PERCEPTIONS OF CLASSROOM DYNAMICS BY DEVELOPMENTAL STUDIES STUDENTS AT A TWO-YEAR TECHNICAL COLLEGE

by

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(Under the Direction of Thomas Valentine)

ABSTRACT

According to McCabe (2000), helping academically deficient students to learn the skills needed for college has been a feature of American education for decades. Ninety-five percent of community colleges offer developmental studies courses. Forty-one percent of students entering community college and 29% of all entering college students are underprepared in at least one of the basic skills courses of reading, writing, and mathematics. Thus, educational programs are created to provide developmental education and support services for the underprepared college students. The programs enroll more than a half a million people each year helping them to gain academic skills necessary to succeed in college and to become positive contributors to society.

One way to help this special group of students to become successful involves assessing what they see and feel in classroom environment settings. Demographic characteristics, a mixture of diverse characteristics, and relationships with instructors as well as other students can often affect classroom perceptions and learning outcomes.

The broad purpose of the study was to understand how developmental studies students perceive classroom dynamics and why different students view classroom
environments differently. The instrument used to measure students’ perceptions was a composite instrument in which was embedded the Classroom Dynamics Questionnaire (Valentine, Oliva, and Thomas, 2002), the Educational Experience Scale (Kim, 1993), and the Identification with Academics Scale (Osborne, 1997). The study sample consisted of 645 students enrolled in 34 developmental studies English, reading, and mathematics classes at a technical college in the southeastern United States.

Bivariate and multiple regression analyses were conducted to discover the best explanation for observed variance in four dimensions of classroom dynamics, namely, teacher respect for students, student confidence in the teacher’s ability, learner voice in the classroom, and learner cohesion in the classroom. Analyses revealed that demographics variables of race, age, gender, and income, had no predictive power in classroom perceptions. However, the variables past educational experiences, educational attainment, and identification with academics were significant predictors for the four dimensions of classroom dynamics.

These findings provide practical contributions for educational practitioners who wish to better understand the way students view their educational experiences.

INDEX WORDS: Developmental Studies, Underpreparedness, Classroom Dynamics, Classroom Environment, Classroom Dynamics Questionnaire, Educational Experiences, Identification with Academics, Educational Attainment, Community Colleges, Technical Colleges, Two-year Colleges
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DEDICATION

This dissertation is dedicated to my son, Terrence Anthony Davis, who lovingly supported me throughout this experience.
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The preparation and completion of this dissertation has been a tremendous learning experience. First I give thanks to God for this most bountiful blessing.

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CHAPTER 1
THE PROBLEM

Background of the Study

Each year one million underprepared students enter colleges and enroll in developmental studies programs. These programs have salvaged the lives of thousands of young people and have become essential to developing students’ skills for the workforce and for personal and societal gains (McCabe, 2000). This enormous population of students is part of today’s rapid growth in college enrollment. Students are not only seeking access, but an education of real and lasting value (Ramaley & Leskes, 2002).

The world today, complex, interconnected, turbulent, and more reliant on knowledge, has affected this rapid growth (McCabe, 2000). Today, according to Ramaley and Leskes (2002), 75% of high school graduates get some postsecondary education within two years of receiving their diplomas. In addition, increasing numbers of older adults have also enrolled in postsecondary education. Professional and personal benefits of college can be for public good and for individual or private good. They form the basis for a springboard to employment, a spur to economic growth, a strong democracy, a fulfilled life, a healthy society, and ultimately, a more peaceful world. Thus, these benefits explain the increasing college enrollment and why everyone should have access to an excellent college education.

Though students are flocking to college, the educational practices invented when higher education served only the few are increasingly disconnected from the needs of
contemporary students. Preparation for higher learning has not kept pace with access, and
the number of underprepared citizens and students are increasing (Ramaley & Leskes, 2002). McCabe (2000) contends that despite aggressive school reform, substantial
numbers of young Americans reach adulthood underprepared for employment in this
information-rich 21st century.

Though remediation means to re-teach, the terms “developmental studies” and
“developmental education” are often used by community colleges ad technical colleges in
referring to “remedial studies” and “remedial education.” Ramaley and Leskes (2002)
indicate that once in college, 53% of all students must take developmental studies courses
in order to attain knowledge in the basic skills of reading, writing, and mathematics.

Helping academically deficient students to learn the skills needed for college has
been a feature of American education for decades. Education leaders have debated and
taken opposing views as to whether colleges should admit students who are not prepared
for college-level work. Regardless of the debate, education programs offered by
community colleges, and, in this case technical colleges, has prevailed because these
institutions provide access to higher education as well as opportunities for job and career
advancement. Developmental education programs and support services for underprepared
college students are also provided by these institutions. According to McCabe (2000),
developmental education programs are important because for many students they serve as
a critical bridge to life success. The programs enrolls more than a half a million people
each year helping them to gain academic skills necessary to become positive contributors
to society and to prepare them for college. McCabe contends that the programs pay
dividends.
McCabe and Day (1998) comment that the importance of developmental studies programs in the community college is undeniable. They claim, “With increasing workforce demands and growing diversity, postsecondary developmental education is a social and economic imperative for the nation” (p. 32). They further emphasize, “Of all educational institutions, community colleges have the greatest ability to move significant numbers of Americans from dependent to self-sufficient status” (p. 33). Commenting on 21st century learning, Spann (2000) affirms that for educational leaders who are concerned for the welfare of citizens, developing an individual’s basic knowledge skills will continue to be necessary for the country’s social and economic well-being.

Demographic characteristics further point out the importance of community college developmental studies programs. McCabe’s (2000) study indicates that 95% of community colleges offer developmental studies courses. Forty-one percent of students entering community colleges, and 29% of all entering college students are underprepared in at least one of the basic skills courses of reading, writing, and mathematics. One million underprepared students enter colleges and enroll in developmental studies courses. Of these students, 20% are deficient in reading, 25% are deficient in writing, and 34% are deficient in mathematics. Fifty-four percent of developmental studies students are under 24 years of age; 24% are between 25 and 34; and, 17% are over 35. Female enrollment slightly exceeds male enrollment. Sixty percent of students are White non-Hispanic; 23% are African American; and, 12% are Hispanic. Fifty-four percent have an annual family income of less that $20,000. Although the majority of developmental studies students are White non-Hispanics, each minority group is overrepresented. Although most are working (many full time), 68% of developmental studies students are
enrolled on a full-time basis. Forty percent receive some form of financial aid. The average credit load of developmental studies courses is approximately one-fourth of a full academic year. Despite these difficulties, 40-50% of students are successful in their developmental studies program courses (McCabe).

There is hope and promise in the delivery of developmental education and services in the community college. As accessible educational institutions, community colleges are committed to developing and educating citizenry that contribute to national prosperity and equity. To achieve this promise, community colleges are sanctioned to respond to the needs of all students by playing an important role in admitting students who enter with poor skills and under unfavorable circumstances (McCabe, 2000). Regardless of the reason, community colleges developmental studies programs can give students intensive experiences to prepare them for college.

Researchers have observed and speculated upon the reasons for the underpreparedness of college students. According to Ramaley and Leskes (2002), less than one-half of high school graduates complete a minimally defined college preparatory curriculum while in high school. Thus, the community college must remedy educational gaps. Ramaley and Leskes further contend that easy courses, poor counseling, and low expectations of students and teachers alike contribute to the mismatch between high school graduation and college readiness.

According to Boylan, Bonham, and White (1999) and Boylan (2003), underprepared students fall into the following major categories:

- **Poor choosers** – those who made poor academic decisions that adversely affected their academic future;
- **Adult students** – those over 25 years of age who have been out of school for several years and must cope with managing adult roles and responsibilities while adjusting to college-level academic expectations;

- **Students with learning disabilities** – those suffering from physical or learning disabilities that prevent them from performing as well as non-disabled students;

- **The ignored (lots of “minorities”)** – those whose learning deficiencies have gone undiagnosed or been ignored in prior schooling;

- **Limited English proficiency students** – those who acquired their early schooling in a foreign country and thus have limited English language and verbal skills;

- **The users** – those who attend college simply for the benefits and who often have no clear academic goals, objectives, or purposes; and

- **The extreme cases** – those who have severe emotional, psychological, or social problems that prevent them from being successful in academic situations.

McCabe (2000) suggests that some of the blame for student underpreparedness for college rests with public schools. There is a widespread belief that public schools have failed and are in need of dramatic improvement. Therefore, legislators and governors have shown new and impressive commitment to meaningful school reforms. However, McCabe argues, “The problem of underprepared citizens is not an educational issue alone. It is seated in and influenced by a rapidly changing society with demographic changes, continued poverty, and new family structures producing more underprepared
McCabe’s study reports some of the reasons that students are underprepared: (a) demographic changes, continued poverty, and new family structures; (b) public school failures resulting in competency deficiencies; (c) the aging of the population, and resultant shrinking of the workforce; and (d) ever-changing businesses and industries demand for capable workers. Of these, poverty has the highest correlation with educational unpreparedness at every level, from preschool to graduate school.

McCabe explains that poverty’s impact and the reasons that “minorities” are such a large proportion of the nation’s poor has to do with fundamental quality-of-life issues. Ramaley and Leskes (2002) propose that these life and social issues explain the characteristics of community college students as they bring vitality to college campuses; however, they simultaneously place significant new demands on faculty knowledge and skill.

According to Cheng (1994), these social issues and personal qualities, interacting with classroom physical environmental factors (space, lighting, ventilation, furniture, etc.) and psychological environmental factors (the social quality as it relates to perceptions and feelings about social relationships among students and teachers) affect learning attitude and behavior. Grimes (1997) states that the success rate of these students is important and makes it possible to address the question of what policies or sets of policies are effective in encouraging community colleges to offer programs that promote student success.

A look at these characteristics reveals a very diverse array of national, racial/ethnic, and social-economic backgrounds of community college students. According to McCabe (2000), the latter time period of the 20th century was a period in
which education leaders focused on opportunities for the underserved populations. He affirmed that the more diverse student bodies became the more students who were academically underprepared, often disrupting traditional practices. This was a consequence of unequal education opportunities in America and a long history of socio-cultural issues. Therefore, the growth expansion of the developmental studies population, coupled with the personal, social, and academic characteristics expansion of underprepared citizens and students, provides support to the study of developmental studies students.

Moore’s (2004) idea of underpreparedness suggests that underprepared students can ‘catch up’ with their classmates, provided they are taught under the best of circumstances and are participating in the right environment. But what are the best circumstances and conditions for a positive environment in which developmental studies students can show remarkable gain and be successful in higher education?

Though not exhaustive, writings by Ramaley and Leskes (2002) suggest that improved programs to ensure the possibility for student success can include the following: (a) a belief by faculty members that all students are capable of high-level learning, as well as a focus on learning and the quality of student accomplishments; (b) meeting students at their ability levels and moving them toward greater achievement; (c) communicating goals and achievement expectations; (d) responding appropriately to students; (e) holding students to high standards of intellectual work that requires strong commitments of time and attention; (f) designing coherent curriculum and employing teaching practices to help all students to achieve their goals; (g) designing curricula that prepares students for successful careers, enriched lives, and engaged U.S. and global
citizenship; (h) requiring students to apply knowledge to learned concepts; (i) employing well-prepared and scholarly instructors; and (j) providing in-school and out-of-school support networks.

These are all essential conditions for a good educational environment in which learning can take place. However, social psychologists such as Lewin (1948/1997) and Moos (1976, 1979, & 1981) provide a more systematic way of understanding social dynamics. Their approaches on classroom environments emphasize that certain qualities, attributes, and characteristics of the student, as well as the teacher, can affect the learning environment and may or may not translate into effective classroom performance. These personal characteristics and social variables can perhaps dictate perceived classroom perceptions among students. This study examines these different perceptions, which are explored briefly in this section, and in more detail in the discussion of classroom dynamics in Chapter 2 of the study.

Classroom Dynamics

The study of perceptions of classroom learning environments has been firmly established as an active field of research since the late 1960s, thus evolving as a considerable interest and important topic (Fisher and Fraser, 1983). Fraser (1986) argues that the classroom dynamics is such a powerful determinant of student outcomes that it should not be ignored by those wishing to improve the effectiveness of schools. Both the environment and its interaction with personal characteristics of the individual are recognized as potent determinants of human behavior (Fraser, 1986). Furthermore, as emphasized by MacAulay (1990), the achievement of a match between students’
preferences and instructional settings is a necessary condition for maximizing cognitive, social and affective outcomes.

Lewin, the social psychologist, wrote extensively on Group Dynamics and its application to educational and instructional settings. Many of the Lewinian-oriented psychologists and students of Lewin have applied his theory to educational settings, thereby, subscribing to the theory that human behavior is a result of the interaction of persons with their environments (Moos, 1976). Lewin advocated that membership in a supporting and accepting group frees a person to experiment with new behaviors, attitudes, and action theories. One such group, for example, could be a classroom for cooperative learning (Gold, 1999).

The Lewinian model, therefore, underscores the significance of the classroom environment as it interacts with the student’s personal characteristics to affect learning attitudes and behavior (Moos, 1979). Lewin’s basic line of argument, referred to as interdependence of fate, maintains that groups move toward a psychological awareness not because their members are necessarily alike (although they may be), but rather that group survival occurs when the members of the group realize that their fate depends on the fate of the group as a whole. One person’s success either directly facilitates or is necessary for another person to succeed. Lewin believed that individuals might come to a group with different dispositions; yet, if they share a common objective, they are likely to act together to achieve it. As a result, a powerful dynamic is created.

Moos expanded on the work of Lewin’s model by taking into account the environmental factors that influence an individual’s perception in a particular social setting. Moos developed the Classroom Environment Scale (CES) identifying teacher
characteristics as the heart of the model. The CES model assesses the students’ perceptions of the learning environment. What a student perceives is important. Perceptions are very useful in predicting achievement and in contributing to the understanding of educational processes (Moos, 1979). The CES model also highlights the critical influence of the teacher’s persona. The model, incorporating three interacting dimensions, used in conceptualizing and characterizing diverse psychosocial environments, are:

- **Relationship** – measures the degree of student involvement, affiliation and teacher support;
- **Personal Growth / Goal Attainment** – measures the emphasis on task orientation and competition;
- **System Maintenance and Change** – measures the emphasis on organization, rule clarity, teacher control and innovation.

The model also represents a simplified component of interrelationships among specific environmental variables, which influence one another. Moos concluded that the **Relationship, Personal Growth / Goal Attainment, and System Maintenance and Change Dimensions** exist in almost every institutional setting. He states that the differential emphasis on aspects of these dimensions may have an impact on individual behavior and/or performance (Moos, 1979).

Creating a safe and respectful environment is recognized as an important duty of any higher education instructor. Moos (1979) claims that the attitudinal climate of the classroom, as created by the teacher, is a major factor in promoting or inhibiting learning. The student’s perception of the academic climate as welcoming, hostile, or
condescending to learning is important. Therefore, perceptions are very useful in predicting achievement and in contributing to the understanding of educational processes (Moos, 1979).

Different students perceive developmental studies classrooms in very dissimilar ways. This is revealed in course evaluations. Even if the majority of students think well of a course, some students, perhaps those having a difficult time in the class, might actually have a dislike for the instructor and perceive an entirely different and/or negative view of the class. It is important to identify and acknowledge perceptual differences, and to understand the degree to which these differences influence the classroom environment concept. Instruments that assess students’ perceptions of classroom social climate serve to identify those important factors that affect learning. One such recent theoretical formulation contributing to the understanding of this significant topic is the Classroom Dynamics Questionnaire (CDQ), developed by Valentine, Oliva, and Thomas (2002). The questionnaire measures interpersonal relationships in the adult education classroom. The four dimensions of specificity of the questionnaire are:

- Teacher-student relationship as measured by
  
  (1) *Respect* – teacher shows respect for students
  
  (2) *Confidence* – students have confidence in teacher’s ability

- Student-student relationship as measured by
  
  (3) *Voice* – students believe that they can speak their minds
  
  (4) *Cohesion* – students as a group are well integrated
These dimensions examine relationships and social interactions of students in postsecondary classrooms. In Chapter 2 of the study, a literature review addresses the respective contents of the four dimensions.

**Determinants of Classroom Dynamics and Social Environment**

Byrne, Hattie, and Fraser (1986), Darkenwald (1987), Michie, Glachan, and Bray (2001), Oliva (2003), and Thomas (2004) noted that demographic variables such as age, race, gender, and income have had little predictor power in determining classroom perceptions. Moore (2004) proposes that something in the student’s prior educational experience, rather than an individual trait *per se*, may account for their academic difficulties. Therefore, it is imperative to look at possible predictor variables that affect classroom dynamics. A more plausible idea might be psychological variables as predictors such as academic self-esteem and identification with academics, which impact perceptions of classroom or classroom dynamics, as noted in studies by Steele (1992), Rosenberg, Schoenbach, Schooler, & Rosenberg (1995), Osborne (1997b), Woo & Frank (2000), Michie, Glachan, & Bray (2001), and Lane (2004). Figure 1 presents a systematic and logical way of observing what causes differences in perceptions of classroom dynamics.

There are many different ways of understanding classroom dynamics and many variables to consider. Although there is no definitive answer to the issue, based on logic and a review of the literature, three classes of determinants are proposed. Arguably, the difference in perceptions of classroom dynamics in the developmental studies classroom can be based on the following variables: (a) demographics and social characteristics;
(b) past experiences of education; and (c) identification with academics. Figure 1 depicts a simple version of the model for the study.

![Model of study predictors](image)

*Figure 1. Simple version of study model depicting predictors of classroom dynamics*

**Variables of Age, Race, Gender, Income, and Family Educational Background**

It is very important to note that social and cultural factors affect learning and are related to achievement levels. According to Boylan (2003), age plays an important role in whether students achieve. He contends that many older adult developmental studies students, those over 25 years of age and who have been out of school for several years, may experience a lack of achievement because they must cope with managing adult roles and responsibilities while adjusting to college-level expectations. Managing these roles and responsibilities can often affect participation and thus cause the student to withdraw from school.
“Minorities,” especially African Americans, are overrepresented in developmental studies programs. Some struggle to complete undergraduate requirements on the same level as other students (McCabe, 2000). Studies reviewed by Bailey (2005) disclosed that many low-income minorities earn credentials at a lower rate and disproportionately fail to secure a degree from their community college or transfer successfully to a four-year institution. Steele (1992) asserts that this can possibly be attributed to the fact that many “minorities” continue to face societal disadvantages of segregation, job ceiling, a lack of economic opportunity, poor schools, poor communities, and family problems.

Students can experience classrooms differently which can significantly affect performance and achievement. According to Steele’s (1997) theory of stereotypes, societal stereotypes about groups can influence the intellectual functioning and identity development of individual group members. Steele argues that females are often stereotypically threatened in classroom settings. Therefore, women oftentimes shun from areas such as math and engineering and ‘move across the hall’ to English. He further asserts that oftentimes the negative threat experienced by females regarding their ability has been disseminated throughout society, causing pressure that could worsen their performance in comparison to males. If the threat is lessened, they will perform equally well. (Steele, 1997).

Underpreparedness is affected by poverty. McCabe (2000) states “The decline of the traditional family and the rising percentage of children born into poverty increase the number of persons who will enter school unprepared and who will have inadequate parental support” (p.17). He contends that most of these individuals will reach adulthood
educationally underprepared and will probably need to enroll in a community college developmental education program at some point in their lives.

According to Howard (2001) more poor students are attending college; however, there are wide disparities of socioeconomic status that separate those who actually complete college and earn a degree from those who do not. His study of students across economic backgrounds revealed that more than 40% of economically advantaged students graduated within five years, compared to six percent of poor students. These poor students are those at the bottom 40% of the SES as defined by parent’s income, education, and occupation. More than likely they attended schools with a small proportion of graduates going to four-year colleges or a large proportion eligible for free or reduced-price lunches; experienced a lack of a quality early education; experienced inadequate health care; and/or perhaps resided in un-stimulating household environments. Therefore, helping the poor and disadvantaged students get into college is half the battle. Attention must be given to helping them remain in college (Howard).

Of particular importance to community colleges is the group of students classified as first-generation college students (Inman & Mayes, 1999). Inman and Mayes advocate the primary importance of this group of students as primary because they often represent a large segment of the community college population and also a unique population with distinct goals, motivations, and constraints. It is also proposed that first generation students are often different from others in that they are typically less well-prepared academically and psychologically for college than those students whose parents attended college. This group of students often faces a variety of nonacademic challenges. Usually they come from poorer families, have a lower sense of self-efficacy and lower self-
esteem, feel generally less socially-accepted, are constrained by financial obligations, and often do not have as much support from their families. Consequently, Inman and Mayes suggest that logically it is expected that first-generation students do not perform as well as students whose parents succeeded in college. However, they contend that this is not necessarily the case and assert that first-generation students can be committed to college and are capable of succeeding (Inman & Mayes, 1999).

Past Experiences of Education

Michie, Glachan, and Bray (2001) suggest that a student’s past educational experience is significant to his/her experience in higher education. It is suggested that direct entry students (18-21 years of age) who come into higher education straight from secondary school, have more confidence in themselves as learners than do re-entry students (22 years and over) who oftentimes underestimate their own ability. Michie et al. also suggest that students who have poor learning experiences tend to be somewhat over-anxious. They avoid the risks of making mistakes. They may also have a reduced academic self-concept due to multiple factors, such as the gap in their education participation; they feel different in some way to traditional entry students; and are unhappy about their previous educational experiences.

Identification with Academics

Osborne (1997b) defines “identification with academics” as “The extent to which academic pursuits and outcomes form the basis for global self-evaluation – conceptually distinct from, though related to, self-esteem and self-concept” (p. 59). In more technical terms, he defines “identification with academics” as, “The extent to which one’s self-evaluation in a particular area (academics) affects one’s overall self-evaluation (global
self-esteem)” (p. 59). Osborne contends that students who are more closely identified with academics should be highly motivated to succeed because their self-esteem is directly affected by their academic performance.

One theoretical perspective on identification with academics posits that it is a source of self-esteem (Osborne, 1999) and a necessary condition for learning. Identification with academics can predict important academic outcomes such as grades, academic probation, dismissal for academic cause, honor roll or dean’s list, and, behavioral referrals and absenteeism. Moreover, according to Osborne, important psychological variables can also be related to identification, such as learning goals, inherent valuing of academics, academic competitiveness, and cognitive processing of course material. “Thus, students who identify with academics should be more motivated to succeed and persist longer in the face of failure because their self-esteem is more strongly influenced by academic performance” (Osborne, 1997b, p. 557).

“Educational and psychological research has shown that students from disadvantaged U.S. minority groups tend to achieve poorer academic outcomes than do White or Asian American students” (Osborne, 1999). According to Steele (1997), there is convincing evidence that students from disadvantaged minority groups achieve poorer outcomes at every level, even when given equal preparation as their White and Asian American peers. Osborne and Rausch (2001) theorize that poorer performance among the minority groups, especially African American boys, is attributed to a lack of identification with academics. This concept is expanded in Chapter 2 of this study.
Statement of the Problem

The developmental studies population is an increasingly important population and it behooves colleges to serve this group of students in the best way possible. From a social point-of-view, more people are attending college and educational expectations are increasing. According to McCabe (2000), to remain competitive in the global economy, a highly skilled workforce must be developed; and the task of raising the competencies of citizens falls on the educational system. Attending community college is an important step in social mobility. For a variety of reasons students need to be helped. Therefore, the population must be more educated for society, personal advancement, and employment.

Yet, a knowledge gap exists in the field of developmental studies classroom dynamics. We know little about this underprepared population of students and their different measures of perception on certain dimensions of classroom dynamics, namely, respect, confidence, cohesion, and voice. Absent from the literature is information on the nature of classroom dynamics in the developmental studies classrooms, and the causes of the differences in the students’ perceptions of classroom dynamics.

Purpose of the Study

The broad purpose of the study was to understand how developmental studies students perceive classroom dynamics and why different students view classroom environments differently. To accomplish this broad purpose, three research questions are posed:

1. How do developmental studies students rate their classroom with respect to the four dimensions of classroom dynamics as measured by the classroom dynamics questionnaire?
2. To what extent do selected demographic characteristics, past experiences of education, and identification with academics *independently* predict developmental studies students’ perceptions of classroom dynamics?

3. To what extent do selected demographic characteristics, past experiences of education, and identification with academics *simultaneously* predict developmental studies students’ perceptions of classroom dynamics?

**Significance of the Study**

There exists the need of an overall evaluation and improvement in understanding the perceptions of developmental studies students who the literature suggest are older, have low academic self-esteem, are marginalized, are economically disadvantaged, and who enter technical colleges with an inadequate educational history. These personal factors and social characteristics are potential barriers to student success, and it is important to determine if these characteristics relate to educational achievements and learning outcomes of the students.

The study also has significance in that it can provide opportunities for technical college instructors to reflect on teaching styles, assess student learning needs, and evaluate classroom climates. Additionally, instructors are able to review the entire learning process in an effort to serve students better as they gain confidence in reaching their goals.

Specifically, the results of the study can provide opportunities for college administrators to closely review student evaluations of instructor. Evaluations can indicate a need for on-going faculty development on optimal classroom environments. Additionally, the results of the study can provide opportunities for college administrators
to develop and conduct faculty orientations and staff development activities designed to (a) prepare instructors to incorporate classroom procedures to influence and maximize learning and (b) produce a classroom atmosphere where students feel that they belong and can freely participate. Specially designed staff development activities can cause instructors to understand the classroom through a radically new and unique personal set of eyes.
CHAPTER 2
REVIEW OF LITERATURE

A review of literature has been conducted to facilitate the understanding of classroom dynamics and its effect on the developmental studies classroom environment. The discussion consists of five major sections. Section one focuses on the community college, examining its mission and service population, students’ social and academic characteristics, characteristics of first-generation college students, and economic barriers to college. Section two focuses on developmental studies education reviewing program participation and the underprepared student. Section three reviews the historical literature on classroom environment, examining key theoretical formulations and measures that have been used with postsecondary populations. Those theoretical formulations and measures are: the Classroom Environment Scale (CES), the Adult Classroom Environment Scale (ACES), and the College Classroom Environment Scales (CCES). The fourth section takes a closer look at dimensions of classroom dynamics. This section is organized according to the four broad areas represented in the Classroom Dynamics Questionnaire, namely, teacher respect for students, students’ confidence in the teacher’s ability, learner cohesiveness, and learner voice. The final section of the literature review deals with the likely predictors of perceived classroom dynamics. The areas discussed are demographic characteristics (age, race, gender, educational attainment, and income) and personal challenges; past experiences of education; and identification with academics.
The Community College

In the 100 years since their creation, community colleges have spread across the United States and have become the largest sector of higher education. Community colleges represent more than 1000 regionally accredited institutions within commuting distance of over 90% of the population. With their open-door admissions policy, student enrollment at community colleges has grown to over 11.5 million students in credit and non-credit classes. Community colleges have been described as the people’s or democracy’s colleges. They are credited with opening access to higher education to the most diverse student body in the history of higher education, thus becoming emulated in countries around the globe (Boggs, 2004).

It is both the best of times and the worst of times for America’s community colleges.

Student enrollment has grown to over 6.5 million students enrolled for credit – almost half (45 percent) of the total number of undergraduates in the United States. At the same time that community colleges are faced with historic enrollment demands, they are struggling with severe budget cuts. When state finances are tight, higher education budgets are often cut disproportionately. To make matters worse, community colleges often absorb a disproportionate share of the higher education budget cuts. While funding policies vary by state, community colleges are the segment of higher education most reliant on public funding. Thus, community college leaders are struggling to meet accelerating demand with declining public resources. Many colleges and systems have responded by increasing tuition (Boggs, 2004, p. 6).
According to a Ford Foundation survey (McClenney, 2004), 81% of people have some relationship to the nation’s community colleges. Receiving high marks, these institutions provide high quality education, along with the opportunity for career training and advancement. Community college leaders and advocates praise community colleges and describe them as being conveniently located, providing high quality education, providing job training, and being affordable (McClenney, 2004). Results of McClenney’s survey revealed that the most supportive reasons for community colleges are that they offer the promise of educational and economic opportunity for everyone.

Mission and Service Population

According to Parsad & Lewis (2003) the place of developmental studies in postsecondary curricular is a much debated issue in policy-related literature and the media. The fundamental issue of this debate is the problem of whether developmental course offerings are appropriate at the college level, and whether those courses should be offered at all colleges or be restricted to two-year colleges (Parsad & Lewis, 2003).

Community colleges have long had to educate students who are not prepared for college level work. As “open-door” institutions, states and localities are asking community colleges to take on an even-greater share of remedial instruction. In a 50-state report by the Education Commission of States (ECS), Jenkins and Boswell (2002) report that at least 10 states, one of which is the state of Georgia, prevent or at least discourage public four-year institutions from offering remedial education. In three states, four-year institutions receive no state funding for remedial instruction. One state has instituted a new policy that four-year institutions can enroll up to 10% of their students in remedial instruction. Above that percentage, universities are required to refer students needing
remediation to community colleges (Jenkins & Boswell, 2002). According to the ECS report by Jenkins and Boswell (2002), the City University of New York (CUNY) is phasing out remedial instruction at the system’s four-year institutions and requiring students needing remediation to attend community college. Similarly, the same transfer is taking place in the California State University System. Thus, these trends will likely increase the already high level of enrollment in remedial or what educators call “developmental” education courses at community colleges (Jenkins & Boswell, 2002).

According to Cohen and Brawer (1996), community education is the broadest of all community college functions.

Community education, taking various forms, embraces adult and continuing education, along with numerous other services to the local community; may take the form of classes for credit or not for credit, varying in duration from one hour to a weekend, several days, or an entire school term; may be sponsored by the college, by some other agency using college facilities, or jointly by the college and some outside group; may be provided on campus, off campus, or through television, the newspapers, or radio; may center on education or recreation, on programs for personal interest or for the good of the entire community; is usually fully supported by participant fees, grants, or contracts with external organization (p. 275).

Cohen and Brawer (1996) further say,

The community colleges reached out to attract those who were not being served by traditional higher education: those who could not afford the tuition; who could
not take the time to attend a college on a full-time basis; whose ethnic background had constrained them from participating; who had inadequate preparation in the lower schools; whose educational progress had been interrupted by some temporary condition; who had become obsolete in their jobs or had never been trained to work at any job; who needed a connection to obtain a job; who were confined in prisons, had physical disabilities, or otherwise unable to attend classes on a campus; or who were faced with a need to fill increased leisure time meaningfully (p. 29-30). If there were no community colleges, what agencies would be performing their community service? How many of the services they provided would be missed? Would secondary schools better maintain their own curricular and instructional integrity if community colleges were not there to grant students absolution for all past educational sins? Would other institutions assume the remedial functions (p. 36)?

Kozeracki (2002) comments on the extent of developmental education in community colleges and higher education. Kozeracki states that community colleges have committed to increase access to higher education institutions by instituting open admissions policies and providing education for individuals who did not have the money or academic preparation to attend a four-year college. The open admissions policies began in the 1960s and meant that inadequate academic preparation was no longer a barrier to college access. Since the mid-19th century, developmental studies programs and courses are being offered to some degree in the majority of all higher education institutions in the U.S. These courses are designed to assist in preparing students for college-level courses (Kozeracki).
Social and Academic Characteristics

Community and technical college students bring a mixture of diverse characteristics to their campus. These characteristics include youth and age, financial comfort and financial need, and racial and ethnic variations (American Association of Community Colleges [AACC], 2004).

The community college is attended by the student needing additional training to get, hold, or improve on a job. With flexible hours, varied course offerings, and low tuition, community colleges have positioned themselves to respond to this training. Therefore, for many students, the community college has been called the “institution of last resort” (Almeida, 1991).

The community college is the entry point for the adult learner who wants to returns to school for self-improvement or job skills training. Many of these older individuals have not sat in a classroom in years. They often find that they need to obtain the academic skills necessary for competing at the college level and in order to compete in today’s job market (Almeida, 1991).

Many first-generation students enter the system through the community college. The community college is also attended by that group of students who add a different dimension to the growing “mission.” This group comprises the underprepared developmental students who possess low abilities in reading, mathematics, and/or other learning skills. This group of students, for a variety of reasons, probably lacked motivation in high school and had poor secondary school attendance. This group of community college students perhaps participated in inadequate programs, had poor teachers, or had reading or learning disabilities and missed out on much of the academics
that prepared people for postsecondary schooling and/or the workforce (Almeida, 1991).

Many community college students are less economically situated within middle- and upper-middle-class America, are often members of minority groups, are less academically prepared from high school, do not possess a high desire to achieve academically, do not aspire for a college degree, and are less likely to be enrolled on a full-time basis. These characteristics contribute to the high dropout rates of community college students (Nora, 2000).

A question often asked is “Do underprepared, low-skilled, or disabled students actually belong within the walls of the community college, or should they involve themselves in other alternatives such as jobs, the military, etc.” (Almeida, 1991, p. 2)? McCabe (1998) asserts that they are needed and should not be written off. He argues that twenty-first century employment will require greater skills than today. With the decline of the percentage of individuals in their work years, every person in the primary work years will be needed for the workforce. Therefore, it is important that these individuals are prepared for productive employment.

According to McCabe (2003), approximately one-fourth of community college students are married. The average age of community college students is 28. Ten percent of community college students are physically disabled. Immigrants make up a significant percentage and tend to be weak academically. Many entering community college students are underprepared and have a poor or low high school grade point average (GPA) or General Educational Development (GED) test score. According to a study by McCabe (2003), the mean high school GPA of remedial students is 2.40. Fifty percent of remedial students scored 800 or lower on the Scholastic Aptitude Test (SAT). Because many
underprepared students literally have never left their neighborhoods, they possess a limited knowledge of the world. They have little or no peer motivation to encourage them to advance academically (McCabe, 2003).

Numbers and variety sum up community college students who continue to attend for their own purposes. Therefore, the community college tries to offer something for everyone in the community and therefore, everyone is potentially a student (Cohen & Brawer, 1996).

*First-Generation College Student*

Increased demographic diversity of the undergraduate student body in American post-secondary education results in a substantial number of first-generation college students. These are students from families where neither parent had more than a high-school education (Pascarella, Pierson, Wolniak, & Terenzini, 2004). According to Pascarella (1997), first-generation college students may have fewer academic skills than their peers, whose parents went to college. In a 1997 study of 3000 students, Pascarella’s findings revealed that first-generation students often were less skilled than their peers in reading, math, and critical thinking. They also showed less improvement in those skills than their classmates during their freshman year. Pascarella (1997) predicts that as higher education becomes more accessible to minorities and students from low-income families, colleges will see a dramatic increase in first-generation students in the next decade. The message resulting from the study is that first-generation students need more support than other students from high school and college programs. Pascarella (1997) reports that first-generation college-goers are more likely than other students to have non-academic obligations, such as parenting and working, which significantly influence study habits.
Therefore, students tend to take fewer credit hours and study less, thereby, causing a lag in cognitive development. First-generation college-goers also experience less encouragement from friends and family. They tend to be female, older, and more likely to be Latino. These students were less involved with peers and teachers in high school and consequently are unprepared mentally for the college experience. They also anticipate requiring a longer period of time to complete their degrees. They are less likely to perceive instructors as being concerned about them. They also are more likely to report personal discrimination. Pascarella also asserts that the only consistent advantage first-generation students possess is the sureness about the academic field in which they plan to major. However, the combined portrait of first-generation students is one of students at academic risk.

According to a study by the NCES, first-generation college students are less likely to complete their degrees; however, they have as much chance for job success as other graduates (NCES, 1998, 1999). The major findings of the NCES study disclose first-generation students were more likely to be older, have lower incomes, be married, and have more dependents than their non-first-generation peers; they were more likely to enroll in postsecondary education on a part-time basis and attend public two-year, private, for-profit, and other less-than-four-year institutions than their non-first-generation counterparts; they were equally as likely to be taking remedial classes as non-first-generation students when they began their postsecondary education; they were more likely to say that obtaining the amount of financial aid they needed, being able to complete coursework more quickly, being able to live at home, and being able to work while attending school were very important influences in their decision to attend their
particular postsecondary institution; and they persisted in postsecondary education and attained credentials at lower rates than their non-first-generation counterparts. This finding holds for students at four-year institutions and public two-year institutions (NCES, 1998, 1999).

Gibbons and Shoffner (2004) identified several unique characteristics of first-generation college students. First-generation college students face the daunting task of applying to college without the assistance of parental experience. Due to a lack of knowledge, parents may be unable to help with many of the logistical requirements related to career and college planning. First-generation students were less likely to choose high school programs of study with parental influence and received less financial and emotional support from their families for attending college. Students from low-income families viewed school counselors as a source of college information, but the students viewed the information provided as not useful for them (Gibbons & Shoffner, 2004).

For first-generation college students preparation for college life while still in high school is important. First-generation students are more likely to leave college or higher education altogether than other students, although usually for reasons other than academic failure. This attrition may be due, in part, to inappropriate college choice or family-related constraints. These students perceived adapting to the stresses of the college environment as more difficult than for other students (Gibbons & Shoffner, 2004).

Gibbons and Shoffner’s research indicated that first-generation students seem to differ in academic preparation. Only 14 percent of prospective first-generation students took algebra in the eighth grade, compared to over one-third of students with college-graduate parents. This led to fewer first-generation students completing advanced level math
courses, which prohibited them from pursuing college degrees. Academic preparation for first-generation students indicated that these students have lower SAT scores, high school grade point average, and overall first-year college performance as compared to other students. Academically, first-generation college students may be less prepared for college than other college-bound youth, leading to another possible barrier to completing college and obtaining a job that will adequately support them financially (Gibbons & Shoffner, 2004).

First-generation college students perceive the college experience solely as a means to a good job. They may be less likely to be involved in campus activities because of work requirements and commuting from home. Therefore, they find it more difficult to connect with college life (Gibbons & Shoffner, 2004).

These implications and characteristics tend to separate the first-generation college student from other students. Their unique needs suggest the importance of school and career counseling to provide them with crucial information and knowledge they need in all areas of college life.

Economic Barriers to College

Poverty rates are good indicators of how a community is doing and whether it is moving in the right direction. Likewise, educational attainment is another strong indicator of the relative well-being of an area or community (Carl Vinson Institute, 2004). A 2004 Community Assets and Critical Issues Assessment (CACIA) Committee working with the Carl Vinson Institute of Government report indicates that in the year 2000, more than sixteen percent of children in the U.S., seventeen years old and under, live in poverty. The report also revealed that slightly more than seventeen percent of children in the State
of Georgia, seventeen years old and under, lived in poverty. Child poverty rates, typically higher than overall poverty rates, provide a clearer picture of how well a community is responding to its most needy population (Carl Vinson Institute, 2004).

Kahlenberg (2004) stresses that even though colleges have admirably focused on creating racially integrated student bodies they have not given comparable help to economically disadvantaged students. Economic barriers to college can result in economic depression and disadvantages. Howard (2001) affirms that while more economically disadvantaged students are attending college than ever before, only a small percentage of them actually graduate. Therefore, helping the poor students get into college is half the battle. Attention must be given to helping them remain in college. Levine and Nidiffer (1996) indicate several barriers that students face in seeking to continue their education. The barriers are low family income, geography, and race. Especially when the child is very young, low family income prevents students from attending high school, even when free public high schools exist near their homes; geography separates the differences in both college attendance rates and opportunities to attend college, and between urban and rural areas; and Whites attend college at almost four times the rate of Blacks and one can attribute the difference to racial discrimination not only in the South but throughout the country (Levine and Nidiffer, 1996). As stated by Bowen, Kurzwell, and Tobin (2005), “Poor families have great difficulty investing sufficient personal and financial resources to prepare their children to attend college, do well, and graduate” (p. B18). They stress that to ensure educational access of disadvantaged students, the problem must be attacked at its roots by improving health, social environment, and pre-collegiate activities.
According to the *Economist* (2005), the education system is increasingly stratified by social class and poor children have a double disadvantage. The schools they attend have fewer resources than those of their richer contemporaries. The writer asserts that America’s great universities are increasingly reinforcing rather than reducing educational inequalities. Poorer students are at a huge disadvantage, trying to get into college, and once there, trying to make the best of what is offered to remain enrolled (Economist, 2005).

During the past few decades, the community college has taken on the job of educating the Nation’s poor. The proportion of lower-income students in two-year colleges was more than three times greater than at four-year colleges. This trend continues and is even more pronounced today. The student body mirrors the trend. Today’s community colleges enroll a higher proportion of minorities than do four-year colleges. More poor students attend the community college than any other sector of higher education. Thus, the odds of a poor student attending a community college are considerably higher than the odds of the same student enrolling in an Ivy League university or other highly selective colleges (Levine & Nidiffer, 1996).

Hayes and Colin (1994) contend that colleges that are truly concerned about diversity will give consideration to economic backgrounds as well as race. This consideration shows that minority students, as well as those who live in trailer homes and the ghettos, are thus valued. Many minority students live in affluent suburbs, consequently, giving attention to the economically disadvantaged student provides information that race-based affirmative action does not provide. This indicates the need
for a fundamental change in the culture of higher education. Just as racial diversity adds quality to a college, so does economic diversity.

Developmental Studies Education

*Program Participation*

The first developmental studies education program was offered at the University of Wisconsin in 1849, providing instruction in reading, writing, and arithmetic. Throughout the nineteenth century, preparatory courses existed at higher education institutions. In the twentieth century, junior colleges began to take over developmental education programs. These programs expanded with the growth of the student population that resulted from the “open door” policy provided by the Higher Education Act of 1965 (Breneman & Haarlow, 1998).

In a 1996 national survey of undergraduate institutions, the National Center for Education Statistics (NCES) found that 41% of first-time students took at least one developmental course in reading, writing, or mathematics. Twenty-two percent of students at public four-year institutions were enrolled in at least one developmental studies course (Parsad & Lewis, 2003). Public two-year colleges enrolled more freshmen (42%) in at least one developmental studies course than all other types of institutions (Parsad & Lewis, 2003). The analysis of Parsad and Lewis’ survey revealed that the proportion of entering freshmen enrolled in developmental studies courses was larger for mathematics (22%) and smallest for reading courses (11%). Developmental enrollments for reading (23%) and mathematics (35%) were higher in public two-year colleges than all other types of institutions (8 to 18% mathematics) and (9 to 7 percent writing).
Between 1995 and 2000 the proportion of freshmen enrolled in developmental writing declined from 16 to 14 percent (Parsad & Lewis, 2003).

In recent years, concerns about the costs of developmental education and academic standards at four-year institutions have been debated. This debate has led some state education departments to take steps to try to reduce or eliminate developmental studies education and to restrict its use of public funds (Parsad & Lewis, 2003).

One harsh critic of developmental education, Manno (1995 & 1996), contends that colleges in the United States oftentimes regularly enroll students who are not academically prepared or motivated to do college-level work. He further states that this process of enrolling underprepared students is done to justify the need for equal access. Therefore, he contends that admission decisions are made using group preferences based on race, gender, or class.

Manno’s (1996) argues that the vast sums of money spent on developmental education students is done so with hopes that the students will soon be prepared for work at the level the college requires. He contends that remediation lengthens the time it takes for a student to earn an undergraduate degree. It adds cost to an institution’s budget, and encourages students to simply loaf through school, unmotivated and undisciplined, or what Manno terms ‘aimless academic drift.’ Manno’s evaluation also revealed that only ten percent of developmental studies minority students hoping to transfer from a community college to a four-year institution earned a two-year associate degree. He states that remedial education devalues the work and significance of the college degree and the high school diploma, which are awarded to the academically unqualified.
A 1992 nationwide analysis reported by Manno (1996) revealed that developmental courses in reading, writing, and mathematics are offered in 75% of American colleges. Thirty percent of entering students (55% at minority colleges) enroll in at least one of these courses. Of the colleges offering developmental courses, 91% are public and 58% are private institutions; 90% are two-year institutions and 64% are four-year institutions.

Manno’s analysis also showed that at CUNY only 31% of developmental studies students earned a degree in four years, down from 45% in 1977. Today 66% of students take five or more years to earn a degree, up from about 55% in 1977. According to Manno’s analyses, 23% of colleges award degree credit for developmental courses. Ninety-eight percent of all colleges allow developmental students who cannot do college work in the fundamentals of reading, writing, and mathematics to take regular courses concurrently.

Manno asserts that this blurred boundary between developmental and college-level work implies that there is no hierarchy of course work, and suggest that judgments about proficiency are secondary to such issues as student self-esteem (Manno, 1996). He suggests that (a) colleges should define college and pre-college work and (b) colleges should grant full enrollment only to those who are truly ready for college work.

Underpreparedness

Definitions of underpreparedness may vary by college; however, the trend is apparent (Amey & Long, 1998). Almeida (1991) explains that the underprepared student is the student who lacks many of the traditional traits of what is perceived as a good quality college education. Such students often cannot read the assigned tests. Finding
themselves ill-equipped to handle these students, professors are often perplexed and are at odds with what to do about the situation.

McCabe (2003) describes the underprepared students to be the ones in society who do not plan for the future and who live disorderly lives. Wiese (2001) explains the definition of the underprepared student as one who does not meet the requirements for initial matriculation at the college of his or her choice. These deficiencies are typically in the area of course work, test scores, or general skills. Depending on the type and severity of the deficiencies, a student’s admission to a college may be denied, or contingent upon the completion of remedial course work which results in a certain level of academic success. Often this remedial requirement is to be completed within a specified time frame (Wiese, 2001).

Noel, Levitz, and Saluri (1985) characterize the academically underprepared students as “those students with distinctive characteristics that are perceived by the academic community to place them at a disadvantage in contention with the vast majority of students who enter college with the academic skills necessary for success in college” (p. 96). Usually, these characteristics are portrayed as erratic academic performance in high school and beginning college, unimpressive standardized test scores, low socioeconomic background, race, gender, rate of persistence and withdrawal from college; depressed motivation, poor abstract and conceptual skills, low self-esteem, poor self-concept, unclear goals, culturally deficient, verbally passive, and educationally disadvantaged. The underprepared student needs success, financial assistance, tutoring, and basic skill development. They possess minimal knowledge of career and educational opportunities and need to feel comfortable within the learning environment (Noel, Levitz,
& Saluri, 1985). These characteristics, although somewhat misleading, tend to lead one to think that all underprepared students are lower-class and/or minority students. However, many students make up the academically underprepared student pool.

In effect, underprepared students are indistinguishable from their peers. They are similar in age and gender. Most were “C” students in high school and perhaps performed poorly on standardized assessments (Day & McCabe, 1997). Moore (2004) characterizes the underprepared student as the at-risk student, who for whatever reason, does not believe that he/she can succeed and views college as “not for them.” Moore contends that these students are perhaps the first in their family to attend college, attended substandard schools, and had to work to support themselves and their family. Therefore they did not have too much time to study. These students lack autonomy, self-efficacy, self-esteem, and self-regulating behavior (Moore, 2004).

Some underprepared students have never had the opportunity to acquire adequate skills; others are simply discouraged from developing their abilities; others come from deprived circumstances and often attended inadequate schools; and some lack high school diplomas, while others received diplomas and entered the workforce. Upon re-entering college years later, they discovered that they needed to refresh their skills (Day & McCabe, 1997).

A national study directed by McCabe (2003) revealed that more than 40% of beginning community college students are underprepared. The underprepared population represents about nine percent of America’s college students, of which 23% are minorities. One-third of the underprepared students are deficient in all basic areas, one-third in two
of the three basic areas and one-third in only one area. The study revealed that half of the academically deficient students successfully complete remediation (McCabe, 2003).

Roueche and Roueche (1994) suggest that community colleges should address the challenges facing the underprepared or “at-risk” student. This student population will not go away and cannot be ignored. The gaps in education and in society between preparedness and demand are serious but not a hopeless situation. Community colleges should continue to provide exemplary programs to serve this population group to meet the challenges and issues they face.

Classroom Environment

Since the late 1960s, considerable interest has evolved in the study of perceptions of classroom learning environments (Fisher & Fraser, 1983). Social environment theory is concerned with interpersonal relationship in a particular social setting (Darkenwald, 1987). Darkenwald further asserts that human behavior in a social setting is a joint function of the individual and his environment. People and environments reciprocally influence each other. Thus, an understanding of environments must precede any assessment of their impact on the teaching-learning process (Darkenwald, 1987).

Darkenwald’s conception of social environment draws on the work of the social psychologists Kurt Lewin and Rudolph Moos. Lewin’s assertion is that an individual’s behavior is strongly influenced by his or her total field or environment. A reciprocal relationship exists with individual characteristics interacting with the environment to determine behavior (Darkenwald, 1987).

To paraphrase Carl Rogers, an influential psychologist in American history and founder of humanistic psychology, it is important to create a safe and secure educational
environment for learning. Thus, faculty and students are in a better position to appreciate each other’s unique qualities (Anderson & Carta-Falsa, 2002). Important use of information about social climate provides a detailed description of how people perceive environments (Moos, 1976). The level of agreement among students and between students and teachers about classroom social environments is very important. Assessment results of environment scales can lead to an ideal climate in which interpersonal relationships can foster feelings of self-worth for students, thereby influencing learning behavior.

According to Barker, Ross, and Thorne (2004) it is the students’ perceptions which determine the climate of a classroom and whether the climate is threatening. These perceptions can include assessments of the personalities of students and instructors, as well as mannerisms and communication styles of both. Through research, Barker et al. describe a non-threatening classroom environment, though not conclusive, as one in which each participant feels safe and free to learn within the limits of the instructor’s design for the course. It is their conviction that a classroom can be a safe place, and be free of most feelings of discomfort by paying attention to controllable classroom factors as well as personal characteristics of students. A safety zone can also be created by establishing an atmosphere of initial rapport and caring; showing a genuine interest in students and their diverse characteristics, strengths, and weaknesses; and establishing appropriate ground rules (Barker et al., 2004). In a safe classroom climate students’ feelings of self-worth are developed and retained. Thus, these feelings can lead to confidence and assurance in a student and thus, influence learning behavior (Dart, Burnett, Purdie, Boulton-Lewis, Campbell, and Smith, 2000).
According to Rogers and Freiberg (1994) the learning environment can be improved by three specific teaching qualities and attitudes. These qualities and attitudes serve to facilitate learning, enhance students’ self-knowledge, and promote authentic teacher-students relationships. These qualities are (1) trust, (2) realness, and (3) empathic understanding, of which realness is considered the most basic of the three. The next section will expand the knowledge of interpersonal relationships.

Instruments that assess students’ perceptions of the classroom social climate serve to identify those important factors that affect learning. Three theoretical models contributing to the understanding of classroom social environment are described in this section.

**Classroom Environment Scale (CES)**

The Classroom Environment Scale (CES), developed by Moos (1979) identified teacher characteristics as the heart of the model. The model takes into account the environmental factors that influence an individual’s perception in a particular social setting. The CES model was developed to assess students’ perceptions of the learning environment in a high school setting.

There exist three parallel forms of the CES. The Real Form (Form R) assesses teachers’ and students’ perceptions of the current classroom social environment. The Ideal Form (Form I) asks individuals how they envision an ideal classroom environment. The Expectations Form (Form E) asks prospective class members what they think the social environment they are about to enter is like (Moos, 1979). All scales of the CES displayed reasonable reliability estimates.
During the construction of the CES, the Real Form was administered to 465 high school classes in 22 various subjects in the United States. Reliability estimates of the CES were compared to estimates of other classroom environment instruments such as the My Class Inventory (MCL), developed by the researchers Fraser, Anderson, and Walberg; the Individual Classroom Environment Questionnaire (ICEQ), developed by researchers Rentoul and Fraser; and the Quality of School Life (QSL), developed by researchers Williams and Batten. Reliability estimates (alpha) for the CES rated as high (.84-.93) as estimates on these other models used to assess classroom environments. Without exception these reliabilities makes it apparent that none of the instruments can be favored over the others (Byrne, Hattie, & Fraser, 1986).

The Real Form (R) of the CES was also administered to 1083 students in 116 junior high school science classes in Austria; the Ideal Form (I) was administered to 1092 students in 116 science classes. Fifty-six teachers responded to the Real Form (R). Most studies involving the CES only involved the students’ Real Form. Therefore, the manual for the CES reports validation data for the student Real Form only. However, validation data and research results for several forms of the CES are reported for different forms of the CES (Fisher & Fraser, 1983). This information is cross-validated and expanded by data obtained using the three different forms of the CES with samples of 56 teachers and 116 classes (Fisher & Fraser, 1983).

The CES reports internal consistency (alpha reliability) estimates for the three forms of the CES. Analysis data of the questionnaire responses indicate adequate internal consistency. This analysis suggests that each form of the CES measures distinct, although somewhat overlapping, aspects of the classroom environment (Byrne, Hattie, & Fraser,
The final instrument consisting of 90 true-false items grouped into three dimensions and nine subscales is described in Table 1 (Moos & David, 1981).

Table 1

*Dimensions of the Classroom Environment Scale (CES)*

<table>
<thead>
<tr>
<th>Dimensions and subscales</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Relationship</strong></td>
<td></td>
</tr>
<tr>
<td>Involvement</td>
<td>Measures the extent to which students have interest in, participate in, and enjoy class</td>
</tr>
<tr>
<td>Affiliation</td>
<td>Measures friendship and the extent to which students work together</td>
</tr>
<tr>
<td>Teacher support</td>
<td>Measures the extent to which the teacher shows interest in students</td>
</tr>
<tr>
<td><strong>Personal growth / Goal attainment</strong></td>
<td></td>
</tr>
<tr>
<td>Task orientation</td>
<td>Measures the extent to which it is important to complete planned activities</td>
</tr>
<tr>
<td>Competition</td>
<td>Assesses the emphasis placed on students competing for grades and recognition</td>
</tr>
<tr>
<td><strong>System maintenance and change</strong></td>
<td></td>
</tr>
<tr>
<td>Order and organization</td>
<td>Assesses the emphasis of the student’s behavior and the organization of classroom activities</td>
</tr>
<tr>
<td>Rule clarity</td>
<td>Assesses the emphasis on establishing clear rules and the consequences for not following rules</td>
</tr>
<tr>
<td>Teacher control</td>
<td>Measures the extent to which rules are enforced, in addition to measuring the severity of punishments for rule infractions;</td>
</tr>
<tr>
<td>Innovation</td>
<td>Measures the extent to which the teacher plans varying activities and the amount of student contribution in planning these activities</td>
</tr>
</tbody>
</table>
Moos (1979) contends that the dimensions of the CES instrument can have distinctive influences on psychological processes and behavior. Data derived from the CES suggest that the social climate methodology can be a useful tool in helping an instructor to understand the climate of his or her class from the students’ viewpoint. College instructors may have little control over various institutional variables; however, the ability to improve the social climate of their classrooms can be a very rewarding option for both the student and the teacher. Moos’ belief is that the social environment has important effects on students’ satisfaction level, learning, and personal growth. These factors lead to greater classroom satisfaction and more positive student-teacher relationships, which result in increased participation by the students (Fisher & Fraser, 1983).

**Adult Classroom Environment Scale (ACES)**

As college enrollments grow more diverse, meeting the instructional needs of the student population is fundamental. Serving students well should include examining students’ perceptions and expectations of the classroom environment (Miglietti & Strange, 1998).

Two decades have passed since Moos’ began the development of his research model on classroom environments, but his instrument for measuring perceptions of classroom environment is still used. However, it must be noted that the model was primarily developed for use in the secondary school classrooms. The consideration of classroom demographics such as age is important to use in measuring teacher and student expectations and perceptions (Miglietti & Strange, 1998).
The Adult Classroom Environment Scale (ACES), developed by Darkenwald and Valentine in 1986, was the only scale developed to measure the social environment of adult education classrooms in general (Darkenwald & Valentine, 1986). Though the model was important, other available instruments were not valid for research with adults. Construction of the ACES began with brainstorming ideas, interviews of adult students and educators, and reviews of other environment scales. An original list of 159 items was generated. This list was later reduced to 89 items, classified into seven dimensions. The 89 items in the ACES were administered to 220 subjects. An item analysis was then conducted. The item pool was reduced to 49 items with seven items associated with each of the seven dimensions. The dimensions are described below.

1. **Affiliation** – defined as student interaction and cohesion;
2. **Teacher support** – defined as sensitivity and encouragement;
3. **Task orientation** – defined as focus and accomplishments;
4. **Personal goal attainment** – defined as relevance and flexibility;
5. **Organization and clarity** – defined as organization and clarity;
6. **Student influence** – defined as collaborative planning and teacher nonauthoritarianism; and
7. **Involvement** – defined as student attentiveness, participation, and satisfaction

Much of the classroom environment theory behind the ACES stems from the work of the social psychologist Moos. The dimensions can be classified into three domains:

1. **Relationship** – the type and degree of personal relationships formed in class;
2. **Personal Growth / Goal Attainment** – the opportunity for personal goal achievement and self-improvement; and
(3) System maintenance and change – the clarity of expectations, maintenance of control, and responsiveness to change in the classroom (Langenbach & Aagaard, 1990).

During the construction of the ACES, two forms of the ACES instrument were developed, the Ideal (I) and the Real (I). The Ideal form elicits opinions about students’ ideal classroom, while the Real forms are student or teacher evaluations of real classes (Miglietti & Strange, 1998). Subjects responded to 49 items on a four-point Likert scale of Strongly Disagree to Strongly Agree. The final form of the ACES was subsequently administered to a sample of 730 subjects with 355 completing the Real form and 375 completing the Ideal form. The subjects were from three major settings: a large state university, a community college in an economically depressed urban environment, and a large middle-class community adult school. Sixty percent of the subjects were female and 65 percent were less than 34 years of age. The educational backgrounds ranged from no credential to a graduate degree (Miglietti & Strange, 1998).

The dimension scores were analyzed. No factor analysis was conducted. After this analysis, Darkenwald claimed that the ACES measured a unitary dimension. Based on this claim, the factor analysis of the scale was said to be misguided (Langenbach & Aagaard, 1990). It was discovered that the seven dimensions indicated low intercorrelations, indicating that they do not measure the same thing. Therefore, Darkenwald and Valentine maintained that a factor analysis of the ACES was warranted to determine factor stability, i.e., the same results need to be obtained on repeated administrations of the instrument.
The two other factor analyses comprised 449 subjects from a wide variety of educational settings, ranging from ABE classes to technical training classes to graduate classes in education. The subjects were somewhat older than those in the original sample (40 and 47 percent were 34 or older), slightly more educated (18 and 25 percent with graduate degrees), and more evenly balanced between males and females (Darkenwald, 1987).

The factor analysis did not entirely support the seven dimensions of the ACES. A revised ACES was constructed to have six reasonably reliable factors. Langenbach and Aagaard contend that the final revision of the ACES yielded more theoretically sound and interpretable data on perceptions of adult classroom environments. Based on the computation of Cronbach’s alpha, a full scale reliability coefficient of .94 was reported for the ACES (Darkenwald, 1987). Therefore, educators interested in adult classroom research with similar populations would have available a reliable instrument based on empirically supported constructs (Darkenwald, 1987 and Langenbach & Aagaard, 1990).

According to Darkenwald, evidence of validity of the instrument lies in the thorough and systematic fashion in which the scale items were selected and refined. Two items, ‘I enjoy this class’ and ‘I am learning a lot from this class’ were included on the questionnaire solely as validity checks. Correlations between scale scores and the satisfaction and success index (.77) for these two items support the proposition and provide additional evidence of validity. The ACES gained importance because other instruments available were not valid for research with adults (Langenbach & Aagaard, 1990; Darkenwald, 1987).
College Classroom Environment Scales (CCES)

According to Winston, Vahala, Nichols, Gillis, Wintrow, and Rome (1994), the major purpose of higher education is to teach, to facilitate, and to encourage student learning. Learning involves more than simply being exposed to a body of information. In addressing the goal of encouraging learning, it is important to understand the variables that influence learning. The College Classroom Environment Scales (CCES) assesses student perceptions of the environment regarding different instructional strategies and their effects of the learning climate. If instructors can better understand student perceptions of their classes, the information could be used to improve their instructional approach and to evaluate different techniques for presenting material in diverse disciplines (Winston et al., 1994).

Winston et al. (1994) began development of the CCES by identifying and writing items describing their experiences in collegiate classes as teachers and students. The experiences produced 143 items that were administered to a total of 47 classes at two Southeastern universities, one small private university and a large public university. Undergraduate students enrolled in introductory through advanced courses participated in the study. Responses produced a total of 981 uses for analysis. To identify commonalities or the most important traits, the responses were factor-analyzed. In an attempt to find the best fit, several rotations were tried, resulting in 52 items being eliminated and a six-factor scale incorporating the most defensible items. Using the remaining 91 items, the authors began the second data collection process, collecting data from 1,112 students enrolled in 81 class sections at the two Southeastern universities. A second factor analysis was performed resulting in the elimination of an additional 29 items. Therefore, the final
version of the CCES comprised 62 statements of which students responded by using a five-place Likert-type scale: 1 = never or almost never true; 2 = seldom true; 3 = occasionally true; 4 = often true; and 5 = always or almost always true. The six-factor scale descriptions are:

- *Cathectic Learning Climate* – a charged academic atmosphere that stimulates student participation;
- *Professorial Concern* – an academic environment in which students perceive the instructor as being personally concerned about them;
- *Inimical Ambiance* – an environment that students see as being hostile, highly competitive, and rigidly structured;
- *Academic Rigor* – an environment that is intellectually challenging and demanding;
- *Affiliation* – an environment in which students see as promoting informal interaction and as being highly supportive, friendly, and student-centered;
- *Structure* – an environment that students perceive as having evaluation criteria and course content clearly articulated.

Four different studies were undertaken to estimate the CCES’ reliability and validity. Data were collected at small and large, public and private universities. Undergraduate students at all levels, introductory and advanced, female and male, Caucasian and African-American students from 81 class sections, and a wide range of academic disciplines were represented. Ranges of class participation and demographic information questionnaires from instructors and other classroom environment inventories
were completed by students as well. Students responded to the Real and Ideal forms of the CCES.

To test for reliability of the instrument, the coefficient alpha procedure was used to estimate the internal consistency of the scales. Test-retest procedures were performed to estimate the scales’ temporal stability. The internal consistency measures of the scales suggested that the CCES is stable enough for its intended usage (Winston et al., 1994).

Through multiple approaches to investigate the CCES for validity, alpha coefficients obtained from some of the approaches for most scales were substantially low. Some scale analysis produced statistically significant negative correlations. Therefore, no general conclusions were warranted about how different instructional strategies affect classroom social environments (Winston et al., 1994).

To address student learning it is fundamental to understand the variables that influence learning (Winston et al., 1994). Klecker (2000) views the importance of classroom assessment as providing feedback to students and information to professors about student achievement and course objectives, with the main assessment goals being to obtain valid, reliable, meaningful, and appropriate information about student learning. Klecker reports a summary of studies by other researches on classroom assessments. These studies found that the assessments measuring learning, reduced student anxiety, relaxed classroom climate, and lead to increased students learning. The context for most of the studies reported by Klecker was for elementary and middle schools.

Dimensions of Classroom Dynamics

In organizing this section and to make it relevant to the current study, the literature is organized and discussed according to the four dimensions of the Classroom
Dynamics Questionnaire: (a) Teacher Respect for Learners, (b) Confidence in Teacher Ability, (c) Learner Cohesiveness, and (d) Learner Voice.

Teacher Respect for Learners

The personality and characteristics of classroom instructors have long been a topic of interest for educational researchers, with the acknowledgement that personality has a direct bearing upon classroom dynamics and the teaching/learning environment. A safe and secure educational environment facilitates and produces positive interactions among students and between students and instructors. True learning therefore results when students experience this sense of safety and association with their instructors.

Students are very aware of their instructors and with what he or she does, occupying their minds as much as the subject that is being taught. When all goes well, students come to respect their instructors, where respect is really love tinged with restraint. Most students want it both ways – humans, student, or otherwise, to be loved (Leamnson, 1999).

An instructor can be faultless in knowledge of subject, yet fail to be a good teacher if respect is not shown to students. Respect for students extends beyond the dimensions of sexual and ethnic diversity. In particular, respect for students generally prohibits public humiliation. Hardly anything is more antithetical to education than putting down a student in public. Putting down a student labels a student’s question as stupid and brushes off a student’s request for further clarification. It also indicates to the student that the request is a huge burden to deal with and a mundane matter (Pockington & Tupper, 2002).
Pockington and Tupper (2002) maintain that respect for students requires criticism as well as encouragement. Good instructors stimulate students to improve, and this requires honest assessment; both encouragement and criticism. Pockington and Tupper also stress that the most important dimension of treating students with respect is taking them as they are, not as they would be if their high school curriculum had been better or their high school teachers cared more about science than punctuality, and so on. Good instructors complain as much as bad ones, maybe more. However, good instructors do not confuse their fantasies about ideal students with ones they actually teach. For example, good instructors do not teach Shakespeare as though students were already deeply familiar with other Shakespeare plays or symbolic logic as though students were already accomplished mathematicians. Pockington and Tupper also warn instructors of the possibility of aiming too low as well as too high and underestimating students’ achievements and possibilities. This is as disrespectful as overestimating them. Instructors should stimulate students to the best work of which they are capable. Thus, taking students where they are means motivating them to fulfill their potentialities (Pockington & Tupper, 2002).

When the self-confidence of students can mature, students and instructors are in a better position to appreciate each other’s unique qualities. These qualities set the stage for the development and materialization of many benefits and a mutual acceptance of trust and respect.

According to Schmuck and Schmuck (2001) when instructors possess feelings of comfort and rapport with colleagues, they feel self-worth and then are better able to relate supportively to students. If instructors feel tense and are in conflict with other faculty
members, they will tend to be uptight with their students. Schmuck and Schmuck suggest that a good indicator of trust and openness is how often instructors ask one another to observe them in their classroom, as in peer coaching. Another indication is how instructors collaborate informally. Usually, when fear, anxiety, and competition characterize staff relationships, creative teaching will not be encouraged and constructive feedback will not aim to improve practices. In schools where teachers trust and are open to one another, effective classroom group processes will be shared in a supportive effort to develop and improve the classroom practices of the instructors. Schmuck and Schmuck (2001) state that “Trust and openness are the necessary underpinnings of peer coaching and collegial mentoring” (p. 303).

A study examining what students desired in instructors was presented by Jett (2003). He presented a case study that examined the complexities of student teacher-student relationships. The conceptual framework used in the study focused on the ideas on teaching and the role of interpersonal relationships in learning. Qualitative interviews and observations were used to gather data. Jett’s study was guided by Carl Rogers’ (1994) ideas on teaching and the role of interpersonal relationships in learning. Also, Jett’s study represented an effort to actively explore Rogers’ ideas in the context of student teaching. The questions used in the study were:

1. What characterizes student-teacher - student relationships?
2. In what ways do student-teacher - student relationships inform how student teachers think about their student teaching experience?

The high school in which the study was conducted was comprised of approximately 1200 students in grades nine through twelve. The participants in the study
were a 22-year-old White male student-teacher who taught honors social studies and approximately 150 students enrolled in the instructor’s five classes. To gather information, four 90-minute semi-structured interviews with the participant took place; also, two 120-minute classroom observations involving the instructor and his students. In the analysis of his study, Jett (2003) discovered that accepting, authentic, and understanding relationships were complicated by tensions of authority and interpersonal comfort. Because student-teachers face obstacles that are distinct from typical teachers, these findings pointed toward the need for an appreciation of the unique facets of trust, realness and empathy in the context of student learning.

Though Jett’s study comprised a relative large sample, it was limited by generalizations of findings, tailored responses to the interview questions, and the observation of one class. However, he noted the importance of the research to better explain the complexities of trust in the teacher-student relationships and the need for improving teacher education. The results of Jett’s (2003) study imply that the student-teachers’ capacity to communicate trust to students might be influenced by their abilities to empathize with them. If student-teachers accept students as individuals having worth, then students are likely to reveal themselves more fully to student teachers. In turn, this will allow student teachers to better understand their students, which leads to a greater appreciation of students’ humanity.

In a study by Anderson and Carta-Falsa (2002) students identified their desires for relationships with their instructors. Through qualitative analyses of narratives Anderson & Carta-Falsa identified the need for nurturing, open, non-threatening, and respectful attitudes in student-faculty relationships. A representative sample of 24 instructors and
400 undergraduate and graduate students from the four learning sites of the Southern Region of National University was selected for the study. The two-question questionnaire was designed to elicit responses from students and faculty about their perceptions of relationships in higher education classrooms. The first question assessed the kinds of relationships the students would most like to have with fellow students in the class. The second question assessed the kinds of relations the students would most like to have with the instructor in the class.

Three themes emerged from the responses and were grouped into categories indicating three types of partnerships formed in the classroom: teaching/learning environment, exchange of information, and mentor/peer association. Theme one revealed that students and instructors had a desire for nurturing, open, supportive, comfortable, respectful, safe or non-threatening, and enjoyable interpersonal climate. Theme two revealed that students desired to work together, to share, and to learn and interact with each other; but they did not state a strong desire to work with the instructor. Theme three revealed that students wanted to develop networks, friendships, and to work with each other; whereas instructors were more focused on principles of effective teaching and did not express a strong need to collaborate with students (Anderson & Carta-Falsa, 2002).

Anderson’s and Carta-Falsa’s (2002) findings indicate that instructors who see the value of collaboration to establish an effective personalized teaching environments are able to establish a climate where interactions are possible, with benefits. In this analysis both instructors and students were interested in establishing a classroom environment where their ideas could be acknowledged with respect and trust. In effect, it was found that students and instructors can learn to perceive each other as contributing, mentoring,
and resourceful individuals who empower each other. Students become empowered to achieve at a higher level and become confident learners. Teaching then has a more personal focus. Anderson and Carta-Falsa suggest a lesson for educators, i.e., students must feel good about their learning environment.

Personal characteristics are not always easy to change. However, teacher education programs should present students with a realistic view of today’s classrooms. The programs should be structured to inform students of the importance of the dynamics of teaching. Thus, the challenge for teacher education programs is to orchestrate activities in which student-teachers can interact in ways that reveal their personal sides to display their interpersonal skills.

When the instructor is a real person, he or she can enter into a relationship with the learner without presenting a front or a facade, thus more likely to be an effective instructor. This means that the feelings that the instructor is experiencing allows a direct personal encounter with the learner. It also allows the instructor the opportunity to meet the student on a person-to-person basis, thus, building trusting relationships with them (Rogers & Freiberg, 1994).

Confidence in Teacher’s Ability

According to the analysis of a study on expectations of teachers, Sander, Stevenson, King, and Coates (2000) support the assertion that current trends in higher education suggest that students view themselves as primary customers and are aware of their rights as customers. Students expect the service and expect the service to meet those customer expectations. Addressing expectations can produce measurable improvements in student outcomes. From their instructors, students’ expectations are dependent on a
number of factors to include culture, gender, age, learning styles and service quality (Sander et al.). The analyses revealed that teaching qualities ranked most important of the variables used in the research. Teaching skills, motivational activities, interactions with students, explanation of subject matter, gave hope for a positive learning outcome (Sander et al.).

Lowman (1994) asserts that effective teaching focuses on the ability of the teacher to concentrate on the process of instruction and the kinds of learning seen in students. Helping students to appreciate complex material, as it is organized and made clearer describes an effective teacher. Effective teaching also involves the ability to stimulate and even captivate students. Likewise, the ability to communicate and create a positive, democratic, and predictable environment describe an effective teacher (Lowman, 1994). These are the teachers whom students rate high and have confidence in their ability to “teach.”

Rogers and Freiberg (1994) define confidence as the basic belief that a person has worth in his or her own right. They suggest that the instructor who has a considerable degree of this attitude can be fully acceptant of the fear and hesitation of the student as he or she approaches a new problem as well as acceptant of the student’s satisfaction in achievement. When the instructor has the ability to understand the student’s reactions from the inside and has a sensitive awareness of the way the process of education and learning seems to the student, then the likelihood of significant learning is increased. This type of understanding requires viewing the world through the student’s eyes and has a tremendous effect on the student when it happens (Rogers & Freiberg).
**Learner Voice**

Great importance is attached to student voices in the classroom. When student voices are barely heard and the teacher monopolizes classroom talk, knowledge is thus treated as residing entirely with the teacher (Kordalewski, 1999). Freire (1970) terms this as “banking” education in which the teacher “deposits” knowledge into students head without dialogue.

Shor (1992) emphasizes that students are too accustomed to being inundated with ‘teacher talk’ and views this as a teacher’s method of classroom control. He asserts that this control can guide or stifle students’ thoughts. Shor contends that listening to students, though sometimes longer than desired, gives them free rein in classroom discussions and helps make them owners of the classroom and the conversations.

Kordalewski (1999) explored different ways in which student voices can be heard in a classroom. First, he suggests negotiating the curriculum. This means that students share in the authority in the classroom, and have input as to how they will proceed in particular activities. This may entail choosing topics, sources, and media for individual and group projects. Having a voice in the classroom process gives students the opportunity to share in decision-making as well as a source of knowledge. The views of Tinzmann, Jones, Fennimore, Baker, Fine, and Pierce (1990) are in accord with those of Kordalewski. They assert that students should have opportunities to have a voice in the decision-making process of their classroom process. Having a voice grants opportunities for students to ask and investigate questions of personal interest and is essential for both self-regulated learning and motivation.
Another suggestion involves developing student voice through writing. This process encourages students to express ideas that matter to them and their use of language and style that convey their thoughts (Kordalewski, 1999). By honoring student voices through writing, students are practicing and tend to develop a range of advanced thinking skills.

The third suggestion offered by Kordalewski (1999), is reflected in the students socially-constituted life experiences. A special significance should be granted to honoring voice to those students belonging to subordinate groups. Their voices should not be devalued or under represented in the curriculum. Curriculums should present students’ cultures in a positive light which invites more participation of students. Therefore, lessons in which students’ everyday experiences are recognized as sources of knowledge promote the exercise of student voices and academic learning resulting from active classroom engagement. By honoring voices in such pragmatic ways languages other than Standard English appear as a resource for learning. Dealing openly with students’ questions about race and other topics might result in some teachers feeling uncomfortable talking about such issues. However, it could provide space for students’ critique of oppressive and discriminatory realities that they perceive and face. The ultimate goal should be for teachers to assist in the growth of those voices (Kordalewski, 1999).

Schneider (1996) stresses the need to nurture students who will grow into lifelong learners, into self-directed seekers, into the kind of adults who are morally responsible. These students should also be given the opportunity to practice making choices and reflecting on the outcomes. “Responsibility means owning one’s failures and successes” (p. 26).
**Learner Cohesiveness**

According to Michaelsen, Fink, and Knight (1997), group activities have become increasingly popular. They suggest that to gauge the learning value of group assignments, teachers should examine the impact of the assignments on group cohesiveness. Certain types of learning tasks contribute positively to group cohesion. If left unchecked, social loafing could result and prevent the development of the social fabric that is necessary for effectively functioning learning groups. Hansen and Stephens (2000) contend that in regards to social loafing students attempt to lower their teachers' academic expectations for their performance. Also, social loafing leads students to reduce their efforts to match the level they think other group members are expending.

The forces that promote social loafing in learning groups can be offset by assignments and activities that foster the development of cohesive learning groups. This happens because trust and understanding builds among group members, thus, establishing more cohesiveness. Secondly, members of a cohesive group see themselves as being integrally tied to the success of the group. As a result, group members become highly motivated and invest personal energy in doing and contributing to group work (Michaelsen et al., 1997).

Michaelsen et al. (1997) suggest effective strategies that classroom instructors can employ to ensure cohesiveness in the classroom. The strategies (p. 4) are:

- Require a high level of individual accountability for group members and/or workshop participants;
- Motivate a great deal of discussion among group members;
Ensure that members receive immediate, clear and meaningful feedback
(preferably involving direct comparisons with the performance outputs from
other groups);

Provide explicit rewards for high levels of group performance

These strategies can cause group members to interact in ways to promote the
development of the cohesive groups and encourage quieter group members to participate
and feel that their ideas are valued and welcomed.

Predictors of Perceived Classroom Dynamics

Demographic Characteristics and Personal Challenges

Today’s community college students, without a doubt, possess varied personal
challenges as they attempt to further their education. According to Schroeder (2003), the
increasingly diverse student populations pose significant challenges to colleges and
universities in terms of expectations and student wants and needs from their collegiate
experience. Diversity traits appear not only in terms of age, ethnicity, socio-economic
level, sexual orientation, and part-time or full-time status, but also in terms of
expectations, attitudes, intellectual capabilities, and learning styles (Schroeder, 2003).
Dealing with personal challenges while attending school can be difficult for students
because they must juggle the two worlds of academia and non-academia.

Factors such as jobs, changing jobs, overtime, poor public transportation or no
transportation, and lack of child care are some of the challenging issues that community
and technical college students often face. Even with financial aid programs, nearly three-
quarters of these students work at least twenty-five hours per week while attending
college. Often the jobs are necessary to pay college expenses. Jobs often interfere with
class schedules, course selection, and learning. Many older adult students balance family responsibilities with their courses. The needs of children, spouses, and elderly parents can also cut into study and class time (NCES, 1999). Single and married women with young children and childcare issues place a premium on the convenience of community colleges because they can choose classes around their and their spouses’ work schedules and childcare availability. Other issues facing the minority students are learning problems and other disabilities. This group often experience low incomes and students are often products of failing public schools (Bailey, 2005). Struggling with these time-consuming and stressful constraints causes many students to leave secondary schools without the benefit of a diploma. Consequently, these constraints also follow the student to the community college.

*Past Experiences of Education*

A student’s past educational experience is relevant to his/her experience in higher education. There are the direct entry students, those students aged between 18-21 and who come into higher education directly from secondary school, and the re-entry student, those students aged 22 years and over who have had a break between high school and participation in higher education. This latter group of students, according to Michie, Glachan, and Bray (2001), is more likely to lack confidence in themselves as learners and underestimate their own ability. Since they do not want to be portrayed as foolish and do not want to fail, they tend to be over-anxious and avoid the risk of making mistakes. Although these experiences may apply to all students, they are particularly prevalent in students who have had poor experiences of learning at school (Michie et al.).
Michie et al. asserts that students entering higher education from routes other than high school are considered to be different in ways than those of the traditional entry students. A gap between school and participation in higher education could cause reduced academic self-concept. Often unhappy about their previous educational experiences, re-entry students tend to be out of step with their human environment and have high levels of motivation in terms of learning and achieving. Additionally, conditions that motivate re-entry students to return to college are often undesirable. Depending on the stage of life a student returns to college, their psychosocial problems at that time may be in conflict for different reasons. The may experience unexpected outcomes such as levels of self-esteem, stress levels, and identity confusion (Michie et al., 2001).

Michie et al., (2001) comments further on the importance of a student’s past experiences of education, arguing against the assumptions about age differences and the description of learners according to stereotypes about age in our society. Rather, he promotes the idea of offering explanations or understanding about students’ learning experiences. He states examples, such as the importance of knowing the recent marital status of a learner or if a learner is a parent of adolescent children. These factors are more important to him rather than being told the learner is 50 years old.

Rothenberg (1994) studied and analyzed 410 essays written by undergraduate and graduate students. Emerging themes from the memories of past school experiences included academic challenges and successes, failures and humiliation, competition and fairness, assessment and transitions. The findings in Rothenberg’s study revealed that the joy in the learning experiences was often attributed to teachers or the individuals’ own activities or newly-discovered abilities (Rothenberg, 1994). In the learning experience,
humiliation was judged as the most awful condition. It was considered worse than the experience of failure, which was attributed to poor teaching. Positive experiences included mastery of material and feelings of becoming competent.

A study by Michie (2001) involving 112 psychology undergraduate university students was conducted and aimed to explore the current experiences of both direct and re-entry students in higher education. The study included a three-part assessment of past school experiences, namely: relationship with teacher; approach to study; and friendships with peers. Michie’s six-part questionnaire study included items to assess motivation to participate in higher education, background factors including age, gender, and other key outcome variables including self-esteem, academic self-concepts, and academics stress. Cronbach’s Alpha Reliability Analysis was use to test internal reliability for all the measurement scales and sub-scales. The analysis showed satisfactory reliabilities ranging from $\alpha = .62$ to $\alpha = .94$.

The analysis of past experiences of school and their impact on current experiences in higher education revealed that individuals reporting that they had effective study habits at school showed evidence of positive approaches to studying at college. Therefore, the study showed some continuity between study habits developed during the school years and subsequent learning environments (Michie et al., 2001). The study’s analyses assessed whether age or gender influenced participants’ early learning experiences. It revealed no significant effects for gender; however, age provided significant effects. Re-entry students reported significantly worse relationships with teachers, less effective approaches to studying, and poorer quality of friendships.
From the analysis of Michie’s et al. (2001) study, further research is required to explore and understand the learning and teaching needs of different student groups in relation to their prior educational experiences. A study on developmental studies students is important to assess the impact of these variables. Rothenberg (1994) suggests that asking students to remember their past schooling is in itself an avenue for exploration. Such an exploration through introspection and reflection would provide layers of insight and knowledge that could lead to powerful teaching-learning processes.

Identification with Academics

There is a growing concern about the education of students that are regarded as least likely to succeed in school (Johannessen, 2003). These students are labeled reluctant, at risk, disadvantaged, alienated, resistant, educationally deprived, and educationally underprepared. They come disproportionately from low socioeconomic status families and from ethnic and linguistic minority backgrounds. It is unfortunate that many of these students do not succeed in postsecondary schools and are enrolled in developmental studies classes and (Johannessen, 2003).

Researchers have studied and researched extensively for the missing link to academic outcomes of the community college students. Osborne (1997b) argues that a concept called identification is associated with academic outcomes among students. Osborne contends the higher identification is associated with more positive academic outcomes. According to Finn (1989), students who identify with school have an internalized sense of belongingness. They feel that they are a part of the school environment and that school constitutes an important part of their own experience. These individuals also value success in school-relevant goals.
According to Steele (1992), students lacking identification with school possess such characteristics as struggling to meet deadlines; attending school for other reasons such as making someone else, perhaps parents, feel proud of them; inability to entrust a sense of belongingness to an educational setting; a resistance to measuring oneself against values and goals; and being vaguely ambitious for intellectual work. With the passing of time, perhaps the students in this category will begin to like the work; grasp the value system that gives it meaning; and feel that instructors think they will truly be successful. With such a change in self-concept comes a new accountability. Self-esteem, something that was not present before, can now be affected by what the student does. This adds new motivation. Self-respect is paramount, not just parental respect. The student now notices a constructive transition in his- or herself. Before the transition, the student might have been categorized as being handicapped by background situations and lack of motivation. After the transition the same observer might determine that even though a person’s background experiences were dismal, they perhaps could have had special advantages such as achievement-oriented family and attended a small and attentive college (Steele, 1992).

A study conducted by Osborne (1997b) focused on community colleges presenting a method of screening incoming freshmen to identify easily and methodically those students who should be targeted for academic intervention at the earliest possible point in their college careers. Data for the study was acquired from 165 freshman and sophomore psychology students enrolled during the first week of the fall term. The college was a rural community college located in the state of New York. Demographics included 36% male and 64% female; 91% White, 4% African Americans, 2% Asian
descent, and 1% Latino. Two percent (2%) chose not to identify themselves as members of any racial group. The age of participants ranged from 17 to 60, with an average age of 23.9. The students were from a predominantly poor, rural county.

At the beginning of the study, the students’ global self-esteem was measured using a self-review inventory constructed by Rosenberg, Schoenback, Schooler, and Rosenberg (1995). Grade point averages as well as academic standing were taken from student transcripts and graduation status was identified. Because of the conceptual distinction between academic self-esteem and academic self-concept, no existing measure was adequate to assess the extent to which a student’s self-esteem was connected with and dependent upon academic outcomes. Therefore, the Identification with Academics scale was constructed by Osborne (1997b).

Reliability analysis revealed strong internal reliability as indicated by Cronbach’s $\alpha = .82$. Overall the scale fared well in predicting academic performance up to two years into the future. Those students who placed in the lower quartiles had lower GPAs at the end of one semester and two years. It was predicted that these students were more likely to be dismissed for academic cause, to be placed on academic probation, or to withdraw from school altogether. Those students in the highest two quartiles were more likely to receive academic honors and/or placed on the dean’s list.

In the study, the measure of identification was not related to degree receipt because of the nature of the community college population, in that, a large percentage of students transfer to four-year institutions without receiving a degree. However, the scale proved to be a valuable tool to community colleges and provided insight and ideas to the
education community on which to focus their efforts and resources on helping those truly at-risk students.

The concept of identification with academics has emerged as an important contribution to the racial achievement gap (Osborne, 1999), emphasizing factors which prevent students of color from viewing themselves as scholars and students who value academics personally. Osborne (1999) contends that the failure to achieve their full academic potential, because of social, psychological, and cultural barriers, might be the contributing cause of underachievement of African American students, particularly boys. They are discouraged and prevented from incorporating school and education into their self-view. Therefore, it is suggested that African American students, boys in particular, have lower levels of identification with academics that other students (Osborne, 1999).

Steele (1992) asserts that, though important, these facts alone could miss the importance of the identification process and neglect a simple condition necessary for students to make this identification, that is, treatment as a valued person with good prospects. Steele’s belief is that the “something else” at the root of Black achievement problems is the failure of American schooling to meet this simple condition of fair treatment for many of its Black students. Steele states, “Doing well in school requires a belief that school achievement can be a promising basis of self-esteem, and that belief needs constant reaffirmation even for advantaged students (p. 72).” However, Steele’s belief is “The lives of Black Americans are still haunted by a specter than threatens this belief and the identification that derives from it at every level of schooling (p. 72).” This specter is of stigma and racial vulnerability which devalues a person’s worth.
Steele (1992) argues that students from disadvantaged minority groups achieve poorer outcomes at every level than do their White and Asian American peers. He contends that something else has to be involved, a missing element that could be one of just modest importance; a barrier that simply adds its effects to that of other disadvantages; or it could be crucial, such that were if corrected, other disadvantages would lose their effect. According to Steele (1992), there is a missing element in the understanding of Black underachievement. Though being disadvantaged is a contributing factor, Blacks underachieve even when ample resources are available. Blacks have strong educational values and are prepared better than adequately in terms of knowledge and skills.

In often subtle ways, and sometimes overt, Blacks remain devalued in American schools when they are still more likely as the Whites to receive corporal punishment, be suspended from school, or be labeled mentally retarded. Seemingly inescapable, these devaluations force on its victims two painful realizations: society is preconditioned to see the worst in them and acceptance is hard-worn; and second, if Blacks achieve success in one educational setting or classroom, they will have to re-win or prove themselves in the next level of schooling. It is a discouraging and everlasting struggle leaving too many Black students hopeless and deeply vulnerable in America’s classrooms (Steele, 1992).

Part of the crisis in Black American’s education stems from the power of stigma and racial vulnerability to undercut identification with schooling, either before it happens or after it has blossomed. The act of not caring, makes students less vulnerable to the specter of devaluation that bothers them. The student languishes in a state of alienation by not allowing achievement to affect his/her view of him/herself. There is the risk of
confirming particular incompetence and the risk of confirming the suspected racial inferiority. In reaction, usually to some modest setbacks, withdrawal takes places and the student hides troubles from instructors, counselors, and even other students. A psychic defense takes over resulting in the disidentification with achievement. Self-concept changes along with outlook and values, so that achievement is no longer important to self-esteem and now the student becomes psychologically insulated from academic life, like a disinterested visitor, cool and unperturbed. Like a pain killing drug, disidentification undoes the future as it relieves the vulnerability (Steele, 1992).

Osborne (1999) describes the coping strategy of African American males. He states

African American males learn early to project this facade of emotionlessness, fearlessness, and aloofness to counter the inner pain caused by the damaged pride, poor self-confidence, and fragile social competence that results from their existence as a member of a subjugated group (p. 558).

According to Steele, this syndrome is more prevalent among Black college students on White campuses. As they perceive an atmosphere that feels hostile, defensive reactions interfering with intellectual performance become aroused. Students display academic demotivation, thinking less of their abilities, and professing loss of energy. Making matters worse, disidentification can spread rapidly, pressuring others to become victims and not identifying with school.

No simple recipe can fix this problem. However, schooling must focus more on reducing the vulnerabilities that block identification with achievement. Steele offers four conditions that are fundamental: (1) It is important for a teacher to become meaningful and important to a student. Therefore, the student must feel valued by the teacher. When
students bear race and class vulnerabilities, building a positive teacher-student relationship is vital. (2) The promise of personal fulfillment, not remediation, should guide the education of these students, taking into account present skill levels. Students should progress at a pace that is challenging and demanding, but not defeating. Thus, students will not be viewed or regarded through the lens of an ability-demeaning stereotype. (3) The design should be one of racial integration implementation in an effort to draw out group differences and make people feel more venerable when they inevitably cross group lines to compete in larger society. (4) The particulars of Black life and culture such as art, literature, political and social perspective, and music, must be presented in the mainstream curriculum of America schooling and not consigned to special times of the year and special-topic courses and programs aimed essentially for Blacks (p. 78).

Finally, to mainstream American life and schooling, Steele offers a challenge to parents to constantly foster in children a sense of hope and entitlement, even when they feel devalued. Osborne offers methods of derailing disidentification with academics by (a) helping students at risk for disidentification to resist that trend, and (b) by encouraging disidentified students to re-identify.

To examine whether identification with academics (IA) had any effect on grade point average (GPA), Osborne (2002) conducted a study on high school students. Results of the study revealed significant correlations between IA and GPA. In this study, no race or gender interaction effects were detected. Osborne’s study also supported the racial paradox prediction derived from Steele’s (1997) stereotype that increasing IA among White students is associated with decreasing probability of withdrawal with the reverse
being true for students of color. As asserted by Steele, students of color are more likely to withdraw because schooling is aversive for them, causing avoidance and disidentification.

Osborne’s (1997a) study to assess whether other disadvantaged minorities, such as Hispanics evidenced disidentification, revealed the following information. For the analysis of the study, Whites, African-American, and Hispanics were included. There is not a sufficiently negative or universal group stereotype concerning Hispanics and academic performance as there is with African-American. Osborne suggests that perhaps Hispanics deal with pressures that affect academic performance in a different way. He also suggests that Hispanics should be studied with a focus on why they do not succumb to disidentification. Osborne’s study also concluded that no other group, except African-American males, appeared to experience serious and significant disidentification with academics. Hispanics females manifested the strongest academic identification of any group studied, raising interesting questions.

Osborne offers various suggestions for colleges. He challenges community colleges to focus on those students most at risk for adverse academic outcomes. Analysis from his studies indicates that the majority of community college students who will experience adverse academic outcomes will begin their college careers less identified with academics than their more successful peers. It is most cost-effective to target these students for academics interventions and focus on efforts and resources to help those students who are truly at-risk for academic failure.
CHAPTER 3  
RESEARCH DESIGN AND METHODOLOGY

This chapter describes the methods used to answer the study’s research questions. The broad purpose of the study was to understand how developmental studies students perceive classroom dynamics and why different students view classroom environments differently. To accomplish this broad purpose, three research questions were posed:

1. How do developmental studies students rate their classroom with respect to the four dimensions of classroom dynamics as measured by the classroom dynamics questionnaire?

2. To what extent do selected demographic characteristics, past experiences of education, and identification with academics independently predict developmental studies students’ perceptions of classroom dynamics?

3. To what extent do selected demographic characteristics, past experiences of education, and identification with academics simultaneously predict developmental studies students’ perceptions of classroom dynamics?

This chapter is divided into eight major sections, describing the logical framework, instrumentation, study sample, data collection, data preparation, data analysis, limitations, and assumptions.

Logical Framework

There are many variables that affect how students perceive the classroom. If fully mapped out they would include:
• Context of the classroom
• Teacher behavior
• Students’ perceptions of the classroom

This broader model at work is illustrated in Figure 2. In this study, only one portion of the model, student perceptions, were examined. Therefore, modest correlations were expected.

![Figure 2. Broader model for predicting classroom dynamics](image)

This study is guided by the logical model as presented in Chapter 1 (Figure 1) in which a framework for understanding perceptions of classroom dynamics is depicted. The framework called for a conception of the dimensions of classroom dynamics that includes four dimensions, namely, teacher respect for students; confidence in the teacher’s ability; learner cohesion; and learner voice.

- *Respect* – the teacher respects the students as learners and as individuals.
- *Confidence* – the learners believe that the teacher is a competent and committed educator.
- **Cohesion** – learners feel a sense of sharing, support, and affiliation with the other learners in the class.

- **Voice** – learners feel that they can express their ideas and true feelings to the other learners in the class (Oliva, 2003).

To more precisely guide the study, an operational version of that model is presented in Figure 3. The framework’s model proposes certain variables believed to be predictors of variations of perceived classroom dynamics, which could affect perceptions and participation in adult education learning activities. Those variables are:

- the demographic characteristics of the student
- the students’ past experiences of education
- the students’ identification with academics

A pictorial view (Figure 3) of the operational model for the study follows with a description in the next section of the instrumentation used in this study.

*Figure 3. Operational model for testing predictors of classroom dynamics*
Instrumentation

One of the most important tasks of the present study was to identify instruments to appropriately assess the variables in the operation model. The study’s author reviewed various instruments in an effort to determine the most appropriate instrument for the present study. Some questionnaires were too broad and lengthy; some items in other questionnaires were not related to the information needed for the study; other questionnaires were not appropriate for community college students. A multi-faceted, self-completion, selected response survey instrument was used. The full instrument is presented in Appendix A. In the instrument, three distinct measures were embedded into one large survey instrument to present a more unified format. The survey also includes questions relating to demographic variables. Descriptions of each measure and its validity and reliability are discussed in this section.

Classroom Dynamics Questionnaire (CDQ)

Development. The Classroom Dynamics Questionnaire (CDQ) is represented by items 1-27 in the instrument depicted in Appendix A. The instrument, developed by Valentine, Oliva, and Thomas (2002), measures four dimensions of classroom dynamics: (a) teacher respect for students; (b) confidence in the teacher’s ability; (c) learner cohesion; and (d) learner voice. Respect and confidence measure relationships between teachers and students. Cohesion and voice measure relationships between students and students. These four dimensions are used to understand how groups of learners view classroom perceptions. The items for these four measures are depicted in Table 2.
Table 2

*Relationships and Dimensions of Classroom Dynamics Questionnaire*

<table>
<thead>
<tr>
<th>Relationships</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-Student Relationships</td>
<td><em>Teacher Respect for Students</em>: The teacher respects the students as learners and as individuals.</td>
</tr>
<tr>
<td></td>
<td><em>Confidence in Teacher’s Ability</em>: The learners believe that the teacher is a competent and committed educator.</td>
</tr>
<tr>
<td>Student-Student Relationships</td>
<td><em>Learner Cohesion</em>: Learners feel a sense of sharing, support, and affiliation with the other learners.</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.</td>
</tr>
</tbody>
</table>

For the purposes of this study demographic characteristics (race, gender, age, first-generation college student, educational attainment, and income) of the students were statistical factors under consideration. Past educational experiences, identification with academic measures and demographic characteristics were analyzed both independently and jointly.

The contents of the CDQ instrument were selected based on a comprehensive review of the literature pertaining to group dynamics and classroom relationships (Oliva, 2003). The instrument attempts to predict the way in which classrooms differ and how those differences affect learning. It is designed to collect data information regarding the interpersonal dynamics occurring in the students’ classroom and the interpersonal dynamics preferred by students in the classroom (Oliva, 2003). The instrument covers relationship areas between teachers and students and students and students, and seeks to
measure four distinct dimensions. To rank the importance of each item in each subscale, respondents will respond to a six-point Likert scale in which one (1) represents strongly disagree and six (6) represents strongly agree.

Many tasks were involved in the development of the CDQ and its subscales. The authors conducted interviews, examined other classroom environment scales, conducted pilot studies, and refined the item pools. After the final selection of the items and subscales, the response scale and background variables were added to the instrument (Oliva, 2003).

These dimensions and relationships assess the perceptions of classroom dynamics in the developmental studies classroom. Section I of each form contains 13 items. Section II of each form contains 14 items, for a total of 27 items on each form. Section III of both versions of the questionnaire contains variables assessing background information such as age, gender, race/ethnicity, economic status, and educational level. The variables in this section can be altered depending on research information sought by the author. The 27 items on each form of the CDQ correspond to the four dimensions of classroom interpersonal dynamics. Each version of the questionnaire provides instruction for completing the forms and contains three sections.

Validity and Reliability. The CDQ was tested for reliability and validity by its authors (Valentine, Oliva, Thomas, 2002). A pilot study using the CDQ was conducted (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; and (3) to ascertain the sufficiency of administration procedures. The authors established validity in terms of (a) preliminary research on information and key concepts that were consistent with the
literature relating to classroom environment and interpersonal relationships; (b) instrument conceptualizations in which major concepts and a conceptual framework were either considered or included; and (c) construct validity via a validity sort which supported a lack of relationship between measures that theoretically should not be similar. Reliability was ascertained by calculating Cronbach’s coefficient alpha (α) to test internal consistency of the four subscales of the instrument (Oliva, 2003). Reliability scores for the four subscales were: (.95) respect; (.95) confidence; (.95) cohesion; and (.90) voice (Oliva, 2003); and (.92) respect; (.93) confidence; (.93) cohesion; and (.93) voice (Thomas, 2004). These calculations represent significantly high reliability (Holcomb, 2004). Subscale items measuring teacher respect for students, students’ confidence in the teacher’s ability, learner voice, and learner cohesion are presented in Tables 3, 4, 5, and 6.

Table 3

*Items Measuring Teacher Respect in the Classroom Dynamics Questionnaire*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>04.</td>
<td>The teacher respects the diverse backgrounds</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>01.</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>08.</td>
<td>The teacher treats students with respect</td>
</tr>
</tbody>
</table>
Table 4

*Items Measuring Teacher Confidence in the Classroom Dynamics Questionnaire*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>07.</td>
<td>The teacher makes learning interesting</td>
</tr>
<tr>
<td>03.</td>
<td>The teacher adequately covers the course content</td>
</tr>
<tr>
<td>06.</td>
<td>The teacher is knowledgeable about the course content</td>
</tr>
<tr>
<td>05.</td>
<td>The teacher has excellent teaching ability</td>
</tr>
<tr>
<td>09.</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>02.</td>
<td>The teacher provides excellent feedback on students’ learning</td>
</tr>
</tbody>
</table>

Table 5

*Items Measuring Learner Voice in the Classroom Dynamics Questionnaire*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</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>
Table 6

*Items Measuring Learner Cohesion in the Classroom Dynamics Questionnaire*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Students in the class enjoy learning</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>

_Education Experience Scale_

_Development._ The *Education Experience Scale* is represented by items 28-34 in the instrument depicted in Appendix A. The scale developed by Kim (1993) was designed to measure the extent to which adult learners have had positive or negative experiences during their past educational experiences. The instrument employs a four-point Likert response scale ranging from one (1) representing strongly disagree and four (4) representing strongly agree. The Education Experience Scale consists of seven randomly arranged items. Items comprising the *Education Experience Scale* are depicted in Table 7.

_Validity and Reliability._ The *Education Experience Scale* was examined for reliability and item adequacy. Kim’s study revealed good reliability of the scale, well
distributed response items, and item clarity. The scale items focused specifically on educational experiences in elementary and secondary schools (Kim, 1993). The Alpha Coefficient calculated for the reliability of the Educational Experience Scale equaled .83.

Table 7

*Educational Experience Scale*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.</td>
<td>In elementary school and high school, I seldom did well in classes.</td>
</tr>
<tr>
<td>29.</td>
<td>In elementary school and high school, other students almost always treated me well in class.</td>
</tr>
<tr>
<td>30.</td>
<td>In elementary school and high school, people almost always made me comfortable in class.</td>
</tr>
<tr>
<td>31.</td>
<td>In elementary school and high school, my teachers almost always liked my school work.</td>
</tr>
<tr>
<td>32.</td>
<td>In elementary school and high school, I almost always looked forward to attending my classes.</td>
</tr>
<tr>
<td>33.</td>
<td>In elementary school and high school, I seldom enjoyed my Classes.</td>
</tr>
<tr>
<td>34.</td>
<td>In elementary school and high school, my educational experiences were almost always successful.</td>
</tr>
</tbody>
</table>
Identification with Academics Scale

Development. The Identification with Academics Scale is represented by items 35-47 in the instrument depicted in Appendix A. The instrument, developed by Osborne (1997b), seeks to assess a student’s thoughts of academic pursuits and outcomes based on the student’s overall self-evaluation. Because self-esteem is directly affected by academic performance, Osborne argues that a student’s identification with academics is directly related to motivation to succeed.

Osborne’s (1997b) research revealed that no existing measure was available to suffice to measure identification with academics. Therefore, he developed a scale designed to measure the relationship of identification with academics success of community college students as well as other groups. Osborne has conducted several studies (Osborne 1995, 1997a, 1997b, 2001, 2002) which have revealed strong validity and high reliability estimates. Voelkl (1996) conducted another study to test the effects of race on identification with academics (Osborne, Rausch, Walker, 2002). During this study identification with academics was measured via two other questionnaires developed by Osborne and Voelkl. They were the School Perceptions Questionnaire (SPQ) and the Identification with School Questionnaire (ISQ). Though both measures alleged to assess identification with academics, the SPQ explicitly claimed to measure the centrality of academics to the self (e.g., “Being a good student is important to me.”). The ISQ claimed to measure a sense of belonging in school and the valuation of school and school-related outcomes (e.g., “I feel comfortable when I am in school, like I belong there.”). Items in both questionnaires were measured on a scale of 1 (strongly disagree) to 5 (strongly agree) (Voelk, 1996). The two scales were combined to form the Identification with
*Academics Scale* (IA). Items comprising the *Identification with Academics Scale* are depicted in Table 8.

**Table 8**

*Identification with Academics Scale*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>Being a good student is an important part of who I am.</td>
</tr>
<tr>
<td>36.</td>
<td>I feel that the grades I get are an accurate reflection of my abilities.</td>
</tr>
<tr>
<td>37.</td>
<td>My grades do not tell me anything about my academic potential.</td>
</tr>
<tr>
<td>38.</td>
<td>I don't really care what tests say about my intelligence.</td>
</tr>
<tr>
<td>39.</td>
<td>School is satisfying to me because it gives me a sense of accomplishment.</td>
</tr>
<tr>
<td>40.</td>
<td>If the tests we take were fair, I would be doing much better in school.</td>
</tr>
<tr>
<td>41.</td>
<td>I am often relieved if I just pass a course.</td>
</tr>
<tr>
<td>42.</td>
<td>I often do my best work in school.</td>
</tr>
<tr>
<td>43.</td>
<td>School is very boring for me, and I'm not learning what I feel is important.</td>
</tr>
<tr>
<td>44.</td>
<td>I put a great deal of myself into some things at school because they have special meaning or interest for me.</td>
</tr>
<tr>
<td>45.</td>
<td>I enjoy school because it gives me a chance to learn many interesting things.</td>
</tr>
<tr>
<td>46.</td>
<td>I feel like the things I do at school waste my time more than the things I do outside of school.</td>
</tr>
<tr>
<td>47.</td>
<td>No test will ever change my opinion of how smart I am.</td>
</tr>
</tbody>
</table>
Validity and Reliability. According to Osborne et al (2002) the Cronbach’s reliability alpha for the SPQ measured .87. Likewise, the ISQ was also reliable, with alphas of .75 and .63 for the belonging and valuing subscales, respectively (Osborne et al). Therefore, Voelkl (1996) suggested the use of a total score, which had an alpha of .78. The two scales were highly correlated (r = .76), and did not produce differential results of interest. Thus, the two scales were combined, producing a single Identification with Academics scale with a Cronbach’s alpha of .91 (Osborne et al., 2002). Items were averaged to produce total scores. The resulting scale contains thirteen items designed to assess the extent to which a student’s self-esteem is connected with and dependent upon academic outcomes.

These three instruments, the Classroom Dynamics Questionnaire, the Educational Experience Scale, and the Identification with Academics Scale, have been combined into one instrument, The Developmental Studies Questionnaire (Appendix A). The response scale, standardized with permission of all three instrument authors reflected a six-point Likert scale in which “one” represented “strongly disagree” and “six” represented “strongly agree.”

Demographic Items

Demographic items are represented by items 48-54 in the instrument depicted in Appendix A. Seven items were selected to solicit demographic information from each participant. Table 9 depicts this information. This information will be used both to describe the sample and to explain the respondent’s perceptions of the interpersonal dynamics as perceived in the classroom.
Table 9

Demographic Items

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>48.</td>
<td>What is your gender?</td>
</tr>
<tr>
<td>49.</td>
<td>What is your race / ethnicity?</td>
</tr>
<tr>
<td>50.</td>
<td>What is your age?</td>
</tr>
<tr>
<td>51.</td>
<td>Are you the first person in your family to attend college?</td>
</tr>
<tr>
<td>52.</td>
<td>What is your educational background? (check one)</td>
</tr>
<tr>
<td></td>
<td>Less than a high school diploma</td>
</tr>
<tr>
<td></td>
<td>High school diploma</td>
</tr>
<tr>
<td></td>
<td>GED (General Educational Development)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>53.</td>
<td>During your earlier school years, what was your family’s financial status?</td>
</tr>
<tr>
<td>54.</td>
<td>What is your family’s current financial status?</td>
</tr>
</tbody>
</table>

Pilot Study

Prior to administration of the instrument to the developmental studies classes, a pilot study was conducted. A convenience small sample of seven students enrolled in college-ready classes (previously developmental studies students) and three professional colleagues at the institution were asked to complete and critique the survey questionnaire and offer suggestions for improvement. The directions and wording of the questionnaire items were found to be clear and comprehensible to all participants. Thus, no changes were made to the Developmental Studies Questionnaire.
Study Sample

The data for the study were collected from a sample of developmental studies students on two campuses of a suburban two-year technical college in a southeastern state of the United States. The study comprised 34 classes during the spring quarter of 2006.

The developmental studies program is an intricate and important part of this southeastern college. During any given quarter, the developmental studies population ranges between one-third and one-half of the population of students. Therefore, the individuals under consideration were determined to be suitable participants because of their classification as developmental studies students enrolled at the technical college.

The participants were identified as students enrolled in developmental studies English, reading, and mathematics courses. These students must complete developmental studies courses before enrolling in their selected program of study. The participants represented a sampling of the technical college’s population. For the study, the sample was adequate because the diverse characteristics of the sample reflect characteristics of community college students. At this institution a large percentage of the college’s students are classified as developmental studies. Spring 2006 end of the quarter enrollment data indicated a total student enrollment of 3651 (unduplicated) students. The data also indicated an enrollment of 999 (duplicated – enrolled in one or more developmental studies classes) students in developmental studies classes. Developmental studies enrollment data indicated 27.4% of the college’s students were enrolled in one or more developmental studies classes. Of those enrolled, 299 or 29.9% were enrolled in developmental studies English; 452 or 45.2% enrolled in developmental studies math; and 248 or 24.8% enrolled in developmental studies reading.
Data Collection

The following activities were completed prior to conducting the study:

A. Permission sought from the authors of the *Classroom Dynamics Questionnaire*, the *Educational Experience Scale*, and the *Identification with Academics* Scale for inclusion in the *Developmental Studies Questionnaire*

B. Permission sought from the College’s president to administer the *Developmental Studies Questionnaire* to students

C. Permission from the Institution Review Board and Human Subjects Office of The University of Georgia to conduct the research

In this study, data was collected using a self-completion questionnaire. Data was collected in 34 classrooms at the suburban two-year technical college. The researcher traveled to the institution and its satellite campus and personally administered the survey instrument to the participants in the study. Prior to collecting the data the researcher acquired permission from the college’s president to conduct the survey. Subsequently, each instructor whose class was surveyed was contacted to access permission to conduct the survey with his/her individual class. Once permission was granted, written notification was sent to inform individual instructors of the purpose, date, time and location of the administration of the questionnaire. On the day of the administration of the questionnaire, written information about the study and the purpose of the research was given and explained to the students, as well as explanations for completing the questionnaire. This information was provided in an effort to completely assure students that participation was completely voluntary and responses would be held in the strictest of confidence. Students desiring not to participate were excused from the classroom (one
student). Written information accompanied the questionnaire to explain the University of Georgia’s Human Subjects policies; confidentiality of survey responses; and the University contact information.

Data were collected anonymously. There was no requirement or response item on the questionnaire to indicate the name or identity of the participant. However, information regarding the class name, level, and size was collected and coded on envelopes used to collect the response sheets. The envelopes were located in a visible location away from the researcher to increase the comfort level of students.

The instructor of the class was not present during the administration of the questionnaire. The participants were students in designated developmental studies English, reading, and mathematics classes, namely at the 095, 096, 097, 098, and 099 levels.

Administration procedures for the study consisted of the following steps:

- College administrative authorization for potential data collection
- Identification of classrooms for possible data collection
- Identification of potential data collection sites
- Instructor consent to collect data from individual classrooms
- Scheduling of a date and time for administration of the Developmental Studies Questionnaire with each individual instructor who agreed to participate
- Direct administration of the instrument following the above set of administrative procedures and after respective classes met at least three weeks

The study sample constituted a convenience sample of study participants enrolled in developmental studies classes. Job schedules, transportation, and other student
personal issues preclude most students at the college from remaining on campus to participate in activities outside of their normal class instruction hours. The researcher desired to administer the questionnaire to an appropriate number of participants in order to gain sufficient responses for analysis. Therefore, the questionnaire was administered to entire classes. Class enrollments average 15-20 students. Administration of the survey did not exceed 30 minutes. Appendix G presents a detailed description of the respondents.

**Description of Respondents.** The sample consisted of 645 students. Two hundred six or 31.9% were male and 406 or 62.9 % were female. Regarding race, five hundred thirty-five or 82.9% of the participants were Black or African Americans; 44 or 6.8% were White; 22 or 3.4% indicated that they were of another ethnicity; 44 of the participants responded as “other” or did not respond at all to this item. Many of the students in this sample were older and married with families. Of the 615 participants indicating their age the youngest was 16 years old and the oldest 59 years old. The mean age of the sample was 28.68 with a standard deviation of 9.71.

One hundred forty-three or 22.2% of the participants indicated that they were *first-generation college students*. Four hundred eighty-four or 75.0% of the participants indicated that they were not *first-generation college student*. Eighteen or 2.8% of the participants did not respond to this item.

Regarding *educational attainment*, seven or 1.1% of the participants’ earned less than high school diploma; 417 or 64.7% earned a high school diploma; 101 or 15.7% earned the General Educational Development (GED) certificate; 110 or 17.1% indicated other educational attainment; 10 or 1.6% of the participants did not respond to this item. Of the 110 participants responding as “other,” they indicated that their educational
attainment included participating in training, job corps, and vocational schools; technical colleges, technical schools, and four-year colleges; and earning from certificates to two-year degrees to bachelors degrees. A complete listing of the participants’ actual responses for *educational attainment* is presented in Appendix B. For the purpose of analysis the responses were recoded as a dichotomous variable indicating high school diploma or post-secondary educational attainment.

Regarding income levels, 326 or 50.5% of the participants indicated that their family household income levels were below $30,000 while in high school. Three hundred forty-five (345) or 53.5% of the participants indicated that their current family household income level is below $30,000.

**Data Preparation**

After all survey instruments were collected, a participant identification number (1-645) was assigned to each survey instrument. This number was intended to identify any survey instrument in the event of data entry problems or errors. No cases were deleted. All 645 cases were included in the analysis of data for this study.

Since a few participants circled two responses on a six-point Likert scale, double-response items were coded to reflect the midpoint of the two. For example, if an item was circled 3 and 4, than that item was recoded to reflect the midpoint (3.5).

Because of limited variability in race, two dichotomous variables were created using only students who identified themselves as Black (African American) or White. The numbers of participants of other ethnic groups were so small that it was not possible to include them in the statistical analysis.
For data related to educational attainment the responses were studied and ultimately a decision was made to modify the data. Since only seven out of 645 participants responded as not having a high school diploma, these were eliminated from the analyses. For those participants indicating “other” as educational attainment, the responses were studied and those that were clearly post-secondary were retained for the analyses. Those responses that were unknown were eliminated, thus leaving exactly three values for analyses (GED, high school diploma, and post-secondary). In order to re-code the educational attainment variable and to make the data workable, the GED and regular high school responses were examined to determine if there was a difference. No significant difference was found. It was decided to combine these two groups into one group called high school diploma recipients. Consequently, a dichotomous variable was created called high school and some post-secondary. Those respondents who could not be fitted into either one of these variables were coded as missing data on this variable. This process was done for two reasons: (a) There is no guarantee that some GED recipients did not check high school diploma as a response; (b) When the data was analyzed using educational attainment as a predictor variable against the four measures of the CDQ, three out of four of the outcomes showed no difference in the mean values of the two groups. There was only a minor difference in one of the cases. Consequently educational attainment was created as a dichotomous variable.

Problems arose with the reliability of the Education Experience measure. After the administration of the existing Educational Experience Scale a reliability analysis was conducted and revealed an Alpha Coefficient of .65. Therefore the dissertation author and the major professor conducted an item analysis of the scale. A thorough examination of
the items revealed that items 28 (In elementary school and high school, I seldom did well in classes) and 33 (In elementary school and high school, I seldom enjoyed my classes) were written as negative statements. Their inclusion greatly affected the reliability estimate of the instrument. Therefore, the decision was made to eliminate these two items from the scale in the analyses of the collected data. With this elimination, the analysis revealed an alpha coefficient of .86. The resulting five items comprising the *Education Experience Scale* (Shortened) and the item means are depicted in Table 10. Table 11 depicts the item means for the *Identification with Academics Scale*.

Table 10
*Item Means for the Educational Experience Scale Shortened*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.</td>
<td>In elementary school and high school, other students almost always treated me well in class.</td>
<td>4.9</td>
</tr>
<tr>
<td>30.</td>
<td>In elementary school and high school, people almost always made me comfortable in class.</td>
<td>4.7</td>
</tr>
<tr>
<td>31.</td>
<td>In elementary school and high school, my teachers almost always liked my school work.</td>
<td>4.8</td>
</tr>
<tr>
<td>32.</td>
<td>In elementary school and high school, I almost always looked forward to attending my classes.</td>
<td>4.5</td>
</tr>
<tr>
<td>33.</td>
<td>In elementary school and high school, my educational experiences were almost always successful.</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Mean item mean: 4.7
Table 11

*Item Means for the Identification with Academics Scale*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>Being a good student is an important part of who I am.</td>
<td>5.6</td>
</tr>
<tr>
<td>36.</td>
<td>I feel that the grades I get are an accurate reflection of my abilities.</td>
<td>5.0</td>
</tr>
<tr>
<td>37.</td>
<td>My grades do not tell me anything about my academic potential.</td>
<td>3.7</td>
</tr>
<tr>
<td>38.</td>
<td>I don't really care what tests say about my intelligence.</td>
<td>4.0</td>
</tr>
<tr>
<td>39.</td>
<td>School is satisfying to me because it gives me a sense of accomplishment.</td>
<td>5.4</td>
</tr>
<tr>
<td>40.</td>
<td>If the tests we take were fair, I would be doing much better in school.</td>
<td>3.5</td>
</tr>
<tr>
<td>41.</td>
<td>I am often relieved if I just pass a course.</td>
<td>3.0</td>
</tr>
<tr>
<td>42.</td>
<td>I often do my best work in school.</td>
<td>5.0</td>
</tr>
<tr>
<td>43.</td>
<td>School is very boring for me, and I'm not learning what I feel is important.</td>
<td>4.7</td>
</tr>
<tr>
<td>44.</td>
<td>I put a great deal of myself into some things at school because they have special meaning or interest for me.</td>
<td>5.0</td>
</tr>
<tr>
<td>45.</td>
<td>I enjoy school because it gives me a chance to learn many interesting things.</td>
<td>5.4</td>
</tr>
<tr>
<td>46.</td>
<td>I feel like the things I do at school waste my time more than the things I do outside of school.</td>
<td>4.7</td>
</tr>
<tr>
<td>47.</td>
<td>No test will ever change my opinion of how smart I am.</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Mean item mean: 4.5
Distribution of Key Measures. Individual items were summed together to create scaled scores for all six of the key measures, i.e., the four classroom dynamics variables (teacher respect for students, student confidence in the teacher’s ability, learner cohesion, and learner voice) and the other two predictor variables (past educational experiences and identification with academics). Individual item means for the four dependent classroom dynamics variables are the answers to Research Question One and appear in Chapter 4. Table 12 depicts the means and standard deviations of key measures for the Developmental Studies Questionnaire.

Table 12

Distributions and Reliability of Key Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Number of items</th>
<th>M</th>
<th>SD</th>
<th>Mean item mean</th>
<th>Coefficient alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDQ Respect (n = 632)</td>
<td>6</td>
<td>31.8</td>
<td>6.1</td>
<td>5.3</td>
<td>.93</td>
</tr>
<tr>
<td>CDQ Confidence (n = 637)</td>
<td>7</td>
<td>36.5</td>
<td>7.0</td>
<td>5.2</td>
<td>.94</td>
</tr>
<tr>
<td>CDQ Voice (n = 626)</td>
<td>7</td>
<td>34.9</td>
<td>6.3</td>
<td>5.0</td>
<td>.83</td>
</tr>
<tr>
<td>CDQ Cohesion (n = 624)</td>
<td>7</td>
<td>35.0</td>
<td>6.8</td>
<td>5.0</td>
<td>.92</td>
</tr>
<tr>
<td>Education Experience Shortened (n = 625)</td>
<td>5</td>
<td>23.4</td>
<td>5.1</td>
<td>4.7</td>
<td>.86</td>
</tr>
<tr>
<td>Identification with Academics (n = 586)</td>
<td>13</td>
<td>58.0</td>
<td>9.4</td>
<td>4.5</td>
<td>.72</td>
</tr>
</tbody>
</table>

Calculations to determine intercorrelations and coefficients of determinations among the outcome variables are presented in Table 13, with significance at the .05 level.
Table 13

*Intercorrelations and Coefficients of Determinations among CDQ Measures*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Confidence</th>
<th>Voice</th>
<th>Cohesion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$</td>
<td>$r^2$</td>
<td>$r$</td>
</tr>
<tr>
<td>Respect</td>
<td>.864</td>
<td>.746</td>
<td>.692</td>
</tr>
<tr>
<td>Confidence</td>
<td></td>
<td></td>
<td>.653</td>
</tr>
<tr>
<td>Voice</td>
<td></td>
<td></td>
<td>.693</td>
</tr>
</tbody>
</table>

Note. Correlations are at the .05 level

**Data Analyses**

Collected data for the survey were analyzed using the Statistical Software Package for the Social Sciences (SPSS). The statistical analysis and procedures were selected and manipulated to answer the research questions:

1. How do developmental studies students rate their classroom with respect to the four dimensions of classroom dynamics as measured by the classroom dynamics questionnaire?

2. To what extent do selected demographic characteristics, past experiences of education, and identification with academics *independently* predict developmental studies students’ perceptions of classroom dynamics?

3. To what extent do selected demographic characteristics, past experiences of education, and identification with academics *simultaneously* predict developmental studies students’ perceptions of classroom dynamics?
To answer the Research Question #1, item means and mean item means for each dimension were calculated. The distributions are presented graphically with histograms for each of the four dimensions.

To answer the Research Question #2, a series of bivariate analyses was conducted in an attempt to explain observed variance in each of the four dimensions (teacher respect for students, confidence in teacher’s ability, learner cohesion, and learner voice) of the CDQ using predictor variables.

When predictor variables were continuous (past educational experience, identification with academics, and age) simple correlation analyses along with coefficients of determination were calculated. When the variable was ordinal (levels of income), Spearman Correlation coefficient was used. When the predictor variables were dichotomous (race, gender, first-generation college student, educational attainment), $t$-test were employed for direct comparisons of means.

To answer Research Question #3, a series of multiple regression analyses were conducted in which an attempt was made to discover the best multivariate explanation of the observed variance in each of the four dimensions of the CDQ.

Limitations

Researcher’s Personal Statement

The study researcher and dissertation author is a college administrator in a southeastern state of the United States who possesses 39 years of experience as a classroom instructor and administrator on both the secondary and postsecondary levels. The educational experiences of the researcher have significantly impacted many thoughts and decisions in this study. Specifically, selection of a research topic for the present study
was influenced by an earlier study conducted during the writing of the researcher’s master thesis; the researcher’s classroom teaching and learning experiences; and ultimately, the researcher’s administrative involvement with postsecondary instructors and their classroom practices. Access to developmental studies classroom was derived through professional relationships with instructors, and top-level administrators at the technical college. The results of the study were interpreted from an educational perspective.

The culture of the educational profession and the researcher’s professional experiences, particularly those involving classroom training, are factors that could have affected the researcher’s interests, assumptions, and interpretations, and thus could have affected all aspects of the study. No professional relationships exist between the researcher and the participants; therefore, hesitation to respond honestly to the questionnaire was not expected.

Limitations of the study

The present study employed convenience, non-random samplings of students in one technical college in one southeastern state of the United States. Because it is a convenience sample, no statistical inferences can be drawn. Any generalizations made by the researcher or any other researcher will be based on data collected from the immediate sample. Though this is a large study sample, further study with larger representative samples is suggested to extend these results to the entire developmental studies population in this state and to developmental studies students in other states within the nation.
The study also employed a limited number of background variables in order to make analyses regarding their effects, or lack of, on classroom environment. Certain variables were measures pertaining to the perceiver. Virtually none were about the perceived. Knowing this, modest expectations were expected. No demographic information of the instructor was sought. Additionally, the study included participants from only 34 classes. Additional studies of similar populations of adult learners are recommended to further explain observed variables in the study.

There was a serious flaw in the measurement of the variable past household income levels. After the data were collected, it was then recognized that this flaw existed. Perhaps in the case of older students, low income levels as indicated in item 53 of the instrument could have been considered “high” income levels when he/she was in high school. If students were recent high school graduates, levels of income stated would make sense. However, since age is ranged from 16-59 years, students responding to the $10,000 – 19,999 level, for example, could have been reflecting a good or modest income level, or not, depending on their age. That is to say that a family income of $10,000 in the year 2000 is very different from a family income of $10,000 in the 1970s. More explanatory information relating to income levels appropriate to the students’ age or to a particular time period perhaps would have resulted in a different perspective in those areas of the study relating to economics.

Assumptions

This study explored perceptions of classroom dynamics, how developmental studies students perceive classroom dynamics, and why different students view classroom environments differently. Because of practical limitations, it does not test what those
differences in classroom dynamics cause. In some ways it seems self-evident that good classrooms with good interaction will lead to better learning. Moreover, the literature has consistently supported this perspective (Moos, 1979 & Frazier, 1986). The importance of other research has shown this on outcome variables. However, in this study it is assumed that the variables are important without measuring the outcomes.
CHAPTER 4

FINDINGS

The broad understand how developmental studies students perceive classroom dynamics and why different students view classroom environments differently. Chapter 4 presents the results of the statistical analyses described in Chapter 3. Results of the analyses are addressed in relation to each of the three research questions that guided this study. The research questions are as follows:

1. How do developmental studies students rate their classroom with respect to the four dimensions of classroom dynamics as measured by the classroom dynamics questionnaire?

2. To what extent do selected demographic characteristics, past experiences of education, and identification with academics independently predict developmental studies students’ perceptions of classroom dynamics?

3. To what extent do selected demographic characteristics, past experiences of education, and identification with academics simultaneously predict developmental studies students’ perceptions of classroom dynamics?

The findings of this study are described in the following sections: Findings Related to Research Question #1, Findings Related to Research Question #2, and Findings Related to Research Question #3.
Findings Related to Research Question #1

Research Question one required the calculation of the means of the individual items for the four classroom dynamics key measures. Next the mean item means for each dimension were calculated. Computing the item means and the mean item mean values facilitated the evaluation of the response levels for each of the four variables indicated. The calculations were used in determining the outcome of the analyses related to perceived classroom dynamics and are presented in Tables 14-17. The analyses reflect uniformly high ratings for all four dimensions of the CDQ. The two dimensions relating to teacher-student relationships perceived in the classroom were rated higher than the two dimensions relating to student-student relationships. However, on all four dimensions, the items were highly rated.

Table 14

*Item Means for Teacher Respect for Students*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>04.</td>
<td>The teacher respects the diverse backgrounds</td>
<td>5.3</td>
</tr>
<tr>
<td>13.</td>
<td>The teacher respects students’ ideas</td>
<td>5.3</td>
</tr>
<tr>
<td>10.</td>
<td>The teacher never talks down to students</td>
<td>5.2</td>
</tr>
<tr>
<td>01.</td>
<td>The teacher treats all students fairly</td>
<td>5.3</td>
</tr>
<tr>
<td>12.</td>
<td>The teacher really listens when students are speaking</td>
<td>5.3</td>
</tr>
<tr>
<td>08.</td>
<td>The teacher treats students with respect</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Mean item mean: 5.3
Table 15

*Item Means for Confidence in the Teacher’s Ability*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>07.</td>
<td>The teacher makes learning interesting</td>
<td>5.0</td>
</tr>
<tr>
<td>03.</td>
<td>The teacher adequately covers the course content</td>
<td>5.1</td>
</tr>
<tr>
<td>06.</td>
<td>The teacher is knowledgeable about the course content</td>
<td>5.4</td>
</tr>
<tr>
<td>05.</td>
<td>The teacher has excellent teaching ability</td>
<td>5.2</td>
</tr>
<tr>
<td>09.</td>
<td>The teacher comes to class prepared</td>
<td>5.4</td>
</tr>
<tr>
<td>11.</td>
<td>The teacher works hard to help students learn</td>
<td>5.2</td>
</tr>
<tr>
<td>02.</td>
<td>The teacher provides excellent feedback on students’ learning</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Mean item mean: 5.2

Table 16

*Item Means for Learner Voice*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>Students feel comfortable expressing their opinions</td>
<td>5.1</td>
</tr>
<tr>
<td>17.</td>
<td>Individual students rarely dominate discussions</td>
<td>4.6</td>
</tr>
<tr>
<td>14.</td>
<td>Students feel free to speak out in class</td>
<td>5.1</td>
</tr>
<tr>
<td>25.</td>
<td>Students rarely disrupt one another’s comments</td>
<td>4.8</td>
</tr>
<tr>
<td>18.</td>
<td>Students feel comfortable disagreeing with one another</td>
<td>4.7</td>
</tr>
<tr>
<td>15.</td>
<td>Every student gets a chance to speak in the class</td>
<td>5.3</td>
</tr>
<tr>
<td>24.</td>
<td>Students are respectful of one another when speaking in class</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Mean item mean: 5.0
Table 17

*Item Means for Learner Cohesion*

<table>
<thead>
<tr>
<th>Item number</th>
<th>Item</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>Students in the class enjoy learning</td>
<td>5.0</td>
</tr>
<tr>
<td>26.</td>
<td>Students care about each other’s learning progress</td>
<td>4.9</td>
</tr>
<tr>
<td>20.</td>
<td>Students learn from one another</td>
<td>5.0</td>
</tr>
<tr>
<td>27.</td>
<td>Students have developed friendships in the class</td>
<td>5.0</td>
</tr>
<tr>
<td>19.</td>
<td>Students support each other’s learning</td>
<td>5.0</td>
</tr>
<tr>
<td>23.</td>
<td>Students work well together</td>
<td>5.0</td>
</tr>
<tr>
<td>22.</td>
<td>Students share learning resources with each other</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Mean item mean: 5.0

Figures 4-7 present the distribution of scores for the four CDQ variables. A review of these illustrations shows a ceiling effect, in which the majority of the participants rated all four dimensions (teacher’s respect for students, student confidence in the teacher’s ability, learner voice, and learner cohesion) of classroom dynamics very highly. The greatest percentage of the scores is concentrated beyond the mean (to the right). Mean values range from 35-38 and standard deviations from 6-7. The similarities in the means indicate the idea of difficulty in distinguishing the independent variables among the participants.
Figure 4. Score distribution for CDQ variable Respect

Figure 5. Score distribution for CDQ variable Confidence
Figure 6. Score distribution for CDQ variable Voice

Figure 7. Score distribution for CDQ variable Cohesion
Findings Related to Research Question #2

Research question two required the determination of bivariate relationships between the predictor variables and the dependent variables. Simple bivariate analyses were used. Coefficients of determination ($r^2$) were obtained by squaring the correlation coefficients to determine the proportion of the variance in each of the dependent variables that can be explained by variation in each of the predictor variables separately. The four dimensions of the CDQ (respect, confidence, voice, and cohesion) were dependent variables. The predictor variables were selected demographic characteristics, the past experiences of education measure, and the identification with academics measure. The relationship between the predictor variables and the outcome measures were assessed. Tables 18, 20, 22, and 24 depict correlations of continuous predictor variables with the CDQ measures respect, confidence, voice, and cohesion, respectively, followed by explanatory descriptions to support the respective table information. Tables 19, 21, 23, and 25 depict mean comparisons of the dichotomous predictor variables with the CDQ measures respect, confidence, voice, and cohesion, respectively, followed by explanatory descriptions to support the respective table information.

Of nine possible predictor variables for teacher respect for students, three achieved significance, educational experience, identification with academics, and educational attainment. Participants with a high school diploma showed a higher level of respect for the teacher than did participants with post-secondary experiences. The strongest predictor was identification with academics which explained over 6.3% of the variance.
Table 18

*Correlations of Continuous Predictor Variables with CDQ Measure: Teacher Respect*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Correlation</th>
<th>p</th>
<th>Coefficient of determination ($r^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification with academics</td>
<td>$r = .251$</td>
<td>.000</td>
<td>.063</td>
</tr>
<tr>
<td>Educational experience</td>
<td>$r = .140$</td>
<td>.001</td>
<td>.020</td>
</tr>
<tr>
<td>Age</td>
<td>$r = .026$</td>
<td>.528</td>
<td>.001</td>
</tr>
<tr>
<td>Past household income</td>
<td>$r_s = .009$</td>
<td>.827</td>
<td>.000</td>
</tr>
<tr>
<td>Current household income</td>
<td>$r_s = -.037$</td>
<td>.384</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 19

*T-tests of Dichotomous Predictor Variables with CDQ Measure: Teacher Respect*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Value</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>200</td>
<td>31.34</td>
<td>6.25</td>
<td>599</td>
<td>-1.589</td>
<td>.113</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>401</td>
<td>32.17</td>
<td>5.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>524</td>
<td>31.81</td>
<td>6.12</td>
<td>566</td>
<td>.721</td>
<td>.471</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>44</td>
<td>31.11</td>
<td>7.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First generation college</td>
<td>Yes</td>
<td>140</td>
<td>32.18</td>
<td>5.81</td>
<td>614</td>
<td>.356</td>
<td>.722</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>476</td>
<td>31.81</td>
<td>6.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational attainment</td>
<td>High school</td>
<td>506</td>
<td>32.06</td>
<td>5.77</td>
<td>588</td>
<td>3.138</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Post secondary</td>
<td>84</td>
<td>29.82</td>
<td>7.53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Of nine possible predictor variables for student confidence in the teacher, four achieved significance, gender, educational attainment, educational experience, and identification with academics.

Male participants showed less confidence in the teacher than female participants. Participants with a high school diploma showed a higher level of confidence in the teacher than did participants with post-secondary experiences.

The strongest predictor was identification with academics which explained 5.8% of the variance.

Table 20

Correlations of Continuous Predictor Variables with CDQ Measure: Teacher Confidence

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Correlation coefficient</th>
<th>p</th>
<th>Coefficient of determination ( r^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification with academics</td>
<td>( r = .241 )</td>
<td>.000</td>
<td>.058</td>
</tr>
<tr>
<td>Educational experience</td>
<td>( r = .131 )</td>
<td>.001</td>
<td>.017</td>
</tr>
<tr>
<td>Age</td>
<td>( r = .001 )</td>
<td>.984</td>
<td>.000</td>
</tr>
<tr>
<td>Past household income</td>
<td>( r_s = -.061 )</td>
<td>.150</td>
<td>.004</td>
</tr>
<tr>
<td>Current household income</td>
<td>( r_s = -.080 )</td>
<td>.057</td>
<td>.006</td>
</tr>
</tbody>
</table>
Table 21

*T-tests of Dichotomous Predictor Variables with CDQ Measure: Teacher Confidence*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Value</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>204</td>
<td>35.75</td>
<td>7.17</td>
<td>603</td>
<td>-2.165</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>401</td>
<td>37.04</td>
<td>6.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>528</td>
<td>36.61</td>
<td>6.95</td>
<td>48</td>
<td>.817</td>
<td>.418</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>44</td>
<td>35.52</td>
<td>8.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First generation college</td>
<td>Yes</td>
<td>140</td>
<td>36.80</td>
<td>6.97</td>
<td>617</td>
<td>.354</td>
<td>.723</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>479</td>
<td>36.56</td>
<td>6.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational attainment</td>
<td>High school</td>
<td>510</td>
<td>36.80</td>
<td>6.64</td>
<td>593</td>
<td>2.573</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>Post secondary</td>
<td>85</td>
<td>34.72</td>
<td>8.33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the nine possible predictor variables for learner voice in the classroom, two achieved significance, educational experience and identification with academics. The strongest predictor was *identification with academics* explaining 4.0% of the variance.

Table 22

*Correlations of Continuous Predictor Variables with CDQ Measure: Learner Voice*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Correlation coefficient</th>
<th>p</th>
<th>Coefficient of determination ($r^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification with academics</td>
<td>$r = .201$</td>
<td>.000</td>
<td>.040</td>
</tr>
<tr>
<td>Educational experience</td>
<td>$r = .130$</td>
<td>.001</td>
<td>.017</td>
</tr>
<tr>
<td>Age</td>
<td>$r = .059$</td>
<td>.149</td>
<td>.003</td>
</tr>
<tr>
<td>Past household income</td>
<td>$r = .052$</td>
<td>.221</td>
<td>.003</td>
</tr>
<tr>
<td>Current household income</td>
<td>$r = .028$</td>
<td>.514</td>
<td>.001</td>
</tr>
</tbody>
</table>
Table 23

*T-tests of Dichotomous Predictor Variables with CDQ Measure: Learner Voice*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Value</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>202</td>
<td>34.34</td>
<td>6.19</td>
<td>595</td>
<td>-1.758</td>
<td>.079</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>395</td>
<td>35.28</td>
<td>6.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>523</td>
<td>34.93</td>
<td>6.22</td>
<td>565</td>
<td>-.137</td>
<td>.891</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>44</td>
<td>35.07</td>
<td>6.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First generation college</td>
<td>Yes</td>
<td>138</td>
<td>35.23</td>
<td>6.00</td>
<td>610</td>
<td>.577</td>
<td>.564</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>474</td>
<td>34.88</td>
<td>6.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational attainment</td>
<td>High school</td>
<td>506</td>
<td>34.95</td>
<td>6.08</td>
<td>585</td>
<td>1.447</td>
<td>.148</td>
</tr>
<tr>
<td></td>
<td>Post secondary</td>
<td>81</td>
<td>33.85</td>
<td>7.72</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the nine possible predictor variables for learner cohesion in the classroom, four achieved significance, gender, educational attainment, educational experience, and identification with academics.

Male participants showed less cohesion in the classroom than female participants. Participants with a high school diploma showed a higher level of learner cohesion than did participants with post-secondary experiences.

The strongest predictor was *identification with academics* which explained 4.0% of the variance.
Table 24

*Correlations of Continuous Predictor Variables with CDQ Measure: Learner Cohesion*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Correlation</th>
<th>p</th>
<th>Coefficient of determination ($r^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification with academics</td>
<td>$r = .201$</td>
<td>.000</td>
<td>.040</td>
</tr>
<tr>
<td>Educational experience</td>
<td>$r = .181$</td>
<td>.001</td>
<td>.033</td>
</tr>
<tr>
<td>Age</td>
<td>$r = .023$</td>
<td>.578</td>
<td>.001</td>
</tr>
<tr>
<td>Past household income</td>
<td>$r_s = .077$</td>
<td>.071</td>
<td>.006</td>
</tr>
<tr>
<td>Current household income</td>
<td>$r_s = .065$</td>
<td>.172</td>
<td>.004</td>
</tr>
</tbody>
</table>

Table 25

*T-tests of Dichotomous Predictor Variables with CDQ Measure: Learner Cohesion*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Value</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>201</td>
<td>34.27</td>
<td>6.85</td>
<td>595</td>
<td>-2.148</td>
<td>.032</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>396</td>
<td>35.53</td>
<td>6.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Black</td>
<td>519</td>
<td>35.07</td>
<td>6.67</td>
<td>560</td>
<td>.259</td>
<td>.796</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>43</td>
<td>35.35</td>
<td>7.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First generation college</td>
<td>Yes</td>
<td>139</td>
<td>35.46</td>
<td>6.53</td>
<td>609</td>
<td>.669</td>
<td>.504</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>472</td>
<td>35.03</td>
<td>6.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational attainment</td>
<td>High school</td>
<td>502</td>
<td>35.26</td>
<td>6.68</td>
<td>582</td>
<td>2.191</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Post secondary</td>
<td>82</td>
<td>33.48</td>
<td>7.80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary of the Bivariate Relationships. The analyses of data between the predictor variables and the dependent variables tested 36 possible predictor relationships. The analyses of the bivariate relationships found thirteen significant relationships as presented in Table 26.

Table 26 shows the summary of significant bivariate relationships. In order to allow for comparison of the amount of variance explained, the significant dichotomous variables, gender, and educational attainment, which had been run originally under a t-test, were now run also as a point biserial correlation. Therefore, a conclusion can be drawn regarding the strongest single predictor of the four CDQ variables.

Table 26

Significant Bivariate Relationships

<table>
<thead>
<tr>
<th>Dimensions of classroom environment</th>
<th>Significant predictor variable</th>
<th>Test statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Respect for Students</td>
<td>Educational Experience</td>
<td>(r = .140; p &lt; .05; ( r^2 = .020 ))</td>
</tr>
<tr>
<td></td>
<td>Identification with Academics</td>
<td>(r = .251; p &lt; .05; ( r^2 = .063 ))</td>
</tr>
<tr>
<td></td>
<td>Educational Attainment</td>
<td>(r = .128; p &lt; .05; ( r^2 = .016 ))</td>
</tr>
<tr>
<td>Confidence in Teacher’s Ability</td>
<td>Educational Experience</td>
<td>(r = .131; p &lt; .05; ( r^2 = .017 ))</td>
</tr>
<tr>
<td></td>
<td>Identification with Academics</td>
<td>(r = .241; p &lt; .05; ( r^2 = .058 ))</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>(r = .088; p &lt; .05; ( r^2 = .008 ))</td>
</tr>
<tr>
<td></td>
<td>Educational Attainment</td>
<td>(r = -.105; p &lt; .05; ( r^2 = .011 ))</td>
</tr>
<tr>
<td>Learner Voice</td>
<td>Educational Experience</td>
<td>(r = .130; p &lt; .05; ( r^2 = .017 ))</td>
</tr>
<tr>
<td></td>
<td>Identification with Academics</td>
<td>(r = .201; p &lt; .05; ( r^2 = .040 ))</td>
</tr>
<tr>
<td>Learner Cohesion</td>
<td>Educational Experience</td>
<td>(r = .181; p &lt; .05; ( r^2 = .033 ))</td>
</tr>
<tr>
<td></td>
<td>Identification with Academics</td>
<td>(r = .201; p &lt; .05; ( r^2 = .040 ))</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>(r = .088; p &lt; .05; ( r^2 = .008 ))</td>
</tr>
<tr>
<td></td>
<td>Educational Attainment</td>
<td>(r = -.090; p &lt; .05; ( r^2 = .008 ))</td>
</tr>
</tbody>
</table>
From the analyses given, the strongest explanatory predictable variable for each of the four dimensions of the CDQ (teacher respect for students, students’ confidence in teacher’s ability, learner cohesion, and learner voice) was *identification with academics*, which explained 6.3%, 5.8%, 4.0%, and 4.0%, respectively, of the observed variance in the four dimensions.

Findings Related to Research Question #3

To answer Research Question three, a series of multiple regression analyses was conducted in which an attempt was made to discover the best multivariate explanation of the observed variance in each of the four dimensions of the CDQ (teacher respect for students, students’ confidence in teacher’s ability, learner cohesion, and learner voice). Research question three required the determination of multivariate relationships between the predictor variables and the dependent variable. Multiple regression analyses were used for the four CDQ variables (teacher respect for students, students’ confidence in teacher’s ability, learner cohesion, and learner voice) educational experience and identification with academics.

In deciding which multiple regression equations to run, only those variables that proved to be significant in the bivariate relationships were included in the multiple regression equations (See again Table 26). The results of the significant multivariate analyses are presented in tables 27, 28, 29, and 30.

*Multiple Regression Results for Teacher Respect for Students*

Relative to the dependent variable *respect*, three variables were significant at the bivariate level (past educational experiences, identification with academics, and educational attainment). When entered into a multiple regression equation all three
parameters were significant as well. Therefore, all were retained in the solution. Data analysis revealed that students with post-secondary experience reported a lower level of respect for teachers than did students with a high school diploma. This three-variable model explained 9.9% of the observed variance in the dependent variable. The results are presented in Table 27.

Table 27

*Three-variable Predictor Model for CDQ Measure: Teacher Respect for Students*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unstandardized coefficient (B)</th>
<th>Standardized coefficient Beta (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>20.841</td>
<td>11.465</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Educational experience</td>
<td>.160</td>
<td>.133</td>
<td>3.33</td>
<td>.001</td>
</tr>
<tr>
<td>Identification with academics</td>
<td>.175</td>
<td>.261</td>
<td>6.47</td>
<td>.000</td>
</tr>
<tr>
<td>Educational attainment</td>
<td>-.899</td>
<td>-.129</td>
<td>-3.20</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .099$; $F = 20.552$; df = (3, 563); $p = .000$

*Multiple Regression Results for Student Confidence in the Teacher’s Ability*

Relative to the dependent variable *confidence*, four predictors were significant at the bivariate level (past educational experiences, identification with academics, gender, and educational attainment). However, when entered into a multiple regression equation not all four of the variables achieved significance. Educational experiences, identification with academics, and educational attainment achieve significance. Therefore, a simplified model using only those three variables was run. The results are presented in Table 28. Data analyses revealed that students with postsecondary experience reported a lower
level of confidence in the teacher than students with a high school diploma. This three-variable model explained 8.5% of the observed variance in the dependent variable.

Table 28

*Three-variable Predictor Model for CDQ Measure: Student Confidence in the Teacher*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unstandardized Coefficient (B)</th>
<th>Standardized Coefficient Beta (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>25.036</td>
<td>11.746</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Educational experience</td>
<td>.150</td>
<td>.110</td>
<td>2.683</td>
<td>.008</td>
</tr>
<tr>
<td>Identification with academics</td>
<td>.191</td>
<td>.249</td>
<td>6.035</td>
<td>.000</td>
</tr>
<tr>
<td>Educational attainment</td>
<td>-.944</td>
<td>-.117</td>
<td>-2.838</td>
<td>.005</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .085$; $F = 16.931$; df = (3, 548)

_Multiple Regression Results for Learner Voice_

Relative to the dependent variable *learner voice*, two variables were significant at the bivariate level (educational experiences and identification with academics). When entered into a multiple regression equation both parameters were significant as well, and therefore, were retained in the solution. This two-variable model explained 5.4% of the observed variance in the dependent variable. The results are presented in Table 29.
Table 29

*Two-variable Predictor Model for CDQ Measure: Learner Voice*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unstandardized coefficient (B)</th>
<th>Standardized coefficient Beta (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>24.595</td>
<td>13.182</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Educational experience</td>
<td>.140</td>
<td>.114</td>
<td>2.760</td>
<td>.006</td>
</tr>
<tr>
<td>Identification with academics</td>
<td>.135</td>
<td>.195</td>
<td>4.746</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .054$; $F = 15.975$; df = (2, 561); $p = .000$

*Multiple Regression Results for Learner Cohesion*

Relative to the dependent variable *cohesion*, four variables were significant at the bivariate level (past educational experiences, identification with academics, gender, and educational attainment). However, when entered into a multiple regression equation not all four of the variables achieved significance. Educational experiences, identification with academics, and educational attainment achieve significance. Therefore, a simplified model using only those three variables was run. Data analyses revealed that students with postsecondary experience reported a lower level of cohesion than students with a high school diploma. This three-variable model explained 7.5% of the observed variance in the dependent variable. The results are presented in Table 30.
Table 30

*Three-variable Predictor Model for CDQ Measure: Learner Cohesion*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unstandardized coefficient (B)</th>
<th>Standardized coefficient Beta (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>23.819</td>
<td>11.632</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Educational experience</td>
<td>.223</td>
<td>.170</td>
<td>4.162</td>
<td>.000</td>
</tr>
<tr>
<td>Identification with academics</td>
<td>.145</td>
<td>.196</td>
<td>4.783</td>
<td>.000</td>
</tr>
<tr>
<td>Educational attainment</td>
<td>-.685</td>
<td>-.089</td>
<td>-2.161</td>
<td>.031</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .075; F = 15.113; df = (3,557); p = .000$

Summary of the Multivariate Relationships

The analyses of the multivariate relationships found four significant relationships. Educational experience, identification with academics, and educational attainment were significant predictors for the CDQ dimension *teacher respect for students*. Educational experience, identification with academics, and educational attainment were significant predictors for the CDQ dimension *confidence in the teacher’s ability*. Educational experience and identification with academics were significant predictors for the CDQ dimension *learner voice*. Educational experience, identification with academics, and educational attainment were significant predictors for the CDQ dimension *learner cohesion*.

Though contributing a small percentage to the variance of the CDQ measures, the strongest explanatory predictor variable for each of the four dimensions of the CDQ (teacher respect for students, students’ confidence in teacher’s ability, learner cohesion,
and learner voice) was the predictor variable *identification with academics*, which explained 2.6%, 2.1%, 1.1%, and 1.5%, respectively, of the observed variance in the four dimensions.

The important question of course, is whether or not the multiple regression equations yield better information than the simple bivariate analyses. Table 31 shows both the best bivariate predictors and the result of the multiple regression equations.

**Table 31**

*Results of Best Single and Multiple Predictors for Classroom Dynamics Variables*

<table>
<thead>
<tr>
<th>Outcome variable</th>
<th>Best single predictors</th>
<th>Multiple predictors</th>
<th>(R^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher respect for students</td>
<td>Identification with academics</td>
<td>Educational experience Identification with academics Educational attainment</td>
<td>.10</td>
</tr>
<tr>
<td>Confidence in teacher’s ability</td>
<td>Identification with academics</td>
<td>Educational experience Identification with academics Educational attainment</td>
<td>.09</td>
</tr>
<tr>
<td>Learner voice</td>
<td>Identification with academics</td>
<td>Educational experience Identification with academics</td>
<td>.05</td>
</tr>
<tr>
<td>Learner cohesion</td>
<td>Identification with academics</td>
<td>Educational experience Identification with academics Educational attainment</td>
<td>.08</td>
</tr>
</tbody>
</table>
Since the independent variables predicting perceptions do not co-exist in isolation it was appropriate to examine the relationships and potential interactions of the variables simultaneously. Therefore, perceptions may be affected by a combination of variables having a shared variance. Knowledge about the population sample, the instrument, and the analyses of data gives reason to accept the idea that the independent variables simultaneously affect classroom perceptions. Therefore, it the opinion of the researcher that the multiple correlations reflect a significant increase in variance as a result of multiple regression; and they show greater predictor power than bivariate analyses.

Secondary Analyses

The research questions called for analyses that focused on the outcome variables of the CDQ. However, additional analyses were conducted that opened up the possibility of the examination of a multi-stage model. In order to accomplish this, additional analyses were required to help flesh the multiple regression analyses reported in the previous section. Specifically, the predictor variables were examined. In these additional analyses the significant predictor variables from the previous analyses (identification with academics, educational experience, and educational attainment) were treated as mediating variables. This required the analyses of three additional multiple regressions. Next, the demographics were introduced to determine what could be explained of those variances. This secondary analysis was conducted to determine the extent that the demographics variables (gender, race, first-generation college student, past household income, and current household income) also predicted the three significant predictors stated above. Backward deletion (in multiple regressions) was performed beginning with all the
variables then deleted one at a time if they did not show significance to the measure.

These findings are presented in Tables 32, 33, and 34.

The two-variable model predicting *educational experience* explained approximately 2% of the observed variance. Both parameters contributed significantly to the model.

Table 32

*Two-variable Model for Variable: Educational Experience*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Unstandardized coefficient ($B$)</th>
<th>Standardized coefficient (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>19.586</td>
<td>16.596</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>1.168</td>
<td>.107</td>
<td>2.607</td>
<td>.009</td>
</tr>
<tr>
<td>First generation college student</td>
<td>1.075</td>
<td>.087</td>
<td>2.124</td>
<td>.034</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .019$; $F = 5.747$; df = (2, 587); p = .003

The two-variable model predicting *identification with academics* explained approximately 10% of the observed variance. Both parameters contributed significantly to the model.

Table 33

*Two-variable Model for Variable: Identification with Academics*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Unstandardized coefficient ($B$)</th>
<th>Standardized coefficient (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>40.017</td>
<td>24.372</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>4.224</td>
<td>.219</td>
<td>5.372</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.191</td>
<td>.205</td>
<td>5.027</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .100$; $F = 30.593$; df = (2, 549); p = .000
The three-variable model predicting *educational attainment* explained
approximately 7.7% of the observed variance. All three parameters contributed
significantly to the model.

Table 34

*Three-variable Model for Variable: Educational Attainment*

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Unstandardized coefficient (B)</th>
<th>Standardized coefficient Beta (β)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.196</td>
<td>.110</td>
<td>2.612</td>
<td>.009</td>
</tr>
<tr>
<td>Age</td>
<td>.018</td>
<td>.209</td>
<td>4.956</td>
<td>.000</td>
</tr>
<tr>
<td>Past household income</td>
<td>.057</td>
<td>.120</td>
<td>2.856</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note. Model Statistics: $R^2 = .077$; $F = 14.599$; df = (3, 525); $p = .000$

*Graphic Presentation of Full Explanatory Models.* Figures 7-10 illustrate the
relationship of significant demographic variables to the predictor variables educational
experience, identification with academics, and educational attainment. These three
variables in turn predict the four CDQ measures.

Figure 8 illustrates the significant relationships of the demographic predictor
variables to the three significant predictor variables of the dependent variable *respect*. As
indicated by the Beta values, the demographic variables, modestly impact the predictors
of the outcome variable *respect*. The variable educational attainment reflected a negative
Beta value. This portion of the model revealed that students with post-secondary
experience reported less respect for teachers than those students with a high school
diploma.
Figure 8. Relationship of demographic variables to predictor variable respect

Figure 9 illustrates the significant relationships of the demographic predictor variables to the three significant predictor variables of the dependent variable confidence. As indicated by the Beta values, these demographic variables modestly impact the predictors of the outcome variable confidence. The variable educational attainment
reflected a negative Beta value. This portion of the model revealed that students with postsecondary experience reported less confidence in teachers than students with a high school diploma.

Figure 9. Relationship of demographic variables to predictor variable confidence

Figure 10 illustrates the significant relationships of the demographic predictor variables to the three significant predictor variables of the dependent variable voice. As
indicated by the Beta values, these demographic variables modestly impact the predictors of the outcome variable *voice*.

*Figure 10. Relationship of demographic variables to predictor variable voice*

Figure 11 illustrates the significant relationships of the demographic predictor variables to the three significant predictor variables of the dependent variable *cohesion*. As indicated by the Beta values, these demographic variables modestly impact the predictors of the outcome variable cohesion. The variable educational attainment reflected a negative Beta value. This portion of the model revealed that students with a high school diploma tend to be more strongly integrated or feel more of a part of the class than postsecondary participants.
These relationships translate the students’ level of respect, confidence, voice, and cohesion. Beta (β) values are presented indicating the amount of change in the dependent variable associated with a one standard deviation unit change in the predictor variable, with all the other predictor variables held constant. Demographic variables, early
educational experiences, whether or not students feel that they should attend college or even belong in college, as well as previous post-secondary experiences, often define experiences students face in current classroom situations.
CHAPTER 5
DISCUSSIONS AND IMPLICATIONS

The purpose of this chapter is to provide an interpretation of the findings presented in Chapter 4. The relationship between the findings of the study and their implications for practice are also addressed here. The information is presented in the following major sections: Summary of Findings, Principal Findings, Discussion of Findings, Implications for Practice, and Suggestions for Future Research.

Summary of Findings

The broad purpose of this study was to understand how developmental studies students perceive classroom dynamics and why different students view classroom environments differently. This study attempted to answer the following research questions:

1. How do developmental studies students rate their classroom with respect to the four dimensions of classroom dynamics as measured by the classroom dynamics questionnaire?

2. To what extent do selected demographic characteristics, past experiences of education, and identification with academics independently predict developmental studies students’ perceptions of classroom dynamics?

3. To what extent do selected demographic characteristics, past experiences of education, and identification with academics simultaneously predict developmental studies students’ perceptions of classroom dynamics?
**Bivariate Analyses**

To determine the extent that predictor variables (demographics, past experiences of education, and identification with academics) independently predict perceptions of classroom dynamics, bivariate analyses were conducted. Relationships between variables were considered significant at the .05 level. Simple correlation analyses were conducted to determine significance or non-significance among relationships. Simple regression analyses were conducted on the predictor variables and the age and income scales. In the case of the dichotomous predictor variables (gender, race, first generation college student, and educational attainment) a series of *t*-tests were conducted.

The bivariate analyses conducted in this study revealed that there were no statistically significant differences between any of the four CDQ measures and age, race, past and current income levels, and whether or not the student was a first-generation college student. Subsequently, the study’s bivariate analyses findings are as follows: (a) educational experience, identification with academics, and educational attainment as predictors for the CDQ dimension *teacher respect for students*; (b) educational experience, identification with academics, gender, and educational attainment as predictors for the CDQ dimension *students’ confidence in the teacher’s ability*; (c) educational experience and identification with academics as predictors for the CDQ dimension *learner voice*; and (d) educational experience, identification with academics, gender, and educational attainment as predictors for the CDQ dimension *learner cohesion*. Table 35 depicts the percentage of variance of the bivariate relationships.
As depicted in this table, the percentage of variance explained is modest. However, given the limited scope of this study, as discussed in the logical framework in Chapter 3, only one of the possible components were measured to explain variation.

The strongest explanatory predictor variable for explaining, separately, the proportion of the variance in each of the four dimensions of the CDQ (respect, confidence, voice, cohesion) was identification with academics, which explained 6.3%, 5.8%, 4.0%, and 4.0%, respectively, of the observed variance in the four dimensions. Overall, these correlations are modest; however, they are significant.

**Multivariate Analyses**

To determine the extent that predictor variables (demographics, past experiences of education, and identification with academics) simultaneously predict perceptions of
classroom dynamics, a series of multiple regression analyses were conducted. Relationships between variables were considered significant at the .05 level.

Only the variables that proved to be significant in the bivariate analyses were considered for multivariate analyses. The analyses conducted in this study revealed that there were no statistically significant differences between any of the four CDQ measures and gender. Subsequently, the study’s multivariate analyses findings are as follows: (a) a three-variable model, educational experience, identification with academics, and educational attainment as significant predictors for the CDQ dimension *teacher respect for students*; (b) a three-variable model, educational experience, identification with academics, and educational attainment as significant predictors for the CDQ dimension *confidence in teacher's ability*; (c) a two-variable model, educational experience and identification with academics as significant predictors for the CDQ dimension *learner voice*; and (d) a three-variable model, educational experience, identification with academics, and educational attainment as significant predictors for the CDQ dimension *learner cohesion*. These predictions explained 9.9%, 8.5%, 5.4%, and 7.5%, respectively, of the observed variance in the four dimensions.

For a more complete explanation of what occurs with the predictor variables of the CDQ measures, additional multi-stage analyses were conducted in which the significant predictors in the above-stated models were examined. The significant predictors were educational experience, identification with academics, and educational attainment. An analysis was conducted to determine the extent that demographic variables (gender, race, first generation college student, past household income, and current household income) also predicted the three significant predictors presented above,
thus, a secondary analyses on the four CDQ variables as depicted in Figures 7-10 of Chapter 4. Although making a modest impact, multivariate and multi-stage analyses did yield considerable improvement in the predicted power of the variable *identification with academics*. Further discussions of these findings are found in the next two sections.

**Principal Findings**

Several studies have been conducted to examine student perceptions on classroom dynamics. However, few studies have focused primarily on developmental studies classroom dynamics. The theories of Lewin (1948) and Moos (1979) provide ways of understanding social dynamics. Their approaches to classroom dynamics emphasize that teacher and student qualities, characteristics, and relationships affect learning environments and can dictate students’ perceptions in particular social settings. They further argue that perceptions can contribute to the understanding of educational processes and outcomes. This study produced three principal findings:

1. Dynamic social-psychological variables are better predictors than static variables. Personal characteristics significantly predict, but at a modest level. This is not surprising because, in this study, the major amount of variance is related to the predicted and not the predictor, that is, to the perceived, not the perceiver.

2. There were many variables not considered in this study related to the composition of the classroom, the other students, teacher demographic characteristics, and the teachers’ behavior. Therefore, variables related to the individual, whether they are demographic or whether they are social-psychological variables, predicted a small but significant amount of the observed variables in perceived classroom environment.
3. The variable best predicting what goes on in developmental studies classroom was Identification with Academics.

Discussion of Findings

Regarding the predictive power of demographic variables on perceptions of classroom dynamics, the present study revealed similar conclusion to those of other studies. Although the present study was limited, still the findings can be compared to other studies. Generally speaking, the correlations were modest. However, certain results of the present study do merit comparison and discussion.

There are many different ways of understanding classroom dynamics and many variables to consider. Although there is no definitive answer to the issue, based on logic and a review of the literature, four classes of determinants are proposed. Arguably, the difference in perceptions of classroom dynamics in the developmental studies classroom can be based on the following variables: (a) demographic and social characteristics; (b) past experiences of education; (c) educational attainment; and (d) identification with academics.

Overall Ratings of the CDQ Variables

Figures 4 and 5 (see again page 105) illustrate the distribution of scores for the CDQ measures teacher respect for students and confidence in the teacher’s ability. As stated, these illustrations show a marked ceiling effect. Figures 6 and 7 (see again page 106) illustrate the distribution of scores for the CDQ measures learner voice and learner cohesion. Again a ceiling effect occurs, however, not as strong as the effects depicted in Figures 4 and 5. These finding shows that students were willing to exercise their
judgment in their responses. I argue that two possible explanations exist for the observed ceiling effect.

The first possibility is that the classrooms were good enough to justify the ceiling effect. This is supported by the notion that the particular school where the data were collected took special measures to meet the needs of the developmental studies students. However, a second possibility is that the students were not willing to judge their instructor in a way that would distribute the variance more evenly.

Demographic Variables

In two of the four dimensions of classroom dynamics, students’ confidence in the teachers’ ability and learner cohesion, gender accounted for a small percentage of variance. Race, age, and past and current income levels all had little and non-significant predictor power on classroom perceptions in the four dimensions.

As noted in Chapter 2, demographic variables such as age, race, gender, and income have little predictor power in determining classroom perceptions. Studies by Byrne, Hattie, and Fraser (1986); Darkenwald (1987); Michie, Glachan, and Bray (2001); Oliva (2003); and Thomas (2004) support this claim. However, in the present study, gender contributed (though modest) significantly to the variance in two dimensions of the CDQ, confidence in the teacher’s ability and learner cohesion. Though contributing significantly in these two dimensions, Beta values revealed negative correlations. The study findings revealed that male students rated confidence in the teacher’s ability and learner cohesion lower than female students. Therefore, it can be stated that males have less trust or belief in the competence and commitment levels of teachers. Additionally, it can also be stated that males feel less support from other learners in the classroom and do
not feel comfortable sharing and associating with other learners. These findings might be due to the idea that females tend to bond more closely with others than males, and thus, form closer and supportive relationships with others. Therefore, females can experience a different perception of environments than males. These findings might also be due to psychological variables and the plight of Black males in education as asserted by Osborne (1997, 1999, 2001, and 2002) and Steele (1992). This idea will be discussed later in this section. It should be noted that of the 645 students responding to the questionnaire, 199 were Black males.

**Educational Experiences**

The present study revealed that early educational experiences significantly impacted classroom perceptions in all four dimensions of classroom dynamics. According to the literature, Michie et al., (2001) assert that students with poor experiences sometimes lack confidence in themselves as learners and sometimes underestimate their own ability. The stage of life at which they attend college can cause unexpected levels of self-esteem, stress, and identity confusion. Michie’s analysis of his own study reported that positive past educational experiences can translate into positive approaches to studying at college and positive relationships formed with others. Though age was not a significant predictor of classroom dynamics for this present study, Michie (2001) contends that for re-entry students, analysis on age reported worse relationships with teachers and poorer quality of friendships with others.

The findings of this study reveal that students with positive early educational experiences, i.e., those who liked attending school and who did well in classes in elementary and high school, had significantly high ratings for the teachers’ respect for
student; they believe that the teacher is competent and committed to the students; the learners feel a sense of sharing, support, and affiliation with the other learners in the class; the learners feel that they can express their ideas and true feelings with the other learners in the classroom; and, in other words, the students felt comfortable and were somewhat successful in school.

Educational Attainment

The present study revealed that educational attainment significantly impacted classroom perceptions in all four dimensions of classroom dynamics. The t-test analyses revealed that students with high school diplomas rated teacher respect, teacher confidence, and learner cohesion higher than those who have participated in other post-secondary experiences and/or have attained post-secondary awards. A point biserial analysis revealed a negative correlation in all four areas of the CDQ thus, a higher rating by students with a high school diploma in all four areas. This finding might be explained and perhaps attributed to the opinion that high school students tend to need to have more closely teacher-student relationships than students who participate in post-secondary educational experiences. On the other hand, according to Carta-Falsa’s (2002) study adult students do attempt to establish relationships with instructors and other learners in the classroom. However, post-secondary students are expected to be more independent and self-directed than high school students. Also, the nature of some classes lend to independent study, which does not impact teacher-student relationships, ability of the teacher, nor relationship forming with others in classrooms. One of three themes revealed in Carta-Falsa’s (2002) study is that instructors who focus on principles of effective
teaching do not express strong desires for collaboration with students. This finding could further explain the ratings of the participants in the four areas of classroom dynamics.

*Identification with Academics*

The present study revealed that the strongest single explanatory predictor for each of the four dimensions of classroom dynamics is *Identification with Academics*. The analyses of this present study indicated the mean item mean of the identification with academics scale as 4.5 on a 6.0 scale. Those students whose academic pursuits, performance, and outcomes had a positive effect on their overall self-esteem rated the respect subscale high. However, others apparently indicated lower ratings.

This finding is reflective of studies which assert that psychological variables such as academic self-esteem and identification with academics impact perceptions of classrooms or classroom dynamics (Steele 1992, 1997 & Osborne 1997). This study assessed 535 Black students, 199 of which were Black males. Emerging as an important contribution to the racial achievement gap, the concept of identification has emphasized factors that prevent students of color from viewing themselves as academically competent and thus viewing themselves as capable of achieving success in the classroom. As Osborne’s studies indicate, social and cultural barriers might be contributing causes of underachievement of Blacks, especially males. Because Black males are sometimes discouraged and prevented from incorporating school and education into their self-view, it is suggested that they have lower levels of identification with academics than other students.

Though the present study did not reveal any predictor power of income on classroom dynamics, 35% of the participants reported past household incomes less than
$20,000, and 36% reported current household incomes less than $20,000. Steele (1992) contends that disadvantaged minority groups, as in this case of a large percentage of the participants, achieve poorer outcomes at every level than do their White and Asian American peers. He asserts that even when resources are available, Blacks tend to underachieve.

According to Osborne (1997), oftentimes it is a problem for students who lack identification with schooling to feel valued by the teacher. This failure to identify with schooling translates to a lack of students feeling respected by the teacher and to the low level of confidence that students have in the teacher. This lack of identification also translates into disengagement with other learners in the class. Students do not feel a sense of sharing, support, and affiliation and do not feel comfortable expressing their ideas and true feelings. Osborne’s study concludes that no other group except Black males appeared to experience serious and significant disidentification with academics.

Further Discussion

Although the variables in this present study were theoretically chosen and found to be reliable, ultimately, they only explained a small percentage of the variance in classroom perceptions.

The literature suggests the effect of certain demographic variables and their importance on classroom perceptions. The literature also offers possible situations that students bring to social settings such as a classroom. The varied degrees of outside issues and problems that students bring to the classroom can and often do alter perceptions. Perhaps these issues cloud perceptions, as students sometimes tend to think of and focus heavily on distant concerns affecting their personal lives. So what is happening to them
outside of the class perhaps shades what is actually going on with them as they participate and review classroom settings.

In this study the statistical relationships between the predictor and outcome variables were significant, however modest. Still, given the specific focus of this study with this particular group of students, there are some practical points to consider, suggesting an explanation of the study’s results. It must be remembered what is not measured is also a function of what is perceived.

Although it seems quite obvious that what a teacher does will affect what a student perceives, less obvious is the fact that who a student is changes that perception. It must be remembered that the actual measurement of what took place in the classroom was not assessed, only the student perceptions. Consequently, it was not expected that the explanatory power of a model using this concept would explain large proportions of variance. Rather, the goal was to determine the extent to which the students’ perceptions and characteristics would explain the variance.

The marked ceiling effect attenuates the correlations. Consequently, it is unknown whether or not those correlations could have been much more sizable. If a model of what teachers perceive in terms of respect consists of teacher behavior, what they do, and the classroom composition, then stronger correlations would have been expected. However, subject matter, class levels, student abilities, and many other variables were not examined. All that was measured were internal realities, thus only modest predictions were sought.

Demographic characteristics of students, characteristics of instructors and other students in classroom settings, as well as other external forces can and often have effects
on the psychological thinking of students. To students, judgments about perceptions are sometimes secondary to what is actually happening to them. Experience has taught that many students’ primary concern is their next meal or what is going on in their household, or even what happened prior to arriving to school. In these instances, there was little or perhaps no concern about what would happen in the classroom. Such thinking and behavior can and do sometimes shape processes and influence perceptions. Although the analyses were significant and modest, the question to consider is, “Do adult developmental studies students really concern themselves with perceptions as much as their lifestyles and their fit into the educational realm?

Do instructors and students actually “know” one another? Do students really care to know the instructor when they are experiencing something so much more traumatic as financial issues? Do older students feel as academically competent as younger students? What about feelings of self-worth? I suggest that these and other factors are functions of what students actually experience while in classroom settings.

The findings of this study can be related to Moos’ (1979) concept of classroom environment which points to the need for a unifying conception of the determinants of classroom social environments. Emphasized is the importance and critical influence of the interrelationships among variables. Moos further asserts that the quality and perception of the classroom environment may be regarded as a function of the interaction between environmental factors, student characteristics, and teacher characteristics.

It can be concluded that the percentage of what is actually perceived is greater than what is not perceived. Because of unmeasured variables, perceptions are somewhat limited and perhaps cloudy. This claim is again made to support the findings of the
independent variables having significant predictive power on the dependent variables of classroom dynamics.

Implications for Practice

The findings of this study showed significant, but, modest correlations between predictor and outcome variables for classroom dynamics. Yet, several practical implications can be drawn from this study with suggestions for adult education instructors, practitioner of community and technical colleges, and others who wish to improve the service programs for this growing population of students.

As noted, student perceptions can translate to positive or negative outcomes. Therefore, a commitment to student success should be paramount. Adult educators should also be dedicated to student learning and success, realizing that developmental studies students are entering college mostly unprepared for the journey ahead. Educational strategies must be developed and utilized to maximize the success rate of this population of students. Regardless of their previous educational experiences, developmental studies students are in college and are enrolled for a variety of reasons. Winston (1994) asserts that a better understanding of student perceptions can be used to improve instructional approaches and to evaluate different techniques for presenting material in diverse disciplines. For that reason practical suggestions are offered.

Faculty and staff development is of foremost important in order to serve effectively this population of students. The study can imply that college administrators should hire and provide faculty development services for its instructors. This effort should:

- include a focus on teaching styles
• promote positive classroom practices to influence and maximize student learning and success
• assess student learning needs
• include sessions on diversity
• include activities to assist instructors to recognize problems as they develop
• focus on educational practices
• make provisions for on-going sessions on optimal classroom environments
• provide opportunities for evaluations of classroom climates

Student orientation sessions to inform students of services and programs developed for their success should also be held. Formal student discussions, focus groups, and engagement activities will show a commitment of the college to increase student participation in and outside of the classroom, thus, addressing the need of students to feel a sense of belonging to a class where they can freely participate.

It is also suggested that college administrators review student evaluations of instructors to determine the students’ perception of the instructor and the class. Collecting data can aid in determining where problems exist and can be used to improve practices and enhance service programs.

Faculty must also advocate for their own development by attending conferences and workshops designed to address issues facing community and technical college students. Also, faculty should make a practice of contributing to their own development by reading professional literature, especially on adult learning. Faculty development is critical to the development of the entire developmental studies program.
Practitioners can assess physical and environmental climates for needed school and classroom improvements. As noted in a study by Hagedorn, Perrakis, and Maxwell (2006), there is a connection between faculty and student perceptions of quality interactions. This study supports this idea. When teachers’ and students’ interpersonal relationships are in agreement about classroom social environment, feelings of self-worth are developed that will influence learning behavior.

Suggestions for Future Research

The present study attempted to determine the nature of classroom perceptions of students enrolled in developmental studies classes. The study’s results suggest that psychological variables were the main causes of student perceptions. These results are not true for all students enrolled in such classes. However, the information and findings presented can certainly influence college practitioners to evaluate their own programs and services and to investigate further the learning outcomes of this particular group of students. Therefore, the following recommendations are suggested for future research:

1. The study employed a convenience sampling of students. Future research should include a replicate study using other groups of adult developmental studies students at other in and out-of-state community and technical colleges.

2. Further research should include a wider range of demographic variables. The present study was conducted at one technical college with a high percentage of Black student population. Therefore, race did not prove to be a factor for perceptions. A replicate study to include more ethnic groups is suggested to generalize further the statistical implications.
3. Demographic data pertaining to teachers in the classroom where the instrument was administered were not collected in the present study. This factor was omitted to protect the risk of the respondents’ anonymity. Future studies that gather demographic information about the teacher should be considered to determine if the information has any effect on classroom perceptions.

4. This study employed quantitative methodology. However, supplementary qualitative approaches in concurrence with quantitative research methodology could perhaps provide additional information regarding classroom perceptions. Qualitative approaches such as interviews can collect information regarding what actually goes on in the lives of this population of students. This information can reveal detailed information concerning whether or not students feel that they fit in a college setting; if age is truly a factor affecting their learning; if students feel that instructors’ teaching styles and approaches are bias to the younger or traditional age students; concerns of college participation while juggling family, financial, and job responsibilities; actual feelings about instructors and other students in their classes; and students’ own concerns about underpreparedness. These factors are certainly important functions of what students bring into classroom settings and can translate into perceptions and learning outcomes.

5. Demographic variables such as race, age, and gender, do not significantly predict perceptions (Oliva, 2003 and Thomas, 2004). Therefore, there has to be a pursuit of other variables to include as predictors of classroom dynamics. In order to build a fuller model and explain more of the small percent that was found from
the study, perhaps capturing some of the behaviors of the classroom would be beneficial in another study.

6. Any attempt to explain more fully the confidence that students place in teachers and the assessment of the teacher’s ability has to include some characteristics about the teacher and about the classroom, none of which were measured. Therefore, for future research, characteristics about the teacher should be assessed for comparison to student responses based on their own characteristics; also the consideration of methods of collecting data to measure teacher perceptions of students comparing the results with students perceptions of teachers.

7. Modest correlations were likely due to the fact that a “ceiling effect” occurred in the dependent variable. The modest correlations of this study are at least partially, perhaps principally attributable to the fact that an extremely limited variance in the dependant variables existed. Therefore, it was probably impossible for the correlations among variables to be high. These ceiling effects which are best depicted in Figures 4-7 (Chapter 4) create a situation in which there was a limited variance and the effective measurement of co-variation was not possible. Consequently, it would be difficult to recommend the CDQ for further research of the developmental studies population in its current form. In order to prove a valuable research tool, the variance on each of the four measures of the CDQ has to be substantially improved.

8. Future researchers should be careful when measuring past income levels of adult populations. There has to be a method of knowing the year in which the data
reflects income in order for allowance of standardized equating on standard
dollars for the current year.

9. Overall, this study had a restrictive scope that only looked at student perceptions.

To increase the explanatory power of future studies, additional data needs to be
collected. This data would perhaps include observational data of classrooms,
teachers’ perceptions, group descriptions, and settings as a whole. A more
complete implementation of the model would undoubtedly do this.
References


postsecondary education (pp. 87-102). In New Directions for Higher Education No.108. San Francisco: Jossey-Bass


Georgia, Athens.


Valentine, T., Oliva, J., & Thomas, S. (2002, November). Conceptualizing and measuring interpersonal relationships in adult education classrooms. A Presentation at the 51st Annual American Association for Adult and Continuing Education Conference (AAACE), St. Louis. MO.


APPENDICES
APPENDIX A

Final Instrument

DEVELOPMENTAL STUDIES QUESTIONNAIRE
DEVELOPMENTAL STUDIES QUESTIONNAIRE

Part I: YOUR CLASSROOM

DIRECTIONS. Not all classrooms are the same. 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.

To what extent do you agree with each statement?  

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teacher treats all students fairly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The teacher provides excellent feedback on students’ learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The teacher adequately covers the course content.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The teacher respects the diverse backgrounds of the students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The teacher has excellent teaching ability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The teacher is knowledgeable about the course content.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The teacher makes learning interesting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The teacher treats students with respect.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The teacher comes to class prepared.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The teacher never talks down to students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. The teacher works hard to help students learn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. The teacher really listens when students are speaking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. The teacher respects students’ ideas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent do you agree with each statement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Students feel free to speak out in class.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Every student gets a chance to speak in the class.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Students feel comfortable expressing their opinions.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Individual students rarely dominate discussions.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Students feel comfortable disagreeing with one another.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Students support each other’s learning.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Students learn from one another.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Students in the class enjoy learning together.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Students share learning resources with each other.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Students work well together.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Students are respectful of one another when speaking in class.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Students rarely disrupt one another’s comments.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Students care about each other’s learning progress.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Students have developed friendships in the class.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part II: YOUR EDUCATIONAL EXPERIENCES

DIRECTIONS. Everyone has different experiences with education. Think back to the time you have spent in classrooms in elementary school and high school. Overall, how well do the following statements describe your educational experience? Circle the number that indicates your response.

28. In elementary school and high school, I seldom did well in classes ........................................1 2 3 4 5 6
29. In elementary school and high school, other students almost always treated me well in class .................1 2 3 4 5 6
30. In elementary school and high school, people almost always made me comfortable in class ................1 2 3 4 5 6
31. In elementary school and high school, my teachers almost always liked my school work ....................1 2 3 4 5 6
32. In elementary school and high school, I almost always looked forward to attending my classes .............1 2 3 4 5 6
33. In elementary school and high school, I seldom enjoyed my classes ..................................................1 2 3 4 5 6
34. In elementary school and high school, my educational experiences were almost always successful.............1 2 3 4 5 6
PART III: YOUR OPINION ABOUT COLLEGE

DIRECTIONS. Please read each statement and circle the number that indicates your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>35. Being a good student is an important part of who I am</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>36. I feel that the grades I get are an accurate reflection of my abilities</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>37. My grades do not tell me anything about my academic potential</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>38. I don't really care what tests say about my intelligence</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>39. School is satisfying to me because it gives me a sense of accomplishment</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>40. If the tests we take were fair, I would be doing much better in school</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>41. I am often relieved if I just pass a course.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>42. I often do my best work in school.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>43. School is very boring for me, and I'm not learning what I feel is important.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>44. I put a great deal of myself into some things at school because they have special meaning or interest for me.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>45. I enjoy school because it gives me a chance to learn many interesting things.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>46. I feel like the things I do at school waste my time more than the things I do outside of school.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>47. No test will ever change my opinion of how smart I am.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>
PART IV: BACKGROUND INFORMATION

48. What is your gender? ____________________

49. What is your race / ethnicity? ____________________

50. What is your age? ______________________________

51. Are you the first person in your family to attend college? _____________

52. What is your educational background? (check one)

☐ Less than a high school diploma
☐ High school diploma
☐ GED
☐ Other ________________________

53. When you were in high school, approximately what was your family’s household income? (check one)

☐ Less than $10,000 ☐ $10,000 – $19,999
☐ $20,000 – $29,999 ☐ $30,000 – $39,999
☐ $40,000 – $49,999 ☐ Above $50,000

54. What is your current household income? (check one)

☐ Less than $10,000 ☐ $10,000 – $19,999
☐ $20,000 – $29,999 ☐ $30,000 – $39,999
☐ $40,000 – $49,999 ☐ Above $50,000

Thank you very much. We appreciate your help with this important research!
APPENDIX B

Responses to Educational Attainment
APPENDIX B

*Responses to Educational Attainment Information*

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 +3</td>
<td>1</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>1</td>
</tr>
<tr>
<td>B.S. Biology</td>
<td>1</td>
</tr>
<tr>
<td>Child Care Diploma (2-year Degree)</td>
<td>1</td>
</tr>
<tr>
<td>Specialist Certificate</td>
<td>1</td>
</tr>
<tr>
<td>Trade School</td>
<td>1</td>
</tr>
<tr>
<td>Computer Diploma</td>
<td>1</td>
</tr>
<tr>
<td>College</td>
<td>13</td>
</tr>
<tr>
<td>Some College</td>
<td>26</td>
</tr>
<tr>
<td>Some College (90 Credit Hours)</td>
<td>1</td>
</tr>
<tr>
<td>Two years college</td>
<td>1</td>
</tr>
<tr>
<td>Two years college</td>
<td>5</td>
</tr>
<tr>
<td>Degree in Managerial Studies</td>
<td>1</td>
</tr>
<tr>
<td>College Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Two-year Cosmetology Diploma</td>
<td>1</td>
</tr>
<tr>
<td>Certificate</td>
<td>1</td>
</tr>
<tr>
<td>Two years in a business college</td>
<td>1</td>
</tr>
<tr>
<td>Basic Nursing</td>
<td>1</td>
</tr>
<tr>
<td>Vocation School</td>
<td>1</td>
</tr>
<tr>
<td>Degree</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix B (Continued)

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-year College</td>
<td>1</td>
</tr>
<tr>
<td>Atlanta Job Corps</td>
<td>1</td>
</tr>
<tr>
<td>Business College</td>
<td>1</td>
</tr>
<tr>
<td>Technical Degree</td>
<td>1</td>
</tr>
<tr>
<td>Associate of Arts Degree</td>
<td>2</td>
</tr>
<tr>
<td>Associates</td>
<td>2</td>
</tr>
<tr>
<td>GMI (Georgia Medical Institute)</td>
<td>1</td>
</tr>
<tr>
<td>Training Corps</td>
<td>1</td>
</tr>
<tr>
<td>Associates Degree in Business</td>
<td>1</td>
</tr>
<tr>
<td>Two-year Associates Degree</td>
<td>1</td>
</tr>
<tr>
<td>Networking Technology Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Atlanta Area Tech</td>
<td>1</td>
</tr>
<tr>
<td>One year Atlanta Area Tech</td>
<td>1</td>
</tr>
<tr>
<td>History and Math at Georgia Perimeter</td>
<td>1</td>
</tr>
<tr>
<td>College</td>
<td>1</td>
</tr>
<tr>
<td>Business Office Technology Diploma/Certified Customer Service</td>
<td>1</td>
</tr>
<tr>
<td>Two years college; four other colleges; had to drop out because</td>
<td></td>
</tr>
<tr>
<td>algebra would keep me from going any further</td>
<td>1</td>
</tr>
<tr>
<td>Other (did not indicate specific education attained)</td>
<td>24</td>
</tr>
</tbody>
</table>
APPENDIX C
Permission Letter from Dr. Kwang Kim
Permission Letter from Dr. Kwang Kim

From: Kwang Kim [KIMK1@WESTAT.com]
Sent: Thursday, March 16, 2006 1:55 PM
To: Davis, Daisy
Cc: tvnj@aol.com
Subject: Permission to use Adult Students Past Experiences of Education Scale

Dear Ms. Daisy Davis,

You have my permission to use the Adult Students Past Experiences of Education Scale in your doctoral dissertation research guided by Dr. Thomas Valentine at the University of Georgia.

Good luck!

Kwang

Kwang Kim, Ed.D.
Westat
Senior Study Director
1650 Research Blvd.
Rockville, MD 20850
301-517-4078
APPENDIX D
Permission Letter from Dr. Jason Osborne
Permission Letter from Dr. Jason Osborne

From: Jason Osborne [jason_osborne@ncsu.edu]
Sent: Monday, January 30, 2006 4:26 PM
To: Davis, Daisy
Subject: Identification with academics scale

Daisy,

I received your letter requesting permission to use the Identification with academics scale. You certainly may. Let me know how your research turns out.

Jason

Jason W. Osborne, Ph.D.
Director of Graduate Programs
PI -- IMPACT evaluation
Associate Professor of Educational Psychology
Office: Poe 602
Phone: (919) 244-3538 (cell)
Fax: (919) 513-1687
e-mail: mailto:jason_osborne@ncsu.edu
My Web page: http://www4.ncsu.edu/~jwosbor2/home.html
Educational Psychology Program web page: http://ced.ncsu.edu/ci/ed_psych.html
IMPACT web page: http://ced.ncsu.edu/impact/
Mailing Address:
Curriculum and Instruction,
Poe Hall 602, Campus Box 7801
North Carolina State University
Raleigh, NC, 27695-7801
APPENDIX E

Research Information Sheet for Participants
PERCEPTIONS OF CLASSROOM DYNAMICS BY DEVELOPMENTAL STUDIES STUDENTS AT A TWO-YEAR TECHNICAL COLLEGE

Research Information Sheet for Participants

We are currently conducting a study about classroom dynamics in adult education classrooms. The study is entitled, “Perceptions of Classroom Dynamics by Developmental Studies Students at a two-year Technical College.” We are trying to better understand the manner 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 Daisy W. Davis, a doctoral student from the Department of Adult Education at The University of Georgia, under the guidance of Dr. Thomas Valentine, Associate Professor of Adult Education (706-542-4017). The information you provide will be used in a dissertation prepared by Daisy Davis and supervised by Dr. Thomas Valentine.

Your participation in this study is **strictly voluntary**. 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**. 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. 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.

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 30 minutes. 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—please contact Daisy Walker Davis via telephone number 404-297-9522, Ext. 1163, or Dr. Thomas Valentine via telephone number 706-542-4017. The Department’s mailing address is the Department of Adult Education, 407 River’s Crossing, The University of Georgia, Athens, Georgia 30602. For questions or problems that may arise during this study, please call or write: Human Subjects Office, The University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone No. (706) 542-3199; E-Mail Address: IRB@uga.edu.

**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!
APPENDIX F

Instructions for Administering the Developmental Studies Questionnaire
INSTRUCTIONS FOR ADMINISTERING
THE DEVELOPMENTAL STUDIES QUESTIONNAIRE

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

2. The researcher will introduce herself to the students.

3. The researcher will explain her presence in the classroom and the purpose of the study.

4. The researcher will distribute the *Research Information Sheet* to each student and allow students time to read it.

5. The researcher will review the following points discussed in the *Research Information Sheet*:
   a. Participation is strictly voluntary. Participants may return a blank questionnaire should they choose not to participate.
   b. Identities and participation are completely anonymous.

6. The researcher will place a large envelope in a visible and neutral location in the classroom for collection of the questionnaires. The participants will be instructed to place the completed questionnaires inside the envelope.

7. The researcher will distribute the questionnaires to the students and will then read the directions for completing the questionnaire.

8. The researcher will advise the students that each questionnaire consists of seven pages: a front page, five inside pages which include the four-part questionnaire, and a back page.

9. The researcher will inform the students that she will remain in the classroom to answer any questions or address any concerns that might arise.

10. Following the completion of the questionnaires, the researcher will express appreciation to the students for their participation in the study.

11. The researcher will collect the envelope and exit the classroom.
APPENDIX G
Descriptions of Respondents
**Descriptions of Respondents**

**APPENDIX G**

**Descriptions of Respondents**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>n = 614; Mean = 28.68; SD = 9.71</td>
</tr>
<tr>
<td></td>
<td>Min = 16; Max = 59</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>n = 206 31.9%</td>
</tr>
<tr>
<td>Female</td>
<td>n = 406 62.9%</td>
</tr>
<tr>
<td>Missing</td>
<td>n = 33 5.1%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>Black / African American</td>
<td>n = 535 82.9%</td>
</tr>
<tr>
<td>White</td>
<td>n = 44 6.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>n = 9 1.4%</td>
</tr>
<tr>
<td>African</td>
<td>n = 5 0.8%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>n = 2 0.3%</td>
</tr>
<tr>
<td>Jamaican</td>
<td>n = 2 0.3%</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>n = 3 0.4%</td>
</tr>
<tr>
<td>Native American</td>
<td>n = 1 0.2%</td>
</tr>
<tr>
<td>Missing</td>
<td>n = 44 6.8%</td>
</tr>
<tr>
<td>First Generation College Student</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>n = 143 22.2%</td>
</tr>
<tr>
<td>No</td>
<td>n = 484 75.0%</td>
</tr>
<tr>
<td>Missing</td>
<td>n = 18 2.8%</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td></td>
</tr>
<tr>
<td>Less than High School Diploma</td>
<td>n = 7 1.1%</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>n = 417 64.7%</td>
</tr>
<tr>
<td>GED</td>
<td>n = 101 15.7%</td>
</tr>
<tr>
<td>Other</td>
<td>n = 110 17.0%</td>
</tr>
<tr>
<td>Missing</td>
<td>n = 10 1.6%</td>
</tr>
<tr>
<td>Past Household Income</td>
<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>n = 160 24.8%</td>
</tr>
<tr>
<td>$10,000 – $19,999</td>
<td>n = 68 10.5%</td>
</tr>
<tr>
<td>$20,000 – $29,999</td>
<td>n = 98 15.2%</td>
</tr>
<tr>
<td>$30,000 – $39,999</td>
<td>n = 90 14.0%</td>
</tr>
<tr>
<td>$40,000 – $49,999</td>
<td>n = 78 12.1%</td>
</tr>
</tbody>
</table>
### APPENDIX G (Continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above $50,000</td>
<td>n = 76</td>
</tr>
<tr>
<td>Missing</td>
<td>n = 75</td>
</tr>
</tbody>
</table>

### Current Household Income

<table>
<thead>
<tr>
<th>Current Household Income</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>n = 131</td>
</tr>
<tr>
<td>$10,000 – $19,999</td>
<td>n = 101</td>
</tr>
<tr>
<td>$20,000 – $29,999</td>
<td>n = 113</td>
</tr>
<tr>
<td>$30,000 – $39,999</td>
<td>n = 87</td>
</tr>
<tr>
<td>$40,000 – $49,999</td>
<td>n = 66</td>
</tr>
<tr>
<td>Above $50,000</td>
<td>n = 80</td>
</tr>
<tr>
<td>Missing</td>
<td>n = 67</td>
</tr>
</tbody>
</table>