known affiliation with each institution would collect data in the classrooms. Both versions (Real and Ideal) of the Classroom Dynamics Questionnaire were used in the pilot study. The two forms were distributed alternately to learners in the classroom, with the exception of one university classroom in which
students filled out both forms in sequence. Only the real version of the instrument is relevant to this study, thus all subsequent discussion will focus on the real version only.

Study Sample

The populations of interest for this study were African American and Caucasian American adult learners enrolled in graduate education courses in three distinct racial settings. The distinct racial settings that were sought are: majority African American classrooms, majority Caucasian American classrooms, and classrooms with a nearly equal racial mix. A majority classroom environment is defined as 70% or greater of a particular race and nearly equal is defined as within 5% of fifty (range: 45%-55%). Approximately 300 study participants were sought in graduate classrooms where African Americans were in the majority and in graduate classrooms where Caucasians were in the majority with some classrooms showing some variation but not planned in both race of students and race of teacher. Study participants were sought using the sample selection guide depicted in Table 3.3 as a means to plan for diversity during sample selection.

Table 3.3

<table>
<thead>
<tr>
<th>Sample Selection Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Education</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Racial Ratio in</td>
</tr>
<tr>
<td>Classrooms</td>
</tr>
<tr>
<td>Number of Classrooms</td>
</tr>
<tr>
<td>Race of Teacher</td>
</tr>
<tr>
<td>White Teacher</td>
</tr>
<tr>
<td>Black Teacher</td>
</tr>
<tr>
<td>Majority African</td>
</tr>
<tr>
<td>American</td>
</tr>
<tr>
<td>Majority Caucasian</td>
</tr>
<tr>
<td>American</td>
</tr>
<tr>
<td>Equal Populations</td>
</tr>
</tbody>
</table>
In as much as the unit of analysis for this study is the individual, such a large number of classrooms for data collection were sought for the following reasons:

1. To obtain variation in what’s going in the classrooms
2. To obtain variation of the racial composition in classes
3. To obtain variation in the race of the teacher

Each of the above reasons for sample selection corresponds to one of the three research questions as stated at the beginning of this chapter.

Data Collection and Preparation

*Data Collection*

Data for the study was collected at three Historically Black Universities and a Research One university in the state of Georgia. The researcher traveled to each institution and personally administered the survey instrument to the participants of the study. Data was collected from a total of 353 participants in 27 classrooms at the four institutions used in the study. Most of the data collected was in classrooms (n=12) where the majority of the classroom population was black and the teacher was black (see Table 3.5) as the majority of institutions who provided the researcher with administrative clearance were HBCU’s.

Table 3.5

*Distribution of classrooms surveyed*

<table>
<thead>
<tr>
<th>Student Population in Classrooms</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White Teacher</td>
</tr>
<tr>
<td>Majority White</td>
<td>$n=7$</td>
</tr>
<tr>
<td>Majority Black</td>
<td>$n=3$</td>
</tr>
<tr>
<td>Equal Populations</td>
<td>$n=2$</td>
</tr>
</tbody>
</table>
The complete data collection process is similar to procedures used in the instrument development process (Valentine, Oliva, & Thomas 2002). The data collection procedures for the study consisted of the following steps:

1. Potential data collection sites were identified
2. Administrative access was sought for potential data collection sites
3. Classrooms were identified for possible data collection
4. The consent of the instructor of the individual classrooms was sought
5. A date and time for administration of the Classroom Dynamics Questionnaire was scheduled with each individual instructor who agreed to participate.
6. The real version (see Appendix A) of the Classroom Dynamics Questionnaire was administered through direct administration following a pre-determined set of administration procedures (see Appendix L) after respective classes had met at least four times. Information sheets (see Appendix I) were included with the survey that explained the following:
   - University of Georgia human subjects policies
   - Anonymity of survey responses
   - University contact information

Administrative clearance was gained to conduct research at a research one university and three Historically Black Colleges & Universities. A convenience sample of study participants enrolled in graduate classes at these institutions was developed based on available enrollment data and instructors willing to grant access to their classes for survey administration. In classrooms where access was granted all students willing to participate were allowed to complete the survey instrument. The pre-determined set of administration procedures was followed at each data collection site. Although a research information sheet was provided to each participant, the
anonymous and voluntary nature of participation in the study was reiterated verbally several times. Participants were also verbally advised that at anytime during completing the survey if they wish not to participate they may do so by returning a black survey or writing they do not wish to participate on a survey that they had begun to complete. The envelopes used to collect the surveys were strategically placed in a visible location away from the instructor (in instances when the instructor remained in the classroom) and away from the researcher to increase the comfort level of students choosing not to participate. In extremely large classrooms two envelopes were used for participant convenience. After envelopes were collected a code was placed on the envelope to identify the race of the teacher and the institution. Additionally, the ratio of the classroom and the number of respondents were also noted on the outside of the survey.

Administration of the survey instrument typically took about 12-20 minutes depending on the size of the class and the number of questions asked by participants. Although all of the participants were graduate students, many had questions concerning doctoral studies. With the consent of the instructor, after administration of the survey instrument, the researcher answered questions that participants had about doctoral studies. No survey administration time period exceeded 30 minutes.

Data Preparation

A codebook (see Appendix N) was developed in order to prepare the data collected for analysis. The coding procedures allow for numeric entry of the data collected into a computerized database. A unique number was placed on each questionnaire that allowed it to be identified by the classroom and the institution in which it was collected. Other numeric codes were assigned to distinguish items such as student gender, student race/ethnicity, teacher race,
teacher gender, student educational degree, student employment status, racial ratio of classroom and student income.

All corresponding survey numbers, responses, background data, and teacher information were entered into the database using whole numbers. Although other races are considered equally important, the study was designed using a dichotomous race variable, which consisted of black and white only. Thus, all surveys and corresponding responses of individuals who did not report themselves as either Caucasian or African American were eliminated. Moreover, since race is the central variable in this study, all non-race reports were eliminated as well.

Next the minimums and maximums of all responses were computer generated using SPSS statistical software in order to identify any inconsistencies or data entry errors. Any such numbers were either corrected or eliminated. The survey required respondents to enter the year in which they were born, thus these numbers had to be converted to years of age. A numeric equation, which subtracted the year entered from 2003, was used to calculate the age of respondents.

Following the above data preparation procedures it was determined that the response of some graduate work under education was too ambiguous. The participant could be enrolled in their first graduate class or their fifth graduate class. There was no way to ascertain this information. Thus, all responses for education reported as “some graduate work” were identified and recoded to reflect highest degree earned. Accordingly, any responses reported by individual as “other” for education were eliminated. The above re-coding and elimination procedures resulted in a study sample that reflects only three levels of education: bachelors, masters, and doctorate.
Further examination of data in the preparation stage, led to the elimination of a variable entitled “racial ratio” and the creation of a subsequent variable entitled “percent black”. The racial ratio variable was one in which a numeric code of 1, 2, or 3 respectively was assigned a number that represented whether the classroom in which a respondent was enrolled was predominately black, predominately white, or nearly equal. After careful consideration, it was determined that coding the population as such may lose a significant amount of variation in the classroom populations. Thus in order to reflect a more true ratio, this variable and its corresponding numbers were eliminated and a new variable entitled “percent black” was created to describe the racial composition of classrooms. The number of black students relative to the total number of students in each classroom was used to calculate this variable.

In consideration of proposed data analysis procedures, it was decided that additional variables were needed to facilitate statistical analysis of several proposed measures. To facilitate analysis of all proposed measures, four new variables were created to reflect average responses for each dimension of classroom dynamics for each participant. The four variables created were: average respect, average confidence, average cohesion, and average voice. Using SPSS, an average value for each variable was calculated by entering a formula that divided the sum of the responses for each dimension by the total number of items in that dimension.

Following the creation of the previous average variables, an additional variable was created to facilitate examination of the extent to which a teacher’s race in relation to a student’s race impacted students’ perceived classroom dynamics for each of the four dimensions. This new variable, Teacher-Student Race, was created to represent the teacher’s race in relation to the student’s race in a classroom. In order to create such a variable, the total population of respondents was divided into four groups: black students with black teachers, white students with
white teachers, black students with white teachers, and white students with black teachers and assigned numeric codes 1, 2, 3, and 4 respectively using the existing variables of teacher race and student race. Due to the considerable number of changes, and additional data entry required, the maximums and minimums for all variables were computer generated using SPSS as final step in data preparation to identify and correct any apparent errors and/or inconsistencies in the data set.

Description of Study Respondents

The final study sample was comprised of 302 respondents who identified themselves as either African American or Caucasian American. The respondents range in age from 20 to 60, with a mean age of 33.46. The respondents were 83.4% female and 16.2% male. The majority, 63.9%, of the respondents was African American, while 36.1% of all respondents were Caucasian American. Only 25.2% of all respondents reported having already earned a graduate degree. Of the remaining respondents, 73.8%, reported a bachelors degree as their highest degree earned. Additionally, regarding employment status, 61.9% of all respondents reported that they worked full-time, 13.9% reported that they worked part-time, and only 7.9% of respondents reported that they were unemployed and actively seeking work. Very few respondents reported that they were retired, just 1%. Only 7.4% of respondents reported having an annual income higher than $50,000 while the vast majority of the respondents reported earning annual incomes of less than $50,000. Approximately a fifth of respondents (21.5%) reported making less than $20,000. Similarly 18.2% of respondents reported earning an annual income of $20,000-$29,999. Almost a fourth of all respondents reported making an annual salary ranging $30,000-$39,999, whereas only 10.3% reported annual earnings of $40,000-$49,999. A description of the respondents used as the final study sample is provided in Table 3.4.
In summary, the respondents in the final study sample were an average of 33.46 years of age. Most of the respondents, 63.9%, were African American and the gender of the vast majority respondents was overwhelmingly female, 83.4%. The majority of the respondents, 73.9%, reported a bachelor’s degree as their highest degree earned, whereas a little more than half, 61.9% of the respondents, reported that they worked full-time. The majority, 76.48% of respondents, reported having had an annual income of no more than $50,000.
**Table 3.4**

*Description of Study Respondents (n=302)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>Mean = 33.46      SD = 8.70</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>n = 252         % = 83.4</td>
</tr>
<tr>
<td>Male</td>
<td>n = 49            % = 16.2</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>n = 109          % = 36.1</td>
</tr>
<tr>
<td>Black/African American</td>
<td>n = 193          % = 63.9</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>n = 223          % = 73.8</td>
</tr>
<tr>
<td>Graduate</td>
<td>n = 76           % = 25.2</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
</tr>
<tr>
<td>Full-Time</td>
<td>n = 187          % = 61.9</td>
</tr>
<tr>
<td>Part-Time</td>
<td>n = 42           % = 13.9</td>
</tr>
<tr>
<td>Unemployed, seeking work</td>
<td>n = 24           % = 7.9</td>
</tr>
<tr>
<td>Retired</td>
<td>n = 3            % = 1</td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>less than $20,000</td>
<td>n = 65           % = 21.5</td>
</tr>
<tr>
<td>$20,000-29,999</td>
<td>n = 55           % = 18.2</td>
</tr>
<tr>
<td>$30,000-39,999</td>
<td>n = 75           % = 24.8</td>
</tr>
<tr>
<td>$40,000 – 49,999</td>
<td>n = 31           % = 10.3</td>
</tr>
<tr>
<td>$50,000 – 59,999</td>
<td>n = 16           % = 5.3</td>
</tr>
<tr>
<td>$60,000 and above</td>
<td>n = 6            % = 2.1</td>
</tr>
</tbody>
</table>

* n varies as a function of missing responses
Validity, Reliability & Distribution of Key Measures

Instrument reliability and validity is paramount in any study that uses an instrument measure. This study employed the use of the classroom dynamics questionnaire as a means to collect data for the purpose of understanding the impact of race on classroom dynamics. This instrument measures students’ perceptions of interpersonal relationships in the classroom among students as well as such relationships between students and the teacher. Accordingly, a discussion of the validity of the Classroom Dynamics Questionnaire followed by a subsequent discussion of data supporting the reliability of the instrument is provided in this section.

In a study that utilizes an instrument measure, establishing instrument validity is paramount. In concurrence with Oliva (2003), the validity of the instrument used in the present study can be established and supported in terms of preliminary research, instrument conceptualization, and construct validity as follows:

1. As a result of preliminary research, the instrument development was based only on information and key concepts that were consistent with the literature relating to classroom environment and interpersonal relationships.

2. In the conceptualization of the instrument, the major concepts in the study as well as its conceptual framework were either considered or included.

3. Construct validity was established during instrument development via a validity sort which supports a lack of relationship between measures that theoretically should not be similar.

In order to ascertain the reliability of the scale and internal consistency, Coefficient Alpha was calculated for the four subscales of the instrument. The Coefficient Alpha results for
the four subscales, Respect, Confidence, Cohesiveness, & Voice was 0.92, 0.93, 0.93, and 0.86 respectively (see Table 3.6).

Table 3.6

**Distribution and Reliability of Key Measures**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Number of Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Respect</td>
<td>6</td>
<td>M = 31.54</td>
<td>SD = 5.43</td>
<td>.92</td>
</tr>
<tr>
<td>Teacher Confidence</td>
<td>7</td>
<td>M = 48.62</td>
<td>SD = 6.97</td>
<td>.93</td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>7</td>
<td>M = 34.33</td>
<td>SD = 6.62</td>
<td>.93</td>
</tr>
<tr>
<td>Learner Voice</td>
<td>7</td>
<td>M = 34.53</td>
<td>SD = 6.09</td>
<td>.86</td>
</tr>
</tbody>
</table>

These calculations are all significantly high in terms of reliability. Even though the Coefficient Alpha calculation of .86 for the Voice subscale is slightly less than the measure for the other three subscales, it is still significantly high in terms of reliability. Thus, the calculations for all four subscales favorably supported instrument reliability.

**Data Analysis**

Data from the collected survey were analyzed using SPSS, a Statistical Software Package for the Social Sciences. The statistical analysis procedures were selected and statistical analysis was used to answer the study’s principal research questions:

1. To what extent does a respondents’ race impact perceived classroom dynamics? In order to answer this question a series of independent t-tests were conducted. African American and White students’ perceptions of each of the four dimensions were assessed. Accordingly, independent t-tests were conducted for each of the four dimensions: confidence, respect, voice and cohesion.
2. To what extent does the percent of African Americans to Caucasians in the classroom impact perceived classroom dynamics for students of different races? In order to answer this question the Pearson correlation statistical analysis technique was employed to ascertain the relationship between the percents of African Americans to Caucasians in the classroom. Accordingly, the degree and direction of the linear relationships between the black racial percentages in classrooms relative to each of the four dimensions of classroom dynamics were measured.

3. To what extent does the teachers’ race in relation to the respondents’ race impact perceived classroom dynamics? In order to answer this research question, the total population of respondents was divided into four groups: black students with black teachers, white students with white teachers, black students with white teachers, and white students with black teachers. An analysis of variance was conducted to determine the ways in which these groups interact with respect to the four dimensions of classroom dynamics.

Limitations

This study utilized purposeful yet convenient sampling techniques in which sample selection was largely governed by: (a) The geographical location of an institution with respect to the location of the researcher as the method of data collection was direct administration of the survey instrument. (b) The researcher’s ability to gain administrative clearance to conduct research at a particular institution, and (c) The researcher’s use of courses in colleges of education.

The geographical location of an institution with respect to the location of the researcher resulted in a study sample that was collected within a 200 mile radius of the researcher. Thus,
generalization of study results from this geographical group of graduate students to the entire graduate student population in other states and within the nation may not be justified. Moreover, the researcher encountered difficulty obtaining administrative clearance to certain institutions which resulted in a study sample where the vast a majority of the data collection occurred at HBCU’s. As most graduate students are not enrolled at HBCU’s and the student population is overwhelmingly African American, generalizations of study results solely on the basis of race may not be justified. Additionally, the researcher’s primary use of courses in colleges of education resulted in an overwhelmingly female study sample. Gender may have significantly impacted classroom dynamics and thus generalization of study results to include all graduate students both male and female may not be justified. Further study with a more diverse, representative sample is suggested to extend these results to the entire graduate student population in this state as well as other states within the United States.

The study researcher and dissertation author is an African American female educator and student in a southeastern state of the United States where historically race has impacted the educational experiences of African Americans. Thus the educational experiences of the researcher have guided many decisions in this study, especially the selection of the research topic for this present study. Additionally, access granted to classrooms at three institutions was a result of the researcher’s professional relationships and/ or affiliation as a student. The professional/student relationships between the researcher and some respondents may have affected the outcomes of the study. Respondents may have been reluctant to respond honestly to particular items on the survey in an effort to maintain anonymity.
CHAPTER 4

FINDINGS

This chapter presents the results of the statistical analysis described in chapter three. These findings are addressed in relation to each of the three research questions that guided this study. The research questions are as follows:

1. To what extent does a respondents’ race impact perceived classroom dynamics?
2. To what extent does the percent of African Americans to Caucasians in the classroom impact perceived classroom dynamics for students of different races?
3. To what extent does the teachers’ race in relation to the respondents’ race impact perceived classroom dynamics?

The findings of this study are described in the following sections: Findings Related to Research Question No. 1, Findings Related to Research Question No. 2, and Findings Related to Research Question No. 3.

Findings Related to Research Question No. 1

In order to answer Research Question No. 1, the mean of each of the four variables average respect, average confidence, average cohesion, and average voice was calculated on the basis of respondents’ race (as discussed previously in data preparation procedures, the item mean of each of the four subscales, Teacher Respect, Teacher Confidence, Learner Cohesiveness, and Learner Voice was calculated and named \textit{average respect}, \textit{average confidence}, \textit{average cohesion}, and \textit{average voice} respectively for each respondent). Computing these mean item mean values facilitated the evaluation of response levels for each of the four subscales. These calculations were used to determine to what extent respondents’ race impacted perceived
classroom dynamics. The calculations of the means for the variable for each of the four subscales for African Americans and Caucasian Americans are depicted in Tables 4.1, and 4.2 below respectively.

Table 4.1

Means for African Americans

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Scale Item Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Respect</td>
<td>5.25</td>
<td>.94</td>
</tr>
<tr>
<td>(n = 194)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Confidence</td>
<td>4.94</td>
<td>1.01</td>
</tr>
<tr>
<td>(n = 194)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>4.92</td>
<td>.91</td>
</tr>
<tr>
<td>(n = 189)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learner Voice</td>
<td>4.92</td>
<td>.88</td>
</tr>
<tr>
<td>(n = 189)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2

Means for Caucasian Americans

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Scale Item Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Respect</td>
<td>5.27</td>
<td>.94</td>
</tr>
<tr>
<td>(n = 109)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Confidence</td>
<td>5.02</td>
<td>1.01</td>
</tr>
<tr>
<td>(n = 109)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>4.87</td>
<td>.91</td>
</tr>
<tr>
<td>(n = 109)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learner Voice</td>
<td>4.94</td>
<td>.88</td>
</tr>
<tr>
<td>(n = 109)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A six point Likert scale in which one represented strongly disagree and six represented strongly agree was used by participants to rank the importance of the items in each subscale. Thus, the average means in Tables 4.1 and 4.2 reflect uniformly high ratings for all four subscales for both African Americans and Caucasian Americans. Inasmuch as all ratings are relatively high, the subscale relating to teacher respect was slightly higher than all other measures for both African American and Caucasian Americans, followed by the Teacher Confidence dimension. Figure 4.1
further compares all subscale variable means of African American and Caucasian American students.

![Figure 4.1 Comparison of Subscale Means by Race](image)

**Figure 4.1 Comparison of Subscale Means by Race**

African Americans and Caucasian Americans rated the Teacher Respect dimension nearly equally, the means were 5.25 and 5.27 respectively; the mean rating for Learner Voice was comparable as well. Comparison of the means revealed that African American respondents’ mean rating for the Learner Voice dimension was 4.92 while Caucasian American respondents’ mean rating for this dimension was 4.94. Thus, preliminary comparisons statistically suggested that a respondents’ race did not impact perceived classroom dynamics.

Further analysis conducted to determine the extent to which a respondents’ race impact perceived classroom dynamics was a series of two-tailed independent t-tests. These independent
t-tests were conducted for each of the four dimensions: confidence, respect, voice and cohesion. Table 4.3 depicts the results for these series of independent t-tests.

Table 4.3

Independent t-tests for the Four Dimensions of Classroom Dynamics

<table>
<thead>
<tr>
<th>Dimension</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
</tr>
<tr>
<td>Teacher Respect</td>
<td>-0.278</td>
</tr>
<tr>
<td>Teacher Confidence</td>
<td>-0.689</td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>0.499</td>
</tr>
<tr>
<td>Learner Voice</td>
<td>-0.115</td>
</tr>
</tbody>
</table>

The above series of independent t-tests revealed that there was no significant statistical difference for each of the four dimensions of classroom dynamics at the 95% confidence level. For all of the above measures of the two-tailed independent t-tests p>0.05, hence there was no significant statistical difference between African American respondents and Caucasian respondents perceived classroom dynamics for each of the four dimensions, Teacher Respect, Teacher Confidence, Learner Cohesion, and Learner Voice.

Findings Related to Research Question No. 2

In order to answer Research Question No. 2, a Pearson correlation was conducted to determine the strength of the relationship between the variable Percent Black (as discussed earlier in data preparation procedures, the variable percent black was created as a means to numerically express the percent of African Americans to Caucasian Americans in classrooms) and each of the four dimensions of classroom dynamics, Teacher Respect, Teacher Confidence, Learner Cohesion, and Learner Voice. SPSS was used to determine the extent to which the
values of the variable Percent Black and the values of each variable representing each of the four dimensions of classroom dynamics co-vary.

Perceived classroom dynamics for students of different races constituted using the mean item mean thus variables, *Average Respect, Average Confidence, Average Cohesion, and Average Voice* were used. The degree and direction of the linear relationships between the black racial percentages in graduate classrooms relative to each of the four dimensions of classroom dynamics yielded by Pearson Correlation Analysis are outlined in Table 4.4; correlation is considered significant at the .01 level.

Table 4.4

*Pearson Correlation Analysis between classroom race population and Subscale Variables*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Percent Black (percent of African Americans)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N)</td>
</tr>
<tr>
<td>Teacher Respect</td>
<td>303</td>
</tr>
<tr>
<td>Teacher Confidence</td>
<td>303</td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>298</td>
</tr>
<tr>
<td>Learner Voice</td>
<td>298</td>
</tr>
</tbody>
</table>

As illustrated in Table 4.4, there was no statistically significant relationship between the black racial percentages in the classrooms and each of the four dimension variables, *Teacher Respect, Teacher Confidence, Learner Cohesion,* and *Learner Voice*. For all measured Pearson Correlation between the variable percent black and the four classroom dynamics dimension variables \(p>.01\), hence the percent of African Americans to Caucasians in the classrooms was
not significantly statistically related to any measures of perceived classroom dynamics for students of different races.

Findings Related to Research Question No. 3

In order to answer Research Question No. 3, the mean of each of the four variables average respect, average confidence, average cohesion, and average voice was calculated relative to Teacher-Student Race (as discussed previously in data preparation procedures, the total population of respondents was divided into four groups: black students with black teachers, white students with white teachers, black students with white teachers, and white students with black teachers and assigned numeric codes 1, 2, 3, and 4 respectively). Computing these mean item mean values facilitated the evaluation of response levels for each of the four subscales in relation to Teacher-Student Race. These calculations were used to help determine to what extent the teacher’s race in relation to the student’s race impacted perceived classroom dynamics for each of the four dimensions, Teacher Respect, Teacher Confidence, Student Cohesiveness, and Student Voice. The calculations of the means for the variable for each of the four subscales relative to Teacher-Student race are depicted in Tables 4.5, 4.6, 4.7, and 4.8 below.
Table 4.5

Variable Teacher Respect Scale Item Means by Teacher-Student Race

<table>
<thead>
<tr>
<th>Teacher-Student Race</th>
<th>Values</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>black-black</td>
<td>135</td>
<td>5.26</td>
</tr>
<tr>
<td>black-white</td>
<td>35</td>
<td>5.10</td>
</tr>
<tr>
<td>white-white</td>
<td>74</td>
<td>5.36</td>
</tr>
<tr>
<td>white-black</td>
<td>58</td>
<td>5.19</td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td>5.25</td>
</tr>
</tbody>
</table>

Table 4.6

Variable Teacher Confidence Scale Means by Teacher-Student Race

<table>
<thead>
<tr>
<th>Teacher-Student Race</th>
<th>Values</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>black-black</td>
<td>135</td>
<td>4.96</td>
</tr>
<tr>
<td>black-white</td>
<td>35</td>
<td>4.87</td>
</tr>
<tr>
<td>white-white</td>
<td>74</td>
<td>5.09</td>
</tr>
<tr>
<td>white-black</td>
<td>58</td>
<td>4.89</td>
</tr>
<tr>
<td>Total</td>
<td>302</td>
<td>4.97</td>
</tr>
</tbody>
</table>
Table 4.7

**Variable Learner Cohesion Scale Item Means by Teacher-Student Race**

<table>
<thead>
<tr>
<th>Teacher-Student Race</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>black-black</td>
<td>133</td>
</tr>
<tr>
<td>black-white</td>
<td>35</td>
</tr>
<tr>
<td>white-white</td>
<td>74</td>
</tr>
<tr>
<td>white-black</td>
<td>55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>297</td>
</tr>
</tbody>
</table>

Table 4.8

**Variable Learner Voice Scale Item Means by Teacher-Student Race**

<table>
<thead>
<tr>
<th>Teacher-Student Race</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>black-black</td>
<td>130</td>
</tr>
<tr>
<td>black-white</td>
<td>35</td>
</tr>
<tr>
<td>white-white</td>
<td>74</td>
</tr>
<tr>
<td>white-black</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>297</td>
</tr>
</tbody>
</table>

A six point Likert scale in which one represented strongly disagree and six represented strongly agree was used by participants to rank the importance of the items in each subscale. Thus, the
average means in Tables 4.5, 4.6, 4.7, and 4.8 reflect uniformly high ratings for all four subscales for all Teacher-Student Race groups, black-black, black-white, white-white, and white-black. Although, all ratings are relatively high, the measures for all subscales were the highest uniformly for white teacher-white student relationships. The measures for all subscales for black teacher-white student relationships uniformly exhibited the lowest ratings. Figure 4.2 further compares all subscale means by teacher-student race.

Figure 4.2 Comparison of Subscale Means By Teacher-Student Race

The mean values within each subscale for all teacher-student race groups were extremely close in value. Values within the Teacher Respect subscale were 5.27, 5.1, 5.36, and 5.19 respectively,
for black-black, black-white, white-white, and white-black teacher-student race comparisons. The mean values within subscales Teacher Confidence, Learner Cohesion, and Learner Voice for all teacher-student race groups exhibited similar closeness as well. Moreover, the total means for all four dimensions were all almost nearly equal. The mean total values for Teacher Respect, Teacher Confidence, Learner Cohesion, and Learner Voice were 5.26, 4.98, 4.90, and 4.93 respectively. Thus, preliminary comparisons suggested that there was little statistically significant difference in perceived classroom dynamics based on a student’s race in relation to the teacher’s race.

Additional comparison, Analysis of Variance (ANOVA), was conducted to further determine the ways in which teacher-student race groups interact with respect to the four dimensions of perceived classroom dynamics. Table 4.9 illustrates ANOVA comparisons of the variance of scores between teacher-student race groups and within teacher-student race groups for each of the four dimensions of classroom dynamics the calculated mean item means for each of the four Subscales. ANOVA further suggests that there was no significant statistical difference for each of the four dimensions (between and within groups) of classroom dynamics at the 95% confidence level on the basis of the teacher’s race in relation to the student’s race. For all of the above ANOVA measures $p > .05$, hence there was no significant statistical difference between groups and within groups of Teacher-Student Race for each of the four dimensions of classroom dynamics, Teacher Respect, Teacher Confidence, Learner Cohesion, and Learner Voice.
Table 4.9

**ANOVA of Subscales of Perceived Classroom Dynamics by Teacher-Student Race Group**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>ANOVA Values</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher Respect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>3</td>
<td>.72</td>
<td>.54</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>301</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher Confidence</strong></td>
<td></td>
<td></td>
<td>.57</td>
<td>.64</td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>301</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Learner Cohesion</strong></td>
<td></td>
<td></td>
<td>1.3</td>
<td>.26</td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>293</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>296</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Learner Voice</strong></td>
<td></td>
<td></td>
<td>.46</td>
<td>.71</td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>293</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>296</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 5

INTERPRETATION OF FINDINGS

The purpose of this study was to examine the impact of race on classroom dynamics in the adult education classroom. This chapter discusses the findings outlined in Chapter Four and their implications for practice and research. The four major sections of discussion in this chapter are: Summary of Findings, Discussion of Findings, Discussion of Methodological Concerns, Implications for Practice, and Implications for Research.

Summary of Findings

To determine to what extent a respondent’s race impacts perceived classroom dynamics, item means for each of the four subscales were initially calculated and assigned a variable name. The mean of the item means was then calculated using the created variables in order to allow for comparison. In order to assess African American and Caucasian American students’ perceptions of classroom dynamics, independent t-tests were conducted for each of the four dimensions: Teacher Confidence, Teacher Respect, Learner Voice, and Learner Cohesiveness. Analysis revealed that there was no significant statistical difference between African American respondents and Caucasian respondents perceived classroom dynamics for any of the four dimensions of classroom dynamics.

To determine to what extent the percent of African Americans in the classroom impacts perceived classroom dynamics for students of different races, the Pearson correlation statistical analysis technique was employed. The variable “Percent Black” was used to ascertain the
relationship between the percent of African Americans to Caucasians in the classroom and students’ perceived classroom dynamics. The degree and direction of the linear relationships revealed the percentage of African Americans in a classroom was not significantly statistically related to any measures of perceived classroom dynamics for students of different races.

To determine to what extent the teachers’ race in relation to the respondents’ race impacts perceived classroom dynamics, the Analysis of Variance (ANOVA) statistical technique was employed. The variable entitled “Teacher-Student Race” was to facilitate the determination of the ways in which teacher-student race groups interact with respect to the four dimensions of perceived classroom dynamics. This variable, assigned a numerical value for each respondent, divided the total study sample population into four groups: black students with black teachers, white students with white teachers, black students with white teachers, and white students with black teachers. An analysis of variance was conducted to determine the ways in which these groups interact with respect to the four dimensions of classroom dynamics. The mean values within each subscale for all teacher-student race groups were calculated and found to be extremely close in value. ANOVA comparisons of the variance of scores between teacher-student race groups and within teacher-student race groups revealed there was no significant statistical difference between groups and within groups of Teacher-Student Race for each of the four dimensions of classroom dynamics, Teacher Respect, Teacher Confidence, Learner Cohesiveness, and Learner Voice.

The various analyses conducted in this study revealed that there was no statistically significant difference on any of the measures used to address the three principal research questions that guided this study. Subsequently, the study findings may be summarized as follows:
1. With respect to the four dimensions of classroom dynamics, students’ race did not significantly impact perceived classroom dynamics.

2. With respect to the four dimensions of classroom dynamics, the percent of black students to white students in a classroom did not significantly impact perceived classroom dynamics.

3. With respect to the four dimensions of classroom dynamics, the teachers’ race in relation to the students’ race did not significantly impact perceived classroom dynamics.

Further discussions of these findings are in the following section.

Discussion of Findings

Although, Critical Race Theory studies suggest that race impacts how people experience the classroom, few studies have been designed that consider race in the context of classroom dynamics. Moreover, the instruments used in adult education (Darkenwald & Valentine, 1986; Moos, 1974) that exist, to measure dimensions of classroom dynamics and the data on which these findings are presented, represent dominant culture world views and give little understanding of what works best for African American learners. This study incorporated the use of a more culturally inclusive instrument, and sought to determine the impact of race on classroom dynamics to gain insight into how people of different races experience the adult education classroom.

The analyses conducted in this study revealed that there were no statistically significant difference on any of the measures used to address the three principal research questions that guided this study. Caucasian American and African American graduate students appear to have very similar classroom experiences regardless of their individual race, the classroom racial ratio, and the race of the teacher. These findings were quite unexpected, and required particular
interpretation to uncover how they might be congruence with the existing literature. Three possible explanations are as follows: (1) The African American students in this study were all graduate students, and thus expert learners; (2) The organizational and institutional culture of the graduate classrooms in this study provides a unique and supportive learning environment for students of all races; and (3) There should be specific methodological considerations when using quantitative methods in critical race studies.

African American Graduate Students as Expert Learners

These finding might suggest that although race-based differences continue to be pervasive in the educational environment, African American graduate students are expert learners who have become practiced at coping with race in the educational environment. Their success may be attributed to achievement motivation, a strong sense of racial identity, and creating academic and social counter-spaces in environments where they are traditionally marginalized. African American graduate students who persist identify intrinsic motivation the most important key to their academic achievement (King & Chepyator-Thomson, 1996).

Moreover, Murray (1938) explained achievement motivation as a constant “tendency to overcome obstacles and attain high standards” p. 64). Motivational factors may enable African American graduate students to persist and have positive learning experiences in spite of racial differences in the classroom environment. African American graduate students have been described as possessing an internal need to be competent and self-determining. “They looked within themselves to find the strength, desire, and the focus they needed to reach their goal and these qualities guided them successfully” (King & Chepyator-Thomson, 1996, p. 6). This persistent desire to strive to achieve success both socially and academically might have
contributed to the high ratings of interpersonal relationships in the classrooms by African American learners.

Although, Allen (2001) asserts that race manifests itself most negatively in the lives of African Americans, these graduate students may have a strong sense of racial identity in adulthood. Racial identity development for African Americans is described as a process of immersion and a focus of attention on self-discovery (Tatum, 1999). Such a focus on self may enable African American graduate students to excel in spite negative effects of race in the learning environment such as loneliness, alienation, and discrimination. Moreover, at higher stages of development, African Americans are characterized by a sense of security about one’s racial identity and preparation to perceive and transcend race (Cross, 1991). Thus, the high ratings of the relationships in the classrooms in this study by African Americans might be attributed to a keen sense of racial identity that allows these individuals to experience the classroom in a positive manner.

Furthermore, students who are traditionally marginalized in the educational environment have a tendency to create academic and social counter spaces along racial and gender lines (Soloranzano & Villalpando, 1998). During the administration of the survey instrument in this study, most of the graduate classrooms were racially segregated in seating arrangement. This observation suggests that academic and social counter-spaces might have existed in these classrooms. Soloranzano and Villalpando (1998) assert that academic and social counter-spaces allow African American students to foster their own learning and nurture a supportive environment wherein their experiences are validated and viewed as important knowledge. Most classrooms in this study were overwhelmingly female and had a sufficient number of African Americans to facilitate the forming of counter-spaces. Perhaps as a response to marginality,
African American female students developed academic and social counter-spaces. The high ratings on all measures which yielded no relationship in perceived classroom dynamics and racial compositions in classes, might have been rated higher due to favorable experiences within academic and social counter-spaces for students’ who are traditionally marginalized in educational experiences.

HBCUs and of Colleges of Education as Inclusive Learning Environments

Differences in students’ perceptions of their classroom social climate have been found to vary according to the type of institution they attend (Vahala & Winston, 1994). Most of the individuals who participated in this study were students in graduate classrooms at Historically Black Colleges & Universities. Contemporary scholars believe that race is not object or biologically significant, but constructed with social sentiment and power struggle (Delgado & Stefancic, 2001). The HBCU classroom environment has a unique social context. Subsequently in the interpretation of these findings, one must consider the predominating social context in which the study was conducted. Research suggests that the experience of African American students may differ depending on whether the college or university they are attending is historically Black or predominately White (Allen, 1986, 1987, 1992; Fleming, 1994; Wells-Lawson, 1994; Redd 1998; Cokley, 2002). More specifically, these studies suggest that students enrolled at HBCU’s tend to exhibit higher levels of cultural awareness and academic self-concept, as well as report more positive classroom learning experiences (Cokley, 2000). Thus, all students might have rated particular survey items highly in this study as a function of the social context of the black college campus climate.

Furthermore, the perceptions of relationships with teachers of different races, for African Americans especially, varies according to whether the college or university they are attending is
historically Black or predominately White (Cokely, 2000). African American students at HBCUs report more positive overall student-faculty interactions, especially with White faculty, than those at predominately white institutions (Chism & Satcher, 1998). Thus, the positive teacher-student relationships perceived by students in his study might be a reflection of the HBCU environment.

Not only have differences in students’ perceptions of their classroom social climate been found to vary according to the type of institution they attend, but also by academic disciplines (Vahala & Winston, 1994). This might suggest that the academic discipline of the graduate classrooms in this study make them a unique and supportive place for students of all races to learn. Most of the respondents in this study were graduate students in colleges of education. Students have described this type of classroom as a caring community where there is mutual responsiveness between professors and students (Chen, 2000). Education classrooms are further described as a place where "students are knowledgeable about a professor’s expectations and professors make teaching a priority and have a strong willingness to help students and cooperate with student learning interests (Chen, 2000, p. 79). The exclusive approach of collecting data in colleges of education might have resulted in very similar classroom environments in this study. Hence, all students regardless of their race may have had positive learning experiences as a result of the inclusive classroom environment that characterize colleges of education.

Discussion of Methodological Concerns

The validity and reliability of the subscales of the instrument measure employed in this study support its findings. Particular consideration was given to the concept of voice during the instrument development process through the use of interviews and African American focus
groups. Yet, the findings in this study are different from the findings in much of the literature that examines the context of race in education (Aguirre, 2000; Gonzalez, 1998; Ladson-Billings, 1998, 1999, 2000; Lynn, 1999; Parker, Deyhle, & Villenas, 1999; Solarzano, 1997, 1998; Solorzano & Delgado Bernal, 2001; Solorazon & Villalpando, 1998; Solorzano & Yosso, 2000, 2001; Tate, 1997; Villenas & Deyhle, 1999). This literature asserts that race manifests itself in the educational environment and reproduces the disparities of the larger society. Lack of evidence of this position in the findings of this study may suggest that very specific methodological considerations must be made when using CRT as the guiding framework while using quantitative methodology. The methodological concerns that arose as a result of the findings of this study are as follows: (1) the instrument response scale employed in this study may exhibit a “ceiling effect” which may be limiting the variability of its measures. (2) the frequent high rating on all measures in the instrument may be a function of extreme “positivity bias” in the rating of individuals and (3) the structure of the instrument items may not have been sensitive enough to uncover with the social construction of race and how it impacts classroom dynamics.

*Instrument Response Scale Concerns*

The first methodological concern is the possible existence the “ceiling effect” due to the use of an inadequate instrument response scale. The ceiling effect is the truncation of data at the top of a distribution due to the limit on highest possible ratings (Gunst & Barry, 2003). In this study, the distributions of survey responses for all four subscales are skewed to the extreme right. This occurrence is depicted in Figures 5.1, 5.2, 5.3 & 5.4 respectively. This extreme crowding of responses near the high end of the instrument response scale suggests that the instrument response scale may have too few categories. This would limit the instruments ability “to
discriminate between respondents with different underlying judgments” (p. 249). Such
limited variability of the response scale of the survey instrument diminishes all possible bivariate
analysis. Thus, the findings in this study may be determined more by the constraints on the
variables than by the true relationships between the scale responses and predictor variables. This
may be an important methodological consideration when using quantitative measures to research
race.

![Figure 5.1 Distribution of Responses for Subscale Teacher Respect](image)

**Figure 5.1 Distribution of Responses for Subscale Teacher Respect**
Figure 5.2 Distribution of Responses for Subscale Teacher Confidence

Figure 5.3 Distribution of Responses for Subscale Learner Cohesion
A second methodological concern resulting from the findings of this study is that the extremely high ratings of interpersonal relationships in the classroom suggest that “positivity” or “leniency” bias may be present. “Positivity” or “leniency” bias exists when “respondents shun the negative end of a response scale (Tourangeau, Rips, & Rasinski 2000, p. 248),” and “as a result, the ratings of other people tend to pile up at the positive end of the scale (p.241).” Examination of figures 5.1, 5.2, 5.3, & 5.4 respectively reveals that the responses for each of the four subscales of the instrument measure in this study are distorted to the extreme right of the distribution curve; they are positively skewed. The respondents in this study may have been reluctant to give negative ratings of others. This reluctance and tendency to overuse the positive end of response scales has been observed in the performance appraisal of employees, evaluations
of political figures, and ratings of college courses and professors (Tourangeau, Rips, & Rasinski 2000). It was also suggested that respondents are more likely to be candid and discriminating when asked to appraise or evaluate them opposed to others. Moreover, Zajonic (1968) argues that we are generally inclined to prefer interpersonal configurations in which most of the relations are positive and to assume positive relations between persons in the absence of contradictory information. Thus, the findings of this study may be a reflection of the positivity bias of the study sample. Moreover, positivity bias may be linked to social desirability, which compels respondents to give you a "politically correct" answer or the answer they think you want (Tourangeau, Rips, & Rasinski 2000). Thus positivity bias may be an important methodological consideration when using quantitative measures to research race.

**Instrument item Concerns**

A third methodological concern is that very specific instrument items may be needed in order to study race quantitatively. Closer examination of the educational research studies that draw on critical race theory (Aguirree, 2000; Gonzalez, 1998; Ladson-Billings, 1998, 1999, 2000; Lynn(1999); Parker, Deyhle, & Villenas 1999; Solarzano, 1997, 1998; Solorzano & Delgado Bernal, 2001; Solorazon & Villalpando, 1998; Solorzano & Yosso, 2000, 2001; Tate, 1997; Villenas & Deyhle, 1999), as well as further investigation into a complete volume contributed to critical race methodology (Twine & Warren, 2000), revealed that very few Critical Race studies use quantitative methodology. The research methodologies most often employed in critical race studies were exclusively qualitative in nature or included some type of qualitative measure. The researchers in most of these studies cite that they choose CRT as a guiding conceptual framework because of a very specific way they wanted to represent or frame the idea of race. They cite their use of qualitative methods as a means to obtain “rich textured accounts” of the
meanings attached to race and how this impacts individuals. They perceive this method as the most effective means through which research can reveal and question the social constructions of race and racial identity, racism, and the use of dominant culture values in society as the norm.

Furthermore, a discussion of an attempt to use a survey instrument to examine race raises the following methodological concern when using surveys to study race: “The overwhelmingly majority of the questions reflect rather simplistic understanding of how and why whites attach meaning to race” (Gallagher, 2000, p. 82). In reality surveys that use general questions just can't pick up the subtleties of race dynamics. This observation suggests that although race is understood as a socially constructed category, it is fairly easy to level off the internal variations within this category when one does not acknowledge how culture, politics, geography, ideology, and economics come together to produce numerous versions of race (Gallagher, 2000). This methodological concern seems to arise when very specific considerations are not made when using survey methodology to study race. Gallagher (2000) additionally states that “the open-ended questions in the survey did sensitize me to issues of identity construction, which had not been adequately addressed in the literature (p. 82)”. This may suggest that when survey instruments are used to study race they should incorporate the use of open-ended questions as a means to address deeper meanings of the issue of race.

Moreover, very specific language may be needed when constructing survey items about race to capture the social structure of race. Critical Race Theory is most often characterized by the use of counter storytelling to explain what we see and the theme of “naming one’s own reality”, or voice. Moreover, counter storytelling not only characterizes Critical Race Theory, but is also an essential methodological component in critical race studies when using quantitative methodology to study race (Gallagher, 2000). An examination of survey items (Gallagher, 2000)
as well as interview questions used in critical race studies reveal that these items specifically mentioned race and personally addressed the thoughts and feelings of individuals about race (Aguirree, 2000; Gonzalez, 1998; Ladson-Billings, 1998, 1999, 2000; Lynn, 1999; Parker, Deyhle, & Villenas, 1999; Solarzano, 1997, 1998; Solorzano & Delgado Bernal, 2001; Solorazon & Villalpando, 1998; Solorzano & Yosso, 2000, 2001; Tate, 1997; Villenas & Deyhle, 1999; Twine & Warren, 2000). The instrument items used in the study were not contextually specific to race and did not personally solicit personal responses from the study respondents. Thus, the instrument items may not have been specific enough to ascertain the impact of race on classroom dynamics in the classrooms in this study. A specific methodological consideration when using surveys to study race may be that the items must explicitly address race and solicit personal responses from participants to address the impact of race on classroom dynamics.

**Implications for Research**

Few studies have been designed in the field of adult education to study classroom dynamics that consider race. Allen (2001) asserts African American and European Americans life experiences diverge so strikingly that race continues to reign supreme over all other interests, and this understanding manifests itself across institutions in America. Moreover, life experience has been identified as an important factor that contributes to the way adults process and use knowledge in the learning environment (Guy, 1999; Sheared, 1999). Therefore, this study provides theoretical contribution to the adult education literature pertaining to race and classroom environment.

The development of the Classroom Dynamics Questionnaire renders this study an important contribution to adult education research. The documented capabilities of this newly created instrument in measuring classroom dynamics, suggest that it has the potential to be a
valuable tool for future research. In the present study, this instrument demonstrated high levels of validity and reliability that support the conceptual framework that guided instrument’s development. Even though this study found no significant differences between teacher-student relationships and student-student relationships, the instrument exhibited excellent ability in discriminating among these groups on all measures of classroom dynamics. Furthermore, during the instrument development process extensive literature review and African American focus groups were used in the consideration of the voice subscale of the instrument. Thus, not only is this instrument a promising tool for measuring interpersonal relationships, but it also has the potential to offer a more culturally inclusive measure for adult education researchers.

Although the present study sought to examine the impact of race on classroom dynamics, it does examine the affect of other predictor variables that may contribute to certain outcomes. Such variables as student persistence, student academic self-concept, learner satisfaction, and student quality of learning in classrooms should also be examined. The Classroom Dynamics Questionnaire displays great potential a tool for determining the impact of certain predictor variables on certain outcome variables.

The conceptual framework that guides this study asserts that students’ perceptions of classroom interpersonal relationships are a function of their racial identity. Yet, no significant variations in students’ perceived classroom dynamics were observed for any of the four dimensions on the basis of race. This study may provide a basis for additional studies in which the researcher should attempt to examine the relationship between race and perceived classroom environment and the intersection of other certain variables such as racial identity development, academic and social counter-spaces, and university campus environments.
Suggestions for Further Investigation

Further studies are needed to extend the research methodologies of Critical Race Theory and to investigate race and classroom dynamics in the context of the Black college environment. The results of this study are not supported by other findings that invoke a Critical Race perspective. However, most of this literature utilize qualitative methodology exclusively or incorporate a mixed method. Further research is needed to ascertain the specific methodological considerations need when researching race from a critical perspective and using quantitative analysis. The instrument may need to be contextually specific to race and address the respondents individually opposed to collectively. This would further address the results of this study and offer deeper understanding of the impact of race on the four dimensions of classroom dynamics.

Second, there is a need for further research that identifies the effects of racial identity on a standardized measure such as the Classroom Dynamics Questionnaire. The absence of this knowledge may render the impact of race on classroom dynamics with using the CDQ undetectable. Further studies would offer even greater understanding of the methodological approaches needed when incorporating the use of a quantitative measure on race in research studies.

Third, there is a need for further research that investigates the uniqueness of context of race at Historically Black Colleges & Universities and how it manifests itself in the interpersonal relationships that mediate classroom instruction. The absence of this knowledge renders HBCU classroom social environment colorblind and race-neutral in this study. This would further add to the results of this study and offer a deeper understanding of race and classroom dynamics and HBCUs.
References


APPENDIX A

Final Instrument Version Real
Not all classrooms are the same. In this study, we are attempting to understand the way in which classrooms differ and how those differences can affect learning. In this questionnaire, we ask you to describe your present classroom. Please read each statement and indicate your response by circling one number. Your answers are strictly anonymous, and your honest responses will help us improve education. The questionnaire should take fewer than ten minutes to complete.

Section I: Teacher-Student Dynamics

To what extent do you agree with each statement?

<table>
<thead>
<tr>
<th>Statement</th>
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<td>1. The teacher treats all students fairly</td>
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<td>2. The teacher provides excellent feedback on students’ learning</td>
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<td>3. The teacher adequately covers the course content</td>
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<td>4. The teacher respects the diverse backgrounds of the students</td>
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<td>5. The teacher has excellent teaching ability</td>
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<td>6. The teacher is knowledgeable about the course content</td>
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<td>7. The teacher makes learning interesting</td>
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</table>
8. The teacher treats students with respect.  
9. The teacher comes to class prepared.  
10. The teacher never talks down to students.  
11. The teacher works hard to help students learn.  
12. The teacher really listens when students are speaking.  
13. The teacher respects students’ ideas.  

Section II: Student-Student Dynamics

To what extent do you agree with each statement?  

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<td>14. Students feel free to speak out in class.</td>
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<td>15. Every student gets a chance to speak in the class.</td>
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<td>16. Students feel comfortable expressing their opinions.</td>
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<td>17. Individual students rarely dominate discussions.</td>
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<td>18. Students feel comfortable disagreeing with one another</td>
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<td>19. Students support each other’s learning.</td>
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<td>20. Students learn from one another.</td>
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<td>21. Students in the class enjoy learning together.</td>
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<td>22. Students share learning resources with each other</td>
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<td>23. Students work well together</td>
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<td>24. Students are respectful of one another when speaking in class</td>
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<td>25. Students rarely disrupt one another’s comments</td>
<td>1 2 3 4 5 6</td>
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<td>26. Students care about each other’s learning progress</td>
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<td>27. Students have developed friendships in the class</td>
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Survey Used in This Study

Classroom Dynamics Questionnaire:

Your Current Classroom

Not all classrooms are the same. In this study, we are attempting to understand the way in which classrooms differ and how those differences can affect learning. In this questionnaire, we ask you to describe your present classroom. Please read each statement and indicate your response by circling one number. Your answers are strictly anonymous, and your honest responses will help us improve education. The questionnaire should take fewer than ten minutes to complete.

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<tr>
<td>2. The teacher provides excellent feedback on students’ learning</td>
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<td>3. The teacher adequately covers the course content</td>
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<td>4. The teacher respects the diverse backgrounds of the students</td>
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<td>5. The teacher has excellent teaching ability</td>
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<td>6. The teacher is knowledgeable about the course content</td>
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<td>7. The teacher makes learning interesting</td>
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</table>
8. The teacher treats students with respect.......................... 1 2 3 4 5 6
9. The teacher comes to class prepared.............................. 1 2 3 4 5 6
10. The teacher never talks down to students....................... 1 2 3 4 5 6
11. The teacher works hard to help students learn.................. 1 2 3 4 5 6
12. The teacher really listens when students are speaking........ 1 2 3 4 5 6
13. The teacher respects students’ ideas............................. 1 2 3 4 5 6

Section II: Student-Student Dynamics

To what extent do you agree with each statement?  

14. Students feel free to speak out in class........................... 1 2 3 4 5 6
15. Every student gets a chance to speak in the class.............. 1 2 3 4 5 6
16. Students feel comfortable expressing their opinions.......... 1 2 3 4 5 6
17. Individual students rarely dominate discussions............... 1 2 3 4 5 6
18. Students feel comfortable disagreeing with one another....... 1 2 3 4 5 6
19. Students support each other’s learning.......................... 1 2 3 4 5 6
20. Students learn from one another.................................. 1 2 3 4 5 6
21. Students in the class enjoy learning together................... 1 2 3 4 5 6
22. Students share learning resources with each other............. 1 2 3 4 5 6
23. Students work well together......................................................... 1 2 3 4 5 6

24. Students are respectful of one another when speaking in class................................................................. 1 2 3 4 5 6

25. Students rarely disrupt one another’s comments............. 1 2 3 4 5 6

26. Students care about each other’s learning progress.............. 1 2 3 4 5 6

27. Students have developed friendships in the class................. 1 2 3 4 5 6

Section III: Background variables

28. What year were you born? __________

29. What is your gender? __________

30. What is your race/ethnicity? __________

31. What is your highest educational degree?
   □ Bachelor’s degree
   □ Some Graduate Work
   □ Master’s Degree
   □ Doctorate
   □ Other (please specify)________________________

(continued on back)
32. Which best describes your employment status?

☐ Employed full-time

☐ Employed part-time

☐ Unemployed, seeking work

☐ Retired

☐ Other (please specify)______________________

33. If you are currently employed, what is your approximate annual salary?

☐ Less than $20,000

☐ $20,000-29,999

☐ $30,000-39,999

☐ $40,000-49,999

☐ $50,000-59,999

☐ $60,000-69,999

☐ $70,000-79,999

☐ $80,000-89,999

☐ $90,000 or more

We appreciate your help with this important research!
APPENDIX B

Adult Classroom Environment Scale Subscales
ADULT CLASSROOM ENVIRONMENT SCALE (ACES) SUBSCALES
(Dimensions and Items)

Dimension #1: Involvement
1. Students are often bored in class.*
2. Students often ask the teacher questions.
3. Most students enjoy the class.
4. Most students look forward to the class.
5. Most students in the class pay attention to what the teacher is saying.
6. A few students dominate the discussions in the class.*
7. Most students take part in class discussion.

Dimension #2: Affiliation
1. The students in the class work well together.
2. Students often share their personal experiences during class.
3. The students in the class often learn from one another.
4. The students in class enjoy working together.
5. Students seldom interact with one another during class.*
6. Students in the class feel free to disagree with one another.
7. Many friendships have developed in the class.

Dimension #3: Teacher Support
1. The teacher makes every effort to help students succeed.
2. The teacher talks down to students.*
3. The teacher encourages students to do their best.
4. The teacher cares about students’ feelings.
5. The teacher respects students as individuals.
6. The teacher likes the students in the class.
7. The teacher cares whether or not the students learn.

Dimension #4: Task Orientation
1. The teacher often talks about things not related to the course.*
2. Students rarely meet assigned deadlines.*
3. Students often discuss things not related to course content.*
4. Activities not related to course objectives are kept to a minimum.
5. Students do a lot of work in the class.
6. Getting work done is very important in the class.
7. The class is more a social hour than a place to learn.*

Dimension #5: Personal Goal Attainment
1. The class is flexible enough to meet the needs of individual students.
2. Many students think that the class is not relevant to their lives.*
3. The teacher expects every student to learn the exact same things.*
4. Students in the class can select assignments that are of personal interest to them.
5. Most students in the class achieve their personal learning goals.
6. The teacher tries to find out what individual students want to learn.
7. Students have the opportunity to learn at their own pace.

Dimension #6: Organization and Clarity
1. The teacher comes to class prepared.
2. Learning objectives are made clear at the start of the course.
3. The class is well organized.
4. The class has a clear sense of direction.
5. The subject matter is adequately covered.
6. Students do not know what is expected of them.*
7. Learning activities follow a logical sequence.

Dimension #7: Student Influence
1. Students help to decide the topics to be covered in the class.
2. The teacher makes all the decisions in the class.*
3. The teacher sticks to the lesson plan regardless of student interest.*
4. Students participate in setting course objectives.
5. The teacher dominates classroom discussion.*
6. Students feel free to question course requirements.
7. The teacher insists that you do things his or her way.*

*Indicates negative (reverse scored) items.
APPENDIX C

Potential Dimensions of Classroom Relationships
CLASSROOM RELATIONSHIPS
Potential Dimensions

Teacher-Student Relationships

1. Teacher Domination – Control of learning content and process; lack of student input; reacts as if challenged; ruthless control of timing; conversations “cut-off”; lack of student prerogative; authority
2. Teacher Support for Learning – Providing help to students
3. Teacher Respect for Students – Listening; valuing ideas
4. Teacher Fairness – Fairness in instructional matters; clear and consistent expectations and assignments; lack of bias and favoritism; trust

Student-Student Relationships

1. Compatible Approach to Learning – Shared sense of purpose; present for the same reasons and share similar goals; compatible classroom norms
2. Mutual Respect – Listening, responding, and valuing; voice
3. Affiliation – Friendships, warmth, cohesiveness; opposite of friction

Other Considerations

1. Humor – Fun in the classroom
2. Relevance – Learner-Centeredness
3. Inclusiveness – Everyone feels welcome, safe, and comfortable; lack of cliques;
4. Quality of Communication – Opportunities for self-expression; good discussion; voice
5. Engagement – Apathy; interest
6. Personalization of Learning and Goals – Individualized learning and recognition of personal goals
APPENDIX D

Classroom Relationships Guiding Interview Questions
CLASSROOM RELATIONSHIPS
Guiding Interview Questions

1. What does it mean when a teacher dominates the classroom?
   - Have you ever had a teacher who was too controlling?
   - What did that look like?

2. What does it look like when a teacher supports adult learners?
   - Can you describe specific behaviors?
   - Can you describe times when you felt unsupported?

3. How does a teacher show respect for students?
   - How does a teacher demonstrate disrespect?

4. Can you think of a time when a teacher treated you unfairly?
   - What does a fair teacher do?

5. If I told you that a group of learners “worked well together”, what would you think I mean?
   - Can you describe a classroom in your own experience where the students worked well together?

6. Have you ever been in a classroom where students really respected each other?
   - How do learners demonstrate respect for one another?
   - How do they demonstrate respect?

7. Have you ever been in a classroom where students really enjoyed one another’s company? Describe that classroom.
   - What happens in a classroom where students do not enjoy one another’s company?
   - What does a friendly classroom look like?
   - What does an unfriendly classroom look like?

8. If I said to you, “I really feel comfortable in this classroom,” what would you think of?
   - Have you ever felt uncomfortable or unsafe in a classroom? Describe.

9. What makes some classrooms interesting and others boring?
   - What should teachers do to get students really engaged in learning?
APPENDIX E

Proposed Classroom Dynamics Questionnaire Items
CLASSROOM DYNAMICS QUESTIONNAIRE
Proposed questionnaire Items

1. This teacher cares about each and every student in the class.
2. Students are confident in the teacher’s knowledge of the subject matter.
3. The teacher respects the diverse backgrounds of the students.
4. The teacher clearly communicates course requirements to the students.
5. Students encourage each other to express their ideas.
6. The teacher motivates students to learn.
7. Students feel comfortable expressing their opinions in class.
8. Students exchange ideas in the class.
9. It is okay to disagree with ideas that arise in class discussions.
10. Students in the class get along well.
11. This teacher works hard to help students learn.
12. The students in the class cooperate well.
13. The teacher treats all students fairly.
14. The teacher makes learning interesting.
15. Students seek input from other students in the class.
16. No one tries to dominate discussions in class.
17. Students encourage each other to succeed.
18. Students feel comfortable disagreeing with one another in the class.
19. Students help make decisions affecting their learning in class.
20. Students respect each other’s opinions.
21. Students assist each other when performing group tasks.
22. Students are respectful of one another when speaking in class.
23. The teacher makes sure that class discussions are related to course content.
24. The students in the class often learn from each other.
25. The teacher comes to class prepared.
26. Students support each other’s learning.
27. This teacher is excellent.
28. Students share information with each other in class.
29. This teacher really knows what she or he is doing.
30. Many friendships have developed in the class.
31. Students work together to improve the learning experience.
32. Students often share common interests in the classroom.
33. Students really listen to each other’s comments.
34. This teacher has excellent teaching ability.
35. The teacher really listens when students are speaking.
36. This teacher is well organized.
37. Students rarely disrupt one another’s comments.
38. The teacher encourages students to ask questions.
39. The students in the class work well together.
40. Learning activities follow a logical sequence.
41. Students often help each other.
42. The teacher knows how to get everyone to participate in class.
43. The teacher treats students with respect.
44. The teacher encourages all students to reach their potential.
45. The teacher respects students’ ideas.
46. The teacher never talks down to students.
47. Every student gets a chance to speak in this class.
48. The teacher values students’ opinions.
49. The subject matter is adequately addressed.
50. This teacher welcomes questions from students.
51. Students often share their personal experiences during class.
52. The teacher provides students with quality feedback on their progress.
53. The teacher plans learning activities to meet the needs of the students.
APPENDIX F

Classroom Dynamics Questionnaire Pilot Subscales
Respect: The teacher respects the students as learners and as individuals.

02. The teacher respects the diverse backgrounds of the students.

03. The teacher really cares about student learning.

07. The teacher respects students’ ideas.

11. The teacher welcomes questions from students.

12. The teacher values students’ opinions.

14. The teacher never talks down to students.

15. The teacher treats all students fairly.

16. The teacher really listens when students are speaking.

18. The teacher treats students with respect.
**Confidence:** The learners believe that the teacher is both competent and committed.

01. The teacher makes learning interesting.
04. The teacher adequately covers the course content.
05. The teacher is knowledgeable about the course content.
06. The teacher really knows what she or he is doing.
08. The teacher has excellent teaching ability.
09. The teacher comes to class prepared.
10. The teacher encourages every student to participate in class.
13. The teacher works hard to help students learn.
17. The teacher is well organized.
19. The teacher provides students with quality feedback on their progress.
Cohesiveness: Learners feel a sense of sharing, support, and affiliation with the other learners in the class.

20. Students are genuinely interested in each others’ ideas.
21. Students cooperate well with one another.
23. Students learn from one another.
24. Students share their knowledge with each other.
26. Students have developed friendships in the class.
27. Students help each other to succeed in the class.
32. Students support each other’s learning.
35. Students work well together.
22. Students really listen to each other’s comments.

25. Students feel comfortable expressing their opinions.

28. No students try to dominate discussions.

29. Students feel free to speak out in class.

30. Students rarely disrupt one another’s comments.

31. Students feel comfortable disagreeing with one another.

33. Every student gets a chance to speak in the class.

34. Students are respectful of one another when speaking in class.

**Voice:** Learners feel that they can express their ideas and true feelings to the other learners in the classroom.
APPENDIX G

Pilot Classroom Dynamics Questionnaire Version R
Classroom Dynamics Questionnaire:

Version R

Not all classrooms are the same. In this study, we are attempting to understand the ways in which classrooms are different. We are also attempting to understand the ways in which those differences can affect education.

In this questionnaire, we will ask you to describe your classroom. Please read each statement and indicate your response by circling one number. Your honest responses will help us to improve education, and your answers are strictly anonymous. The questionnaire should take fewer than ten minutes to complete.

Section I: Teacher/Student Dynamics

To what extent do you agree with each statement?  

1. The teacher makes learning interesting .................... 1 2 3 4 5 6
2. The teacher respects the diverse backgrounds of the students .. 1 2 3 4 5 6
3. The teacher really cares about student learning ............ 1 2 3 4 5 6
4. The teacher adequately covers the course content .......... 1 2 3 4 5 6
5. The teacher is knowledgeable about the course content. . . . 1 2 3 4 5 6
6. The teacher really knows what she or he is doing.  

7. The teacher respects students’ ideas.  

8. The teacher has excellent teaching ability.  

9. The teacher comes to class prepared.  

10. The teacher encourages every student to participate in class.  

11. The teacher welcomes questions from students.  

12. The teacher values students’ opinions.  

13. The teacher works hard to help students learn.  

14. The teacher never talks down to students.  

15. The teacher treats all students fairly.  

16. The teacher really listens when students are speaking.  

17. The teacher is well organized.  

18. The teacher treats students with respect.  

19. The teacher provides students with quality feedback on their progress.  

(over)
Section II: Students Dynamics

To what extent do you agree with each statement?

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<thead>
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<th>Statement</th>
<th>1</th>
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<tbody>
<tr>
<td>Students are genuinely interested in each others' ideas</td>
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<td>Students really listen to each other's comments</td>
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<td>Students learn from one another</td>
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<td>Students share their knowledge with one another</td>
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<td>Students have developed friendships in the class</td>
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<td>Students help each other to succeed in the class</td>
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<td>No students try to dominate discussions</td>
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<td>Students feel free to speak out in class</td>
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<td>Students rarely disrupt one another's comments</td>
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<td>Students feel comfortable disagreeing with one another</td>
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<td>Students support each other's learning</td>
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<tr>
<td>Every student gets a chance to speak in the class</td>
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</tbody>
</table>
34. Students are respectful of one another when speaking in class.  

1 2 3 4 5 6

35. Students work well together.  

1 2 3 4 5 6

36. Overall, how would you rate this class?  

☐ Excellent  
☐ Very Good  
☐ Good  
☐ Average  
☐ Poor

Section III: Background variables

What is your current age? ________________

What is your gender? ________________

What is your race/ethnicity? ________________

What is your highest degree?  

☐ No degree  
☐ High school diploma or GED  
☐ Associate or two-year degree  
☐ Bachelor’s degree  
☐ Graduate degree  
☐ Other (Describe: ________________)  

Thank you for helping us with this important research!
Appendix H

Pilot Classroom Dynamics Questionnaire Version I
Classroom Dynamics Questionnaire:

Version I

Not all classrooms are the same. In this study, we are attempting to understand the ways in which classrooms are different. We are also attempting to understand the ways in which those differences can affect education.

People are different, and different people expect different things from a classroom. This questionnaire will ask you to describe your “perfect” classroom. Please read each statement and indicate your response by circling one number. Your honest responses will help us to improve education, and your answers are strictly anonymous. The questionnaire should take fewer than ten minutes to complete.

Section I: Teacher/Student Dynamics

To what extent do you agree with each statement?

1. The teacher makes learning interesting

   Strongly Disagree   Strongly Agree

   1 2 3 4 5 6

2. The teacher respects the diverse backgrounds of the students

   1 2 3 4 5 6

3. The teacher really cares about student learning

   1 2 3 4 5 6

4. The teacher adequately covers the course content

   1 2 3 4 5 6

5. The teacher is knowledgeable about the course content

   1 2 3 4 5 6
6. The teacher really knows what she or he is doing. 1 2 3 4 5 6
7. The teacher respects students’ ideas. 1 2 3 4 5 6
8. The teacher has excellent teaching ability. 1 2 3 4 5 6
9. The teacher comes to class prepared. 1 2 3 4 5 6
10. The teacher encourages every student to participate in class. 1 2 3 4 5 6
11. The teacher welcomes questions from students. 1 2 3 4 5 6
12. The teacher values students’ opinions. 1 2 3 4 5 6
13. The teacher works hard to help students learn. 1 2 3 4 5 6
14. The teacher never talks down to students. 1 2 3 4 5 6
15. The teacher treats all students fairly. 1 2 3 4 5 6
16. The teacher really listens when students are speaking. 1 2 3 4 5 6
17. The teacher is well organized. 1 2 3 4 5 6
18. The teacher treats students with respect. 1 2 3 4 5 6
19. The teacher provides students with quality feedback on their progress. 1 2 3 4 5 6

(over)
**Section II: Students Dynamics**

*To what extent do you agree with each statement?*

<table>
<thead>
<tr>
<th>Statement</th>
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<tbody>
<tr>
<td>20. Students are genuinely interested in each others' ideas . . . . .</td>
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<tr>
<td>21. Students cooperate well with one another . . . . . . . . . . . . . . .</td>
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<td>5</td>
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<tr>
<td>22. Students really listen to each other’s comments . . . . . . . . . .</td>
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<td>23. Students learn from one another . . . . . . . . . . . . . . . . . . .</td>
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<td>24. Students share their knowledge with one another . . . . . . . . . . .</td>
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<td>25. Students feel comfortable expressing their opinions . . . . . . . . .</td>
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<td>26. Students have developed friendships in the class . . . . . . . . . . .</td>
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<tr>
<td>27. Students help each other to succeed in the class . . . . . . . . . .</td>
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<tr>
<td>28. No students try to dominate discussions . . . . . . . . . . . . . . .</td>
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<td>29. Students feel free to speak out in class . . . . . . . . . . . . . . .</td>
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<tr>
<td>30. Students rarely disrupt one another’s comments . . . . . . . . . . .</td>
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<td>31. Students feel comfortable disagreeing with one another . . . . . . .</td>
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<td>32. Students support each other’s learning . . . . . . . . . . . . . . . .</td>
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<td>2</td>
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<tr>
<td>33. Every student gets a chance to speak in the class . . . . . . . . . .</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
34. Students are respectful of one another when speaking in class.  

35. Students work well together.  

36. Overall, how would you rate this class?  
   - Excellent  
   - Very Good  
   - Good  
   - Average  
   - Poor  

Section III: Background variables  
What is your current age?  
What is your gender?  
What is your race/ethnicity?  
What is your highest degree?  
   - No degree  
   - High school diploma or GED  
   - Associate or two-year degree  
   - Bachelor's degree  
   - Graduate degree  
   - Other (Describe: )  

Thank you for helping us with this important research!
APPENDIX I

Classroom Dynamics Pilot Study Research Information Sheets
Dear Participant:

We are currently conducting a study about classroom dynamics in adult education classrooms. We are trying to better understand the way in which teachers and students interact in the classroom and the ways in which those interactions can affect education. The study is being conducted by Dr. Thomas Valentine and two co-researchers from the Department of Adult Education.

Your participation in this study is strictly voluntary. If you agree to participate, you will be asked to complete a questionnaire. Most people will be able to complete the questionnaire in less than ten minutes.

In order to protect your anonymity and your option to not participate, only you will handle the questionnaire after it is distributed. You will be asked to place your own questionnaire into a large envelope at the front of the room. We hope that you will choose to return a completed questionnaire. However, if you choose not to participate in this study, simply place a blank questionnaire inside the envelope. There will be no penalties of any type for returning a blank questionnaire.

Please note that participation is completely anonymous. The teacher of this course will never see your completed questionnaire and the researchers will not be able to identify individual respondents. When we publish our findings, we will report our findings based on groups, not on individuals.

We do not foresee this study causing you any harm or discomfort. However, should you be uncomfortable about completing the questionnaire, simply return a blank questionnaire.

If you have any questions about this research—now or in the future—feel free to contact Dr. Thomas Valentine. He can be reached by telephone at 706-542-2214. His mailing address is the Department of Adult Education, 407 River’s Crossing, The University of Georgia, Athens, Georgia 30602.
Please note: Completion and return of this questionnaire implies that you have read this information and consent to participate in the research.

Thank you for your help with this important research.

For questions or problems that may arise during this study, please call or write: Chris A. Joseph, Ph.D., Human Subjects Office, The University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone No. (706) 542-6514; E-Mail Address: IRB@uga.edu.
Dear Participant:

We are currently conducting a study about classroom dynamics in adult education classrooms. We are trying to better understand the way in which teachers and students interact in the classroom and the ways in which those interactions can affect education. The study is being conducted by Dr. Thomas Valentine and two co-researchers from the Department of Adult Education.

Your participation in this study is strictly voluntary. If you agree to participate, you will be asked to complete a questionnaire. Most people will be able to complete the questionnaire in less than ten minutes. We hope that you will choose to return a completed questionnaire. However, if you choose not to participate in this study, simply place the blank questionnaire inside the large envelope at the front of the room. There will be no penalty or repercussions for returning a blank form.

We will be asking teachers from many classrooms to complete this same form. However, because you are the only person in this room completing an “Instructor’s Version” of this questionnaire, it is not possible to promise you anonymity. Instead, we promise strict confidentiality. Your completed questionnaire will be handled only by the members of the research team, and when we publish our findings, we will report our findings based on groups, not on individuals.

We do not foresee this study causing you any harm or discomfort. However, should you be uncomfortable about completing the questionnaire, simply return a blank form.

If you have any questions about this research—now or in the future—feel free to contact Dr. Thomas Valentine. He can be reached by telephone at 706-542-2214. His mailing address is the Department of Adult Education, 407 River’s Crossing, The University of Georgia, Athens, Georgia 30602.
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APPENDIX J

Classroom Dynamics Questionnaire Validity Sort Talley Results
Confidence: The learners believe that the teacher is a competent and committed educator.

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<tr>
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<tbody>
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<td>901.</td>
<td>The teacher makes learning interesting.</td>
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<td>604.</td>
<td>The teacher adequately covers the course content.</td>
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<tr>
<td>505.</td>
<td>The teacher is knowledgeable about the course content.</td>
<td>13</td>
</tr>
<tr>
<td>208.</td>
<td>The teacher has excellent teaching ability.</td>
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<tr>
<td>109.</td>
<td>The teacher comes to class prepared.</td>
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<td>910.</td>
<td>The teacher encourages every student to participate in class.</td>
<td>02</td>
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<td>613.</td>
<td>The teacher works hard to help students learn.</td>
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<tr>
<td>919.</td>
<td>The teacher provides excellent feedback on students’ learning.</td>
<td>10</td>
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</table>
**Respect:** The teacher respects the students as learners and as individuals.

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<td>802.</td>
<td>The teacher respects the diverse backgrounds of the students</td>
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<tr>
<td>703.</td>
<td>The teacher really cares about student learning.</td>
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<td>307.</td>
<td>The teacher respects students’ ideas.</td>
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<td>811.</td>
<td>The teacher welcomes questions from students</td>
<td>07</td>
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<td>514.</td>
<td>The teacher never talks down to students.</td>
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<td>415.</td>
<td>The teacher treats all students fairly.</td>
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<td>316.</td>
<td>The teacher really listens when students are speaking.</td>
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<td>118.</td>
<td>The teacher treats students with respect.</td>
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**Voice:** Learners feel that they can express their ideas and true feelings with the other learners in the classroom.

<table>
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<tr>
<th></th>
<th>Description</th>
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<td>Students are genuinely interested in each other’s ideas.</td>
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<td>622.</td>
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<td>07</td>
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<td>325.</td>
<td>Students feel comfortable expressing their opinions.</td>
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<tr>
<td>928.</td>
<td>Individual students rarely dominate discussions.</td>
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<tr>
<td>829.</td>
<td>Students feel free to speak out in class.</td>
<td>13</td>
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<td>730.</td>
<td>Students rarely disrupt one another’s comments.</td>
<td>11</td>
</tr>
<tr>
<td>631.</td>
<td>Students feel comfortable disagreeing with one another.</td>
<td>11</td>
</tr>
<tr>
<td>433.</td>
<td>Every student gets a chance to speak in the class.</td>
<td>13</td>
</tr>
<tr>
<td>334.</td>
<td>Students are respectful of one another when speaking in class.</td>
<td>11</td>
</tr>
</tbody>
</table>
**Cohesiveness:** Learners feel a sense of sharing, support, and affiliation with the other learners in the class.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>406.</td>
<td>Students in this class enjoy learning together.</td>
<td>12</td>
</tr>
<tr>
<td>712.</td>
<td>Students care about each other’s learning progress.</td>
<td>12</td>
</tr>
<tr>
<td>217.</td>
<td>Students learn well together.</td>
<td>12</td>
</tr>
<tr>
<td>721.</td>
<td>Students cooperate well with one another.</td>
<td>13</td>
</tr>
<tr>
<td>523.</td>
<td>Students learn from one another</td>
<td>13</td>
</tr>
<tr>
<td>424.</td>
<td>Students share information with each other.</td>
<td>12</td>
</tr>
<tr>
<td>226.</td>
<td>Students have developed friendships in the class</td>
<td>13</td>
</tr>
<tr>
<td>127.</td>
<td>Students help each other to succeed in the class.</td>
<td>13</td>
</tr>
<tr>
<td>532.</td>
<td>Students support each other’s learning.</td>
<td>13</td>
</tr>
<tr>
<td>235.</td>
<td>Students work well together.</td>
<td>13</td>
</tr>
<tr>
<td>136.</td>
<td>Students share learning resources with each other</td>
<td>12</td>
</tr>
<tr>
<td>820.</td>
<td>Students are genuinely interested in each other’s ideas</td>
<td>09</td>
</tr>
</tbody>
</table>
APPENDIX K

Classroom Dynamics Questionnaire Final Subscales
Classroom Dynamics Questionnaire  Final Subscales

**Confidence:** The learners believe that the teacher is a competent and committed educator. (7 items)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>The teacher makes learning interesting.</td>
</tr>
<tr>
<td>3</td>
<td>The teacher adequately covers the course content.</td>
</tr>
<tr>
<td>6</td>
<td>The teacher is knowledgeable about the course content.</td>
</tr>
<tr>
<td>5</td>
<td>The teacher has excellent teaching ability.</td>
</tr>
<tr>
<td>9</td>
<td>The teacher comes to class prepared.</td>
</tr>
<tr>
<td>11</td>
<td>The teacher works hard to help students learn.</td>
</tr>
<tr>
<td>2</td>
<td>The teacher provides excellent feedback on students’ learning.</td>
</tr>
</tbody>
</table>

**Respect:** The teacher respects the students as learners and as individuals. (6 items)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>The teacher respects the diverse backgrounds of the students.</td>
</tr>
<tr>
<td>13</td>
<td>The teacher respects students’ ideas.</td>
</tr>
<tr>
<td>10</td>
<td>The teacher never talks down to students.</td>
</tr>
<tr>
<td>1</td>
<td>The teacher treats all students fairly.</td>
</tr>
<tr>
<td>12</td>
<td>The teacher really listens when students are speaking.</td>
</tr>
<tr>
<td>8</td>
<td>The teacher treats students with respect.</td>
</tr>
</tbody>
</table>

**Voice:** Learners feel that they can express their ideas and true feelings with the other learners in the classroom. (7 items)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Students feel comfortable expressing their opinions.</td>
</tr>
<tr>
<td>17</td>
<td>Individual students rarely dominate discussions.</td>
</tr>
<tr>
<td>14</td>
<td>Students feel free to speak out in class.</td>
</tr>
<tr>
<td>25</td>
<td>Students rarely disrupt one another’s comments.</td>
</tr>
<tr>
<td>18</td>
<td>Students feel comfortable disagreeing with one another.</td>
</tr>
<tr>
<td>15</td>
<td>Every student gets a chance to speak in the class.</td>
</tr>
<tr>
<td>24</td>
<td>Students are respectful of one another when speaking in class.</td>
</tr>
</tbody>
</table>

**Cohesiveness:** Learners feel a sense of sharing, support, and affiliation with the other learners in the class. (7 items)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Students in the class enjoy learning together.</td>
</tr>
<tr>
<td>26</td>
<td>Students care about each other’s learning progress.</td>
</tr>
<tr>
<td>20</td>
<td>Students learn from one another.</td>
</tr>
<tr>
<td>27</td>
<td>Students have developed friendships in the class.</td>
</tr>
<tr>
<td>19</td>
<td>Students support each other’s learning.</td>
</tr>
<tr>
<td>23</td>
<td>Students work well together.</td>
</tr>
<tr>
<td>22</td>
<td>Students share learning resources with each other.</td>
</tr>
</tbody>
</table>
APPENDIX L

Administration Procedures
INSTRUCTIONS FOR ADMINISTERING
THE CLASSROOM DYNAMICS QUESTIONNAIRE
Version R

1. The researcher will entered the classroom at a pre-determined time that was scheduled with the input of the instructor of the class.

2. The researcher explained the purpose of the study, however students were only advised that this is a study about classroom dynamics due to the sensitive nature of the subject.

3. The researcher distributed the research information sheet to each student as well as one to the instructor of the class, and allowed them approximately two minutes to read it.

4. The researcher reviewed the following points discussed in the research information sheet
   ◊ participation is strictly voluntary
   ◊ identities and participation are completely anonymous
   ◊ participants may choose not to participate at any given time
   ◊ participants may return a blank questionnaire should they choose not to participate.

5. The researcher placed a large envelope in a visible and neutral location in the classroom for the collection of the questionnaires. The participants were instructed to place the questionnaire inside the envelope after completion.

6. Each student was given a real form of the questionnaire and the directions for completing the questionnaire was read aloud to students by the researcher. The researcher advised students that each questionnaire consists of four pages: a front page, two inside pages, and a back page.

8. The researcher remained inside the classroom to answer any questions or address any concerns that might arise and advised the participants of such.

9. Following the completion of the questionnaires, the researcher expressed appreciation to the students’ for their participation in the study. The teacher was also be thanked for allowing the researcher to administer the questionnaire. The envelope containing the questionnaires was collected and the researcher exited the room.
APPENDIX M

Pilot Study
Pilot Study

The total pilot study sample was comprised of 213 learners, ninety-six respondents from law enforcement and 117 respondents from the University setting (see Table 1).

Table 1. Pilot Study Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Law Enforcement Training Facility</th>
<th>University</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>96</td>
<td>117</td>
<td>213</td>
</tr>
<tr>
<td>% Female</td>
<td>17.6%</td>
<td>84.3%</td>
<td>54.9%</td>
</tr>
<tr>
<td>%HS Degree</td>
<td>57.1%</td>
<td>0%</td>
<td>25.1%</td>
</tr>
<tr>
<td>%Associates</td>
<td>17.6%</td>
<td>0%</td>
<td>7.7%</td>
</tr>
<tr>
<td>%Bachelors</td>
<td>23.1%</td>
<td>74.1%</td>
<td>51.7%</td>
</tr>
<tr>
<td>%Graduate</td>
<td>2.2%</td>
<td>25.9%</td>
<td>15.5%</td>
</tr>
<tr>
<td>%African American</td>
<td>6.0%</td>
<td>77.9%</td>
<td>47.2%</td>
</tr>
<tr>
<td>%White</td>
<td>94.0%</td>
<td>22.1%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Mean Age</td>
<td>26.5 (SD=5.3)</td>
<td>33.7 (SD=7.9)</td>
<td>30.6 (SD=7.8)</td>
</tr>
</tbody>
</table>

The law enforcement sample was primarily male, most of which had a highest educational level of high school, and overwhelmingly Caucasian. Whereas the University setting sample was primarily female, had at least bachelor’s degrees, and mostly African American. The mean ages were 26.5 and 33.7 respectively for the law enforcement group and University group.
Statistical analysis yielded the following results for real version of the instrument from the pilot study.

Table 2 **Reliability of the Classroom Dynamics Questionnaire (alphas)**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect Scale</td>
<td>Real Form = .95</td>
</tr>
<tr>
<td>Confidence Scale</td>
<td>Real Form = .92</td>
</tr>
<tr>
<td>Cohesiveness Scale</td>
<td>Real Form = .92</td>
</tr>
<tr>
<td>Voice Scale</td>
<td>Real Form = .91</td>
</tr>
</tbody>
</table>

The reliability of the Classroom Dynamics Questionnaire is .97. Reliabilities at all levels of specificity of the instrument were exemplary indicating the excellent measurement capabilities of the instrument (See Table 2). The mean and standard deviation distributions were also determined for each of the four dimensions, as well as, teacher-student relationships and student-student relationships (See Table 3).
The pilot study yielded the following relationships between classroom dynamics and, gender, race, age, and setting (See Table 4).
Table 4. **Relationships between the CDQ and Gender, Race, Age, and Setting**

<table>
<thead>
<tr>
<th>Level II</th>
<th>Level III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher-Student Relationships</strong></td>
<td><strong>Respect Scale</strong></td>
</tr>
</tbody>
</table>
| Real: College > Law Enf. | College > Law En.
| rs = .34 with Education | |
| **Confidence Scale** | College > Law En.
| rs = .30 with Education | |
| **Student-Student Relationships** | **Cohesion Scale** |
| Real: none | Real: none |
| | |
| **Voice Scale** | Real: none |

The real form of the CDQ yielded more favorable classroom interactions collectively as well as teacher-student relationships and with respect to the four constructs (respect, trust, voice, and cohesiveness) for the college setting. No difference was seen between any populations for student-student relationships. One explanation for the lack of differences between populations for student-student relationships may be the homogeneity of the student populations.

At the completion of the pilot study, several problems were identified that arose during the administration of the survey instrument. At the law enforcement academy, due to the
administration of the instrument immediately prior to lunch break, the following obstacles were noted (Oliva, 2003):

- Participants appear to hastily complete questionnaire.
- Participants appear to begin completing the questionnaire without reading the directions

Not only were obstacles encountered at the law enforcement academy, but also at the university. Apprehension was sensed from instructors when approached about the administration of the survey. Many viewed the questionnaire as an evaluative tool for their instruction. Moreover, questions arose from participants on several occasions when they encountered the race background variable in section three of the survey. The diversity of the population in the HBCU setting gave rise to minority students who identify with several different backgrounds opposed to a single one.

The following survey administration recommendations arose as a result of the pilot study in both the HBCU setting and Law enforcement setting:

1. Care should be taken to avoid administering the survey prior to breaks or special events in the classroom.

2. The purpose of the teacher’s participation in the study should be discussed with the teacher prior to administering the survey to the class so that any concerns or reluctance to participate can be addressed on a more personal level.

3. The researcher should read or discuss the directions for completing all versions of the instrument prior to giving it to participants for completion.
4. Due to the low numbers of students who questioned how to deal with the background variable on it was decided that any problems encountered with such should be dealt with on an individual basis.

At the conclusion of the data collection for the pilot study the questionnaire items were re-examined for clarity and redundancy. This resulted in the deletion of three items and the re-writing of three other items. Additionally the definition of the Confidence construct of the CDQ was revised to improve its clarity.

These refinements were followed by a final construct validity sort in which four additional items, one for each construct, were added to ensure adequacy of potential items. The sort was conducted with a panel of 13 adult educators (Oliva, 2003). Instrument items place in identical constructs by at least 10 members of the panel were retained. Thirty-one items were retained, however four items that were very similar in nature placed in the construct of Cohesiveness were eliminated. The results of this the final validity sort lead to the creation of a final instrument that would contain 27 items (see Appendix I). The final construct definitions and final instrument core items, which correlate with each dimension, are depicted in Tables 7, 8, 9, &10.
**Respect:** The teacher respects the students as learners and as individuals.

Table 7. *Items Measuring Teacher Respect in the Classroom Dynamics Questionnaire*

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teacher respects the diverse backgrounds of the students.</td>
</tr>
<tr>
<td>2. The teacher respects students’ ideas.</td>
</tr>
<tr>
<td>3. The teacher never talks down to students.</td>
</tr>
<tr>
<td>4. The teacher treats all students fairly.</td>
</tr>
<tr>
<td>5. The teacher really listens when students are speaking.</td>
</tr>
<tr>
<td>6. The teacher treats students with respect.</td>
</tr>
</tbody>
</table>
**Confidence:** The learners believe that the teacher is both competent and committed.

Table 8. *Items Measuring Teacher Confidence in the Classroom Dynamics Questionnaire*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher makes learning interesting.</td>
</tr>
<tr>
<td>2</td>
<td>The teacher adequately covers the course content.</td>
</tr>
<tr>
<td>3</td>
<td>The teacher is knowledgeable about the course content.</td>
</tr>
<tr>
<td>4</td>
<td>The teacher has excellent teaching ability.</td>
</tr>
<tr>
<td>5</td>
<td>The teacher comes to class prepared.</td>
</tr>
<tr>
<td>6</td>
<td>The teacher works hard to help students learn.</td>
</tr>
<tr>
<td>7</td>
<td>The teacher provides excellent feedback on students’ learning.</td>
</tr>
</tbody>
</table>
Cohesiveness: Learners feel a sense of sharing, support, and affiliation with the other learners in the class.

Table 9. Items Measuring Learner Cohesiveness in the Classroom Dynamics Questionnaire

1. Students in the class enjoy learning together.
2. Students care about each other’s learning progress.
3. Students learn from one another.
4. Students have developed friendships in the class.
5. Students support each other’s learning.
6. Students work well together.
7. Students share learning resources with each other.
Voice: Learners feel that they can express their ideas and true feelings to the other learners in the classroom.

Table 10. Items Measuring Learner Voice in the Classroom Dynamics Questionnaire

1. Students feel comfortable expressing their opinions.
2. Individual students rarely dominate discussions.
3. Students feel free to speak out in class.
4. Students rarely disrupt one another’s comments.
5. Students feel comfortable disagreeing with one another.
6. Every student gets a chance to speak in the class.
7. Students are respectful of one another when speaking in class.
APPENDIX N

Classroom Dynamics Questionnaire Codebook
## Classroom Dynamics Questionnaire

**Codebook**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items 1-27</td>
<td>q1-q27 Enter response value circled</td>
</tr>
<tr>
<td>Teacher Respect</td>
<td>q1, q4, q8, q10, q12, q13</td>
</tr>
<tr>
<td>Teacher Confidence</td>
<td>q2, q3, q5, q6, q7, q9, q11</td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>q19, q20, q21, q22, q23, q26, q27</td>
</tr>
<tr>
<td>Learner Voice</td>
<td>q14, q15, q16, q17, q18, q24, q25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Black</td>
<td>pctblack</td>
</tr>
<tr>
<td></td>
<td>Number of black students/number white students multiplied by 100</td>
</tr>
<tr>
<td>Teacher- Student Race</td>
<td>t_s_rac</td>
</tr>
<tr>
<td></td>
<td>Teacher’s race relative to student’s race</td>
</tr>
<tr>
<td>Black-Black</td>
<td>1</td>
</tr>
<tr>
<td>Black-White</td>
<td>2</td>
</tr>
<tr>
<td>White-Black</td>
<td>3</td>
</tr>
<tr>
<td>White-White</td>
<td>4</td>
</tr>
<tr>
<td>Background Variable</td>
<td>Background Variable Numeric Code</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Age (year born)</td>
<td>2003 minus year born</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
</tr>
<tr>
<td>Caucasian</td>
<td>2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
</tr>
<tr>
<td>Native American</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Race/Ethnicity (Recoded)</td>
<td></td>
</tr>
<tr>
<td>African American (black)</td>
<td>1</td>
</tr>
<tr>
<td>Caucasian (white)</td>
<td>2</td>
</tr>
<tr>
<td>Educational Degree</td>
<td></td>
</tr>
<tr>
<td>Bachelor's</td>
<td>1</td>
</tr>
<tr>
<td>Some Graduate Work</td>
<td>2</td>
</tr>
<tr>
<td>Masters</td>
<td>3</td>
</tr>
<tr>
<td>Doctorate</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Education Degree (Recoded)</td>
<td></td>
</tr>
<tr>
<td>Bachelor's</td>
<td>1</td>
</tr>
<tr>
<td>Some Graduate Work</td>
<td>1</td>
</tr>
<tr>
<td>Masters</td>
<td>2</td>
</tr>
<tr>
<td>Doctorate</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>1</td>
</tr>
<tr>
<td>Part-time</td>
<td>2</td>
</tr>
<tr>
<td>Unemployed, seeking work</td>
<td>3</td>
</tr>
<tr>
<td>Retired</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Annual Salary</td>
<td></td>
</tr>
<tr>
<td>Less than $20,000</td>
<td>1</td>
</tr>
<tr>
<td>$20,000-29,999</td>
<td>2</td>
</tr>
</tbody>
</table>
$30,000-39,999 | 3  
$40,000-49,999 | 4  
$50,000-59,999 | 5  
$60,000-69,999 | 6  
$70,000-79,999 | 7  
$80,000-89,999 | 8  
$90,000 or more | 9  

<table>
<thead>
<tr>
<th>Teacher Variable</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
</tr>
<tr>
<td>Caucasian American</td>
<td>2</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
</tr>
</tbody>
</table>