

**Conditions Related To The Academic Performance Of African
American Students At Virginia Polytechnic Institute And State
University**

by

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State University in partial fulfillment of the requirements
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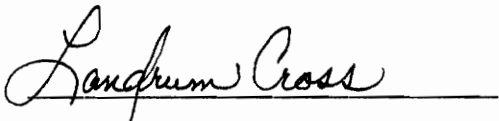
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Student Personnel Services and Counseling

APPROVED:



Don G. Creamer, Chair



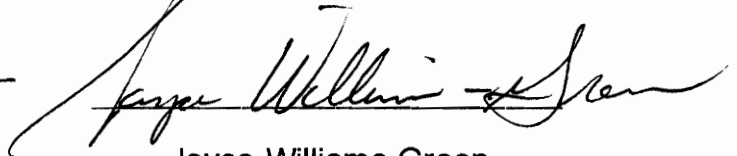
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CONDITIONS RELATED TO THE ACADEMIC PERFORMANCE OF AFRICAN
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Abstract

It's just a struggle, on a predominantly white campus. It's a struggle. Every step of the way. If you don't stay focused and want it, it's not going to happen.

This study discovered and explored conditions related to the academic performance of African Americans at a comprehensive public research university in rural southwest Virginia. The above quote captures the essence of students' perspectives and experiences as they relate to academic performance at Virginia Tech.

Data for this study were collected by conducting focus groups interviews with African American students at Va. Tech. A total of 35 students participated in seven focus group interviews. Data collection involved 15 students with QCAs less than 2.0, six students with QCAs between 2.0 and 3.0, and 14 students with QCAs greater than 3.0. Data were analyzed by the constant comparative analysis method.

The findings of this study indicate that academic performance of African American students at Va. Tech is related to interactions between the student and the social and academic environments. These interactions are explained by three themes. Achievement motivation explains the personal attributes and

commitments students bring to the institution, and are willing to invest in their education. Social infrastructure is the relationship and interaction patterns with peers, family and parents. Faculty issues refer to interactions with white faculty and the importance of black faculty.

All students believed that a good adjustment, hard work and effort, clear goals, choice of major, and strong study skills and habits were important to academic performance. Other issues of importance included negative racial stereotypes, negative faculty attitudes, interaction with white students, discomfort in the environment, poor adjustment, and parental influence.

Opinions on how these factors affected academic performance varied among groups. The students who had not excelled academically took complete responsibility for their failure. Some questions remain unanswered regarding this finding. Other students believed they had excelled because they worked hard, had clear goals and were pleased with their majors. However, according to the students with QCAs greater than 3.0, the underlying motivation for their determination to succeed was to “prove them wrong.”

Acknowledgments

To the Lord God Almighty, I give eminent thanks for blessing me with the mind and spirit to complete this task.

The students who participated in this study are the foundation for its success. I offer each of you my sincere thanks, and best wishes for the future.

Throughout this process, numerous individuals have cheered me to success. To my committee members, I offer thanks for your unending belief in my ability to accomplish this task. Words can never express my appreciation for your commitment to me. You each offered a special part of your self intellectually, personally and professionally.

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Finally, I dedicate this dissertation to, Ruth “Bumpsey” Watkins -- my role model, my friend, my supporter regardless of what, when, where, how, or why. Her belief in the value of education navigated me to where I have now arrived. To Bumpsey, who has always, and will continue to love me unconditionally, and most importantly, for being the best “Mom” in the whole wide world. This one’s for you!!!!

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CHAPTER I

INTRODUCTION

Virginia Polytechnic Institute and State University (Virginia Tech) is a comprehensive public research university in rural southwest Virginia. Like other higher education institutions, Virginia Tech is faced with the challenges of retaining and graduating African American students. A review of the student extracts for Spring 1995, for African American students at Virginia Tech indicates that at the beginning of the Spring 1995, semester, 22% of African American students (118) had Quality Credit Averages (QCAs) less than 2.0, compared with only 11% (58) who had QCAs of greater than 3.0. Forty-three percent of the African American students had QCAs between 2.0 and 2.5, and the remaining students (23%) had QCAs between 2.5 and 3.0 (Giles, 1995). Students who matriculated in Fall 1994, are not included because they have only been at the University for one semester. To graduate from Virginia Tech, students must have a QCA of at least 2.0.

The purpose of this study is to explore and gain an understanding of factors related to the academic performance of African American students at Virginia Tech. This is important because, according to Stewart (1991), only about 25% of African American students who matriculate at four-year colleges and universities graduate within six years, as compared to 50% of white students. Specifically, this study will address the question "What factors are related to academic performance of African American students at Virginia Tech?" The terms "black" and "African American" will be used interchangeably in this study.

The participation and academic performance of racially diverse students in higher education in general, and in predominantly white institutions in particular, is an issue of national, state, and local concern. This concern has prompted educators and policy makers to seek methods for enhancing opportunities for access to higher education, and for improving academic performance, retention, and graduation rates of minority students (Richardson, 1991). The challenge to institutions of higher education throughout the next several decades will be to diversify the student body, and, by necessity, create a responsive and viable institutional framework for supporting academic success. It is, therefore, incumbent upon administrators and policy makers to assess academic programs and environments to ensure that they facilitate success for all students, and, in particular, for African American students.

This chapter provides an overview of the research project. Chapter II is a review of the current literature on the research topic. In chapter III an overview of the methodology is provided. Chapter IV presents an overview of the research methodology and a presentation of the findings.

In Chapter V are vignettes and presentation of the data. The implications, recommendations, and conclusion are presented in Chapter VI.

Background

The African American population continues to be the largest ethnic minority population in the United States, and is proportionately the most under-represented group in higher education. By the Year 2010, the African American population is projected to increase by 31 percent (Otuya, 1994), and by 2025, by 40% (Mingle, 1987).

Relative to white students in America's post-secondary institutions, African American students have lower persistence rates (Allen, 1991; Carter & Wilson, 1993), lower grades (Mow & Nettles, 1990), lower graduation rates (Deskings, 1991; Gosman, Dandridge, Nettles, & Thoeny, 1983), less likelihood of enrolling in advanced degree programs (Braddock & Trent 1991), poorer overall psychological adjustment (Fleming, 1984), and lower post-graduation occupational attainment and earnings (Farley & Allen, 1987). To improve these conditions will require educators to identify, acknowledge, and respond to the conditions that influence academic success and failure for African American students in four-year institutions.

During the early seventies, African American participation in higher education reached its highest level ever, only to experience a decline in the mid-eighties. In 1976, black students comprised 9.4% of enrollment in all higher education, but by 1985 that proportion had fallen to 8.8% (Wilson & Melendez, 1985). In 1994, enrollment was about 10% (Carter & Wilson, 1993). Forty percent of these students were enrolled in four-year institutions. Enrollment patterns indicate that three-fourths of all African American students enrolled in four-year institutions attend white colleges and universities (Otuya, 1994). Projections for the twenty-first century predict a slight increase in the number of African American students participating in higher education.

During the nineties and into the twenty-first century, higher education will be faced with many challenges. As the availability of traditional college students declines, students with different needs will enter higher education. Atwell (1988) contends that a beginning step for solving problems related to diversity in higher education is for educators to “. . . acknowledge that many of

our structures and values are actually obstacles to the educational success of minorities" (p. 8).

Over the past several decades, colleges and universities in the United States have included in their strategic plans and missions the intent to create an environment receptive and appreciative of diversity. Virginia Tech, like most other institutions, has embraced this posture through its five-year plan for 1991-1996. As articulated in the 1991-1996 University Plan (Carlisle, 1992), one of the intended goals was aimed at ". . . increasing the diversity of the student body, the faculty and the staff through effective recruiting and retention programs" (p. 18). The plan further listed the objective of expanding ". . . resources and support services available to departments attempting to meet affirmative action objectives" (p. 18) and enhancing ". . . support for both academic and extra-curricular programs related to the concerns of minorities and women" (p. 18). These assertions demonstrate Virginia Tech's efforts to prepare for the changing student population.

As we approach the twenty-first century, all of higher education is faced with rapidly changing demographics. African American representation will be at least twelve percent of the population; Hispanics will represent twenty-one percent; and the Asian American population will be roughly twenty-two percent (Henry, 1990). This suggests a potential increase in the enrollment of ethnic minority students in the nation's colleges and universities. If institutions are prepared to meet the needs of these populations, it could positively influence the cognitive and affective development of all students (Astin, 1993). With the probability of such benefits, it will be advantageous for colleges and universities to prepare to educate the "new student" of higher education.

Numerous factors influence the success of African American students in predominantly white institutions. Within the institution, mission, tradition, character, and culture influence how colleges respond to diversity. From the periphery, state and federal policies and regulations, alumni input, and community needs also influence decisions made within institutions of higher education. Whether the impetus to respond to these students is invoked by internal or external forces, it is less important than ensuring that existing and future learning environments respond to the needs of increasingly diverse student populations. Allen (1991) writes:

Despite a generation of experience with a significant presence of black students in white institutions of higher education, we only have a limited and imprecise understanding of the factors that affect the increases and decreases in an institution's enrollment of minority students and once enrolled, of the factors that provide these students with an institutional and educational experience that is personally gratifying and academically successful. Thus, even when an institution is ready to commit more resources to the minority endeavor, the leadership lacks clear direction on how to best expend these resources. (p. 4)

This paragraph crystallizes the difficulties incurred in attempts to successfully educate African American students. Perhaps one of the most difficult challenges for college administrators in the twenty-first century will be to gain an understanding of how to meet diverse student needs, while maintaining or improving upon present standards of excellence. The resolution of this dilemma can be facilitated through, among other things, an understanding of historical, social, and political influences on the education of African Americans in the United States. The following section will synthesize the historical and socio-political events that have led to the participation of African American students in America's predominantly white colleges and universities.

Historical and Socio-Political Influences

The discussion of the entry of African Americans to higher education has historical, social, and political implications. With each major social revolution in the United States came legislative changes that influenced opportunities for African American participation in higher education. Examples of these changes and relationships can be seen as far back as the Civil War, and as recently as discussions in the 1990s regarding the legitimacy and legality of minority scholarships in American higher education.

An important tenet in discussing the progress of African American students on white campuses is the examination of education in its larger context. The American higher education system can be viewed as a microcosm of the socio-political functions of the country. A review of the history of education reveals that, more often than not, educational trends have been influenced by the issues, concerns, and agenda of the larger society. America often looks to education to be the leader in ameliorating the ills of the larger society (Altbach, 1991). Such is the case with issues related to African American participation in higher education.

During slavery, it was against the law for African Americans to be educated (Brubacher & Rudy, 1968). Colon (1991) estimated that by 1890, only 80 African Americans had graduated from predominantly white colleges.

The milestone for the entry of blacks into higher education in the nineteenth century was the Civil War and the period proceeding the signing of the Emancipation Proclamation (Fleming, 1981). Although some blacks attended white institutions in the 18th century, most attended historically black colleges, which were established by free blacks and northern missionaries.

The first private black college, Cheyney State, was founded in 1837 in Pennsylvania. Prior to the Civil War, two more black colleges also were founded in the north, Lincoln University in 1854, and Wilberforce in 1856. In 1890, with the second passing of the Morrill Act, black land grant colleges were established (Fleming, 1981). While some of these institutions offered a four-year degree, most of them were established as non-degree granting cultural, mechanical, and industrial schools, and did not provide a liberal education until after 1916.

In 1896, Plessy v. Ferguson upheld the "separate but equal" doctrine. As a result of this decision, all levels of schooling for blacks (primary, secondary, and collegiate) were segregated. However, in 1954, the U.S. Supreme Court in its landmark decision, Brown v. Board of Education of Topeka, struck down the "separate but equal" doctrine established under Plessy, thereby outlawing segregation in public education in America. By this time, some predominantly white institutions had begun to admit blacks, and about one percent of all freshmen attending white colleges and universities were black. In 1956, in Florida Ex. Rel. Hawkins v. Board of Control, the court ruled that Brown also held for public higher education and that states could no longer maintain racial segregation in public education. This ruling laid the foundation for the desegregation of America's public colleges and universities.

The 1960s and 1970s were tumultuous for America. While the U.S. was recognized and respected globally as a world power, it had tremendous difficulty remedying its racial problems. Colleges and universities were the conduits for controversy, and student protests were at their highest level ever (Boyer, 1987). Demonstrations regarding civil rights, the Vietnam war, and

women's rights were commonplace and unabated. Issues of access and equality were discussed among all classes of people, and the country was experiencing its most significant revolution regarding the participation of African Americans since reconstruction. More than any other period in the history of American higher education, the social and political activism of the sixties and seventies formulated the platform for American higher education.

During this period, there was an increase in the number of African American students graduating from high school and college. The high school completion rates improved during the 1960s and 70s, hence more students were available to enter college (Blackwell, 1983). The Carnegie Commission on Higher Education reported that, "by the 1960s predominantly white colleges and universities were actively recruiting black students and devising programs to assist black students financially and to prepare them academically for the education programs they would be offered" (p. 6).

According to Mingle (1981), only 4 percent of African Americans were enrolled in predominately white colleges by 1960. By 1970, this figure had increased to 40%, and by 1978, 60% of all African American students enrolled in higher education attended predominantly white colleges and universities. These increases were undoubtedly influenced by the country's social and political climate, as well as the legislative activities discussed below. By 1982, Blackwell (1983) estimated that approximately 75% of all African American students were attending predominantly white colleges and universities.

Student activism and social issues were not the only influences during this period. Legislative activities also influenced the entry of African Americans into higher education. Title VI of the Civil Rights Act of 1964 provided for federal

regulation of higher education with the threat of withholding federal funds from colleges and universities that discriminated on the basis of race, color, or national origin. There was also substantial federal support for social programs and financial support for disadvantaged families and youth. The Higher Education Act of 1965 provided for expansion of work study programs, establishment of need-based student grants, and federal assistance for selected colleges. In 1968, Upward Bound, Talent Search and Student Support Services were created, which provided for outreach and academic support for high school and college students, and in 1972, the Amendments to the Higher Education Act provided additional funding for needy students through the Basic Educational Opportunity Grants, later known as the Pell Grants. These programs helped to make education an attainable goal for all people regardless of race, class, or economic status.

Institutions did not immediately comply with Title VI of the Civil Rights Act of 1964. Four-years later, in 1968, the Department of Health, Education and Welfare (DHEW) found ten states, including Virginia, out of compliance with the act. The states were cited in 1968 and 1969, but it was not until 1970 that Adams v. Richardson was actually filed in the US District Court in Washington, DC.

Adams sought to require DHEW to enforce Title VI by responding to states' desegregation plans, monitoring states' progress, and conducting reviews in states that were not included in Adams. The decision in Adams required colleges to dismantle their dual systems of higher education for blacks and whites. Up through 1987, the Adams states remained under the scrutiny of the Office of Civil Rights, and in 1987, Judge Pratt ruled that Adams no longer

had a case. In 1989, the case was reinstated and, in 1994, remained in litigation. All of these events ultimately influenced the transformation of education in the United States, and broached a revolution that has endured for more than a century--the legal right for blacks to be educated in America's public schools and colleges.

By 1994, the country still found itself in a state of confusion regarding the future of ethnic minority students in higher education. Admission standards and changes in financial aid eligibility policies influenced if, when, where, and how African American students could attend college. Scarce federal, state, and institutional resources influenced the types of retention programs that were available to support African American students, and the political climate in the country was such that, more and more, questions were being raised regarding the legitimacy of affirmative action in higher education. These factors all continued to maintain African American students in a state of uncertainty regarding their future in post-secondary education, and re-emphasize the importance of academic success for those students who were able to participate in higher education.

This section has attempted to synthesize the historical and socio-political factors that influenced participation of African Americans in higher education. The confluence of these events guided American education through the junctures of aristocracy and meritocracy to the period of egalitarianism, where it remains today. The emergence of the egalitarian system, combined with the high value placed on education in the black community has continued to influence the sporadic, yet persistent participation of blacks in higher education.

Recent Indicators of Changes in Education

For 20 years, predictions and indicators have suggested that American higher education has been headed for changes in the character and complexion of the college going population. This prediction has, indeed, come to fruition with the recent influx of ethnic minorities into the nation's colleges and universities.

One of the earliest forecasts came with Cross' prediction of the entry of a "new student" to higher education. These students, according to Cross (1971; 1976), would include ethnic minorities, women, adult learners, and students from low socio-economic levels. Her prediction, however, came with the warning of the paradox between the concepts of equal opportunity and academic excellence. Later in 1976, she characterized the "new student" as one new to education, and specifically noted the challenges associated with educating this population. In 1973, the Carnegie Commission in its final report stated:

We believe that major steps can be taken now, and that all remnants of inequality of educational opportunity due to race, sex, family level of income and geographical location should be overcome substantially by 1980 and as completely as possible by the year 2000. (p. 35)

These postulations occurred early in the 1970s, yet, by 1994, few colleges and universities had adequately prepared themselves to address the challenges associated with increasing numbers of ethnic minority students. Discussions regarding the need to reform higher education and the need to prepare to educate a diverse student body continued throughout the 1980s and 1990s. In 1981, Berdahl and Altbach characterized education as being in an "academic crisis" and partially attributed this to demographic changes. In 1983, the American Council on Education and the Education Commission of

the States published A Nation at Risk. This document described American education as being in a "state of emergency," calling attention to the low retention and graduation rates in high schools and colleges, the under-preparedness of American students, and the resulting inability to compete globally. A Nation At Risk brought to the forefront observations about the failure of American education to deliver quality education to all students.

A year later, the Study Group On The Conditions Of Excellence In American Higher Education published its document, "Involvement In Learning" (1984). This report stressed the importance of student involvement in higher education. In particular, it emphasized the importance of access, excellence, and quality, and called attention to the major changes in education that had occurred since the 1950s, including the changing student population. This report also addressed the importance of student effort and assessment as they relate to involvement and student success. This is especially important to this research effort because the literature strongly supports that African American students in white institutions often experience isolation, dissatisfaction, and disconnectedness from the campus community.

In 1987, the Commission on Minority Participation in Education and American Life published One Third Of A Nation. The following quote was used to illuminate the state of education in the United States: "America is moving backward-not-forward in its efforts to achieve the full participation of minority citizens in the life and prosperity of the nation" (p.1). One Third Of A Nation noted that if America was to remain a world leader, the country must be prepared to educate ethnic minority students who would comprise one third of the nation by the year 2000. While other reports were as important, this

document articulated the theme that in order to maintain its strength globally, the United States would have to address the needs of growing ethnic minority populations.

Attention to American higher education was once again brought to the forefront with the "America 2000" (U. S. Department of Education, 1991) proposal, and the assertion by former President Bush of a need to raise achievement levels of America's secondary and post-secondary educational systems. However, more recent issues include the 1994 ruling outlawing the legality of race-specific scholarships, and the controversial book, The Bell Curve (Herrnstein & Murray, 1994), which raises questions about the intelligence of African Americans. All of these indicators have had some influence on how issues related to access and participation of African American students in post-secondary education are viewed by educators and the nation as a whole.

Although the outlook for African American students in higher education is unclear, it is important that their participation and academic success are discussed and remain priorities. America's prosperity and growth are linked to the success of all ethnic minority students. Unless the American educational system is able to ensure both access and opportunity for academic success for this population, the entire country is disadvantaged by producing a generation of citizens who will have neither the skills, nor the education, to contribute to the nation's need for a highly technical workforce capable of global competition.

Statement of the Problem

African American students experience academic difficulty in higher education and attain the baccalaureate degree at appreciably low rates. (Astin,

1975; 1990) Carter & Wilson, 1992). Porter (1990) found that the baccalaureate completion rate for black and Hispanic students was between 25 and 30 percent, as compared to 50 percent for white and Asian American students. Mow and Nettles (1990) found that African American students earn grades at least one letter grade lower than white students in white colleges and universities. Coupled with the problems of low completion rates and low grades, are other concerns regarding psycho-social development (Fleming, 1984), attrition (Abercrombie, 1987; Sedlacek, 1987; Steward, 1984) and adjustment (Fleming, 1984; Suen, 1983; Wilson, & Melendez, 1985). These observations call attention to a potential state of emergency for African American students enrolled in America's predominantly white institutions (PWIs).

African American students who enroll at Virginia Tech as first-time freshmen in the summer sessions or in the Fall semester are members of the Virginia Tech Academic Success Program (VTASP). VTASP is the University retention program that provides academic and personal assistance to all African American students who enter the University as freshmen, and for white students who are characterized as high-risk based on SAT scores of less than 1000, high school grade point average (GPAs) of less than 3.0, and high school class rank lower than the 25th percentile. The focus of this study is to discover and explore conditions and factors that influence academic performance of African American VTASP students at Virginia Tech.

Academic success can be measured in various ways. However, the accepted quantifiable variable for measuring achievement and success is grades earned during the undergraduate experience. Although there is some

disagreement among educators regarding the best indices to measure the quality and quantity of student learning (Astin, 1991; Cross, 1976), grades continue to be the variable most often used to measure academic success (Astin, 1977; Tinto, 1987). At Virginia Tech, QCA combined with accumulated credit hours are the primary measures that define student success, and ultimately, graduation. This study, therefore, defines "successful" and "unsuccessful" within the context of QCA.

Grades affect students in various ways. While enrolled in college, grades influence and sometimes determine the readiness for progression to higher level courses, acceptance into restricted majors, the likelihood of attrition, persistence or graduation, academic probation and suspension, financial aid and scholarship eligibility, and eligibility for participation in some campus activities. Grade point average is one of the strongest variables associated with persistence (Astin, 1977; Hardiman, 1983), and also affects psychological well-being, self esteem, motivation, and the likelihood of isolation (Astin, 1982).

Ten years of data indicate that black students at Virginia Tech experience disproportionate levels of academic failure (Giles, 1993c). The data also show that, although there is no significant difference in the number of hours attempted by the black and white students in the VTASP, black students earn credit for only about 89% of hours, as compared to 96% for white students. Furthermore, by the fourth year, the average QCA for blacks is below the "C+" level, and the average for white students approaches a "B-". Consequently, graduation rates of African American students fall short of their white peers (Giles, 1994b).

The African American student population at Virginia Tech, as of January 10, 1995, consisted of 534 full-time undergraduate students who entered the University as first-time freshmen between the years 1989 and 1993. Of this group, 22% (118 students) had cumulative QCAs less than 2.0, compared to only 11% (58 students) who had QCAs over 3.0. The remaining 66% had QCAs between 2.0 and 3.0 (Giles, 1995). The primary focus of this study is on students with QCAs over 3.0, and students with QCAs under 2.0. First-year students will not be included in this study.

The upper QCA limit of 3.0 was chosen for several reasons. First, grades of 3.0 or above could potentially lead to more undergraduate opportunities, as well as increased post-graduate options. Examples of such opportunities and options include membership in honorary societies, eligibility for merit-based scholarships, and participation in post-graduate fellowship programs. Second, students who have attained academic success may have identified and used strategies and patterns that might be valuable to less successful students. An understanding of these strategies and patterns will be helpful in designing initiatives to assist less successful students.

Reasons for selecting the lower limit of below 2.0 are related to the dangers associated with this level of performance. First and foremost is the potential consequence of not being able to graduate. Students at Virginia Tech with a cumulative QCA of less than 2.0 cannot graduate. Second, the graduation rate of African American students at Virginia Tech is about half that of white students. Academic performance is related to this disturbing imbalance. If strategies can be identified to assist the under 2.0 students, this could potentially increase the number of students who are eligible to graduate.

Third, if students do not achieve satisfactory academic performance, they will be asked to leave the University and/or might be in danger of losing financial assistance. Finally, the personal and academic traumas associated with failures could negatively influence academic performance in the future (Weiner, 1965).

The urgency of this problem is also reflected in the withdrawal rate of African American students at Virginia Tech between the end of Fall 1993, and the beginning of Spring 1994. Ten percent of the African American students who were enrolled in Fall 1993, did not return to Virginia Tech in Spring, 1994. Of these non-returning students, 59% departed because of having been placed on first or second academic probation, and 23% were at risk of being placed on academic probation or suspension if their grades did not significantly improve in the next one or two semesters. The remaining 17% left for various "other" reasons (Stringer, 1994).

Virginia Tech has made numerous efforts to address the issues of performance and retention of African American students. As a result of the 1984 Retention Committee Report (Williams-Green, 1992), funding was provided to support the Virginia Tech Academic Success Program, the Freshman Rule (a forgiveness policy implemented in 1984 at Virginia Tech that allows for up to six hours to be omitted from the freshman students QCA. To invoke the rule a grade of F, D-, D or D+ must have been recorded in the course, and the course must have been attempted within the first 28 semester hours), and resources were provided to support the College Success Strategies course.

In Spring 1990, a group of African American students expressed their concerns about the low retention rates for African American students to the President and Provost of the University. As a result of their concerns, a committee was appointed to review the issues of "measures of success" campus climate, and communication and coordination of efforts to support black students (Williams-Green, 1992). The findings of this committee report resulted in the decision to appoint a new committee "to prioritize the recommendations and to estimate projected costs."

In Spring 1991, the University Retention Committee was appointed to "review retention initiatives and make recommendations concerning retention initiatives and university policies and procedures." This committee submitted a report to the Provost with the following recommendations: (a) that "measures of success" be redefined to include "measures of personal and institutional characteristics which facilitate or inhibit academic success, retention, development and progress . . . that measures be identified and instituted to develop a more sophisticated and realistic picture of retention," (b) that appropriate information be collected and disseminated throughout the University, (c) and that necessary resources be identified and supported by the University (Williams-Green, 1992).

Although some of the recommendations in the report have been implemented, the University has not seen significant improvements in performance or graduation rate of African American students. The four-year graduation rate for African American students entering in the VTASP class of Fall, 1990, was 18%, and represented a 5% increase over the 13% graduation rate for the class of 1989 (Giles, 1993c). While this reflects a proportional gain

of about 25%, this is still not a desirable graduation rate. Furthermore, the matriculation rate for new African American freshmen at the university, in the Fall of 1994 was at its lowest rate at any time since Fall, 1986. These enrollment and graduation data are alarming, and poignantly emphasize the importance of exploring students' perceptions of conditions and factors that have influenced their academic performance in order to better assist them in achieving academic success at Virginia Tech.

Virginia Tech Academic Success Program (VTASP)

The Virginia Tech Academic Success Program (VTASP) was established in 1984 and is the major University retention initiative at Virginia Tech. The mission of the program is to provide academic and personal support services that facilitate success for students characterized as potentially high-risk.

The VTASP provides academic and personal support for program participants for two years. This support is provided through optional academic advising, tutoring, peer support, a special Fall orientation program, and enrollment in a study skills course. Participation in the program is optional, and students can choose to use any or all of the services.

At its inception in Fall 1984, VTASP served African American students exclusively. In 1986, the program was extended to include a random selection of white students with SAT scores of less than 1000. Over the years, the selection criteria for white students has changed, while for African American students it has remained constant. From 1986 through 1989, white VTASP students were randomly selected from white freshmen enrolling for the first time in the Fall with total SATs of 1000 or less. In 1990 and 1991, the selection process was modified and the variables of class rank below 25%, and high

school grade point average less than 3.0 were included as criteria for selecting white students. (From now on, this criteria will be referred to as "Old Risk")

In 1984, the Office of Institutional Research and Planning Analysis (IRPA) developed a profile of students who might be expected to experience academic difficulty at Virginia Tech. This profile was used to select the 1992 white VTASP participants because the initial selection criteria did not yield enough white students. In an effort to equalize the black and white groups, a decision was made to use the IRPA formula for selecting students for the white group. This resulted in white students in the College of Engineering being selected for VTASP. (In previous years, no white Engineering majors had been selected for VTASP because their entry characteristic exceeded the cutoff for students selected for the program.) An evaluation of the 1992 VTASP group revealed that the white students in the IRPA risk category performed better than the students in the Old Risk category, and that lower percentages of black students than white students earned Fall term QCAs in the higher ranges (Giles, 1993d). As a result of these findings, the program administrators made the decision to revert to the Old Risk criteria for white VTASP students.

All African American first-time freshmen with American citizenship entering in the summer through the Student Transition Program (a summer enrichment opportunity for African-American students) and in the Fall or Spring semester are included in the VTASP group. White participants who enter in the Fall are chosen based on entry characteristics. With each freshmen class, efforts are made to have an equal number of black and white students in the program. The number of white students who are selected is based on the number of new black entering freshmen.

The rationale for including all African American students in VTASP is related to the culture and character of Virginia Tech. Virginia Tech is a large, predominantly white institution located in rural southwest Virginia. Although the culture of the University is gradually changing, its roots are in the tradition of an all-white, male military institution. The African American student population is approximately 4%, and African Americans comprise less than 2% of Virginia Tech faculty.

In 1986, 1987, and 1988, the entry characteristics of the black and white VTASP students were approximately the same. On average, the white students earned better grades than the black students over that period. In 1990 and 1991, even though the average entry characteristics for black students was significantly higher, white students still outperformed the black students in the VTASP.

Evaluation of the VTASP occurs through annual analysis of the academic performance of program participants, assessments of advisor visits and contacts, assessments of peer support interaction, and assessments of use of tutorial services by VTASP students. Other assessments of VTASP participants have included evaluation of use of the Freshman Rule (Giles, 1992b), evaluation of the academic performance of students who have enrolled in the College Success Strategies course, and a one-time study to investigate if the high school attended influenced the academic performance of white VTASP students.

This extensive research on the VTASP has shown no causal relationship between student performance and the use of support services. There is also no correlation between high school grades, SAT scores and class rank, and

grades earned at Virginia Tech (Giles, 1992a). The research findings do conclude, however, that African American students earn lower grades than white students in the VTASP, and that within the African American population, there is a low percentage of grades over 3.0 (Giles, 1993c).

Purpose of the Study

There is some question regarding the adequacy of pre-college characteristics in predicting outcomes and graduation rates for minority students who attend predominantly white colleges and universities (Breland, 1978; Tracey & Sedlacek, 1985). Further, when African American students do persist to graduation, they do so having attained lower QCAs than do white students (Mow & Nettles, 1990). This brings into question numerous issues, including how much learning has taken place and readiness for entry into graduate school or employment. It is important to understand why students do or do not earn good grades, in order to improve academic performance, increase retention rates, and raise graduation rates. An understanding of this phenomenon will help institutions ameliorate current problems and improve delivery of current and future programs.

This study will explore conditions related to the academic performance of African American students at Virginia Tech, and will:

- Discover and explore factors related to academic performance of African American students at Virginia Tech.
- Identify topics for design of quantitative inquiry.
- Describe the environmental and personal factors related to academic performance.

- Provide a basis for the institution to assess the state of African American students at Virginia Tech through anecdotal evidence and perceptions of and by the students.

Research Questions

This study discovered and explored factors related to academic performance of African American students at Virginia Tech. The following research questions were explored:

1. What conditions enhance the academic performance of African American students at Virginia Tech?
2. What conditions impede the academic performance of African American students at Virginia Tech?

Assumptions

The following assumptions are based on a pilot study conducted with Virginia Tech students who had cumulative QCAs less than 2.0, and on entry characteristics of African American students at Virginia Tech.

1. Based on SAT scores, high school GPA, and class rank, African American students who are admitted to Virginia Tech are adequately prepared, and have the necessary academic skills to be successful at Virginia Tech.
2. Each participant in this study enrolled at Virginia Tech with the intent to persist to graduation in no more than 10 semesters.
3. Each participant in this study was regularly admitted to Virginia Tech.
4. Each participant in this study anticipated maintaining a cumulative QCA of 2.5 plus at the time of entry to Virginia Tech.

Definition of Terms

The terms used for this study are defined below. These definitions are based on the specific intent of the study, rather than the policies of the institution being studied.

Academic Performance - Advancement toward the completion of a degree as determined by students' quality credit average (QCA), and their progression rate (Nettles, 1988).

Achievement Motivation - The stimuli which propel students to accomplish goals.

African American - Any black student who is a domiciliary United States citizen. For this study, the terms African American and black will be used interchangeably.

College Success Strategies Course (EDCI 1004) - A course offered to Virginia Tech students that addresses study skills, time management, and other strategies for success in college. This course credit does not count toward graduation, but does count in calculating Quality Credit Average.

Focus Groups - A group that is carefully planned to share and obtain perceptions about a similar topic of interest in a non-threatening environment (Kreuger, 1988).

Freshman Rule - A forgiveness policy implemented in 1984 at Virginia Tech that allows for up to 6 hours to be omitted from the freshman students QCA. To invoke the rule a grade of F, D-, D, or D+ must have been recorded in the course, and the course must have been attempted within the first 28 semester hours.

Historically Black Colleges and Universities (HBCUs) - Four-year educational institutions in America founded for the specific purpose of educating black or African American students, and where at least 90 percent of the undergraduate student population is composed of black or African American students.

Minority Student- African American students and any other student who is a member of an underrepresented group in higher education.

Perception - Term used to describe how an individual sees, feels, or experiences a situation or event. Perceptions are based on individual values, socialization factors and interests (Patton, 1990).

Personal Attributes - The intrinsic stimuli which influence success or failure.

Personal Commitments - The investments which students are willing to make to their academics.

Predominantly White Institutions (PWIs) - An educational institution wherein at least 90 percent of the undergraduate student population, faculty, and staff are white Americans.

Progression Rates - The rate at which college students earn credits toward a higher academic level (Nettles, 1988).

Quality Credit Average (QCA) - The measure used by Virginia Tech to record the grades earned by a student.

Satisfactory Academic Performance - Completion of at least the first academic year at Virginia Tech with a Quality Credit Average (QCA) between 2.0 and 3.0.

Social Infrastructure - The personal relationships that influence how students manage their academic performance.

Successful Academic Performance - Completion of at least the first academic year at Virginia Tech with a Quality Credit Average (QCA) of 3.0 or above.

Less Successful Academic Performance - Completion of at least the first academic year at Virginia Tech with less than a 2.0.

CHAPTER II

LITERATURE REVIEW

As educators look toward the twenty-first century, it is important to address concerns pertaining to retention and graduation rates of African American students. A key variable related to this is academic performance. The purpose of this chapter is to examine the literature as it relates to factors that influence the academic success of African American students at predominantly white institutions. This review is constructed by discussing the following topics: (a) participation of African Americans in higher education, (b) institutional culture and commitment as they relate to academic success of African American students, (c) retention programs, (d) pre-college preparation and academic performance, (e) person-environment theories, (f) adjustment and academic performance, (g) isolation, (h) faculty-student interaction, (i) student effort and involvement, and (j) identity.

Participation of African Americans in Higher Education

Education is traditionally held in high esteem by African Americans. As far back as the pre-emancipation period, education was seen as a panacea for African Americans to eliminate the vestiges of slavery and to gain upward mobility. This continues to be the prevailing attitude regarding the importance of education. It is ironic that this perspective remains intact given the vexing difficulties faced by many African American students in their efforts to attain the baccalaureate degree.

Since the 1800s, the prognosis for participation and academic success of blacks in higher education has been tenuous. During the 18th century and the early part of the 19th century, the slow progression was a result of the legal prohibition of education for blacks. By the late 1800s, changes in laws allowed blacks to be educated, but in separate facilities. The “separate but equal” doctrine was anything but equal. It resulted in all levels of schooling for blacks (primary, secondary and collegiate) being established separately, and typically fewer funds and resources were allocated to black schools. This resulted in substandard education for African American students. In 1954, the Brown decision and, in 1956, the Hawkins decision outlawed the “separate but equal” doctrine, but it was not until the late sixties that there was a significant increase in the participation of African American students in higher education.

During the early seventies, African American participation in higher education reached its highest level ever, only to experience a decline in the mid-eighties. This decline is found not only in baccalaureate study, but also in the attainment of post-baccalaureate degrees. In 1986, African Americans earned 26.5 percent fewer doctorates than in 1976 (Ansley, 1990; Ansley and Jacobs, 1990). Otuya (1994) reported that between 1982 and 1992, the number of masters and doctorates awarded to African Americans decreased by 6 to 8 percent. Given the high interest in post-baccalaureate study and the increased opportunities for pursuing advanced degrees, it would appear that the number of advanced degrees earned would have increased, rather than diminished, over a ten-year period. Identifying factors that influence grades, and establishing interventions to facilitate success at the baccalaureate level, will lead to improved grades, lower attrition rates, and better graduation rates,

which will increase opportunities for African American students to pursue post-baccalaureate study.

Academic performance, retention rates, and graduation rates have been at the forefront of discussions in higher education for more than a decade. Colleges and universities have experienced declining enrollments, mediocre academic performance and low graduation rates, not only for ethnic minorities, but for all students. In a follow up study of students who entered college in 1981, Astin, Korn, and Green (1987) concluded that:

The proportion of students in four-year colleges completing the bachelors degree within four-years is remarkably low (31.2 percent) especially in comparison to 15 years earlier (46.7 percent of the 1966 freshmen had earned degrees by 1970). For whatever reason, it would appear that retention rates for students entering four-year colleges and universities have declined substantially during the past 15 years. (p. 39)

Astin's findings reflected graduation rates of all enrolled students.

However, when data are examined on the retention and completion rates for African American students, the findings are even more alarming. After six years, only 15.6% of African Americans in public four-year institutions will receive their Bachelors degree (Carter & Wilson, 1992).

Retention and graduation data reflecting the past 20 years indicate that colleges and universities do a poor job of educating ethnic minority students. Giles (1993c) found that for African American students at Virginia Tech, the overall graduation rate for five or more years averaged less than 50%, as compared to 70% for white high-risk students. Furthermore, Porter (1990) found the overall completion rates for black students in white institutions after six years to be half of that for whites. These findings underlie the prevailing problem inherent in addressing the issues related to academic achievement of

African American students at PWIs, and the importance of providing interventions to ensure academic success.

Consideration of this dilemma is especially important given the population trends for the last twenty years and the demographic projections for the twenty-first century. Over the last several decades, America has experienced a decline in the number of white traditional-aged college students. This decline was driven by the decrease in birth rates among white Americans in the late sixties and seventies. For ethnic minorities, a converse trend prevailed. The ethnic minority population in America over the last twenty years has grown at unprecedented rates. Predictions for the twenty-first century suggest that ethnic minority students will continue to account for a significant number of students in post-secondary education (Hodgkinson, 1983; 1986; 1992; Mingle, 1987). These students will bring with them diverse levels of academic preparation, and a multiplicity of special curricular and learning needs. Institutions can prepare for these challenges by gaining an understanding of the needs of minority students and designing and implementing effective retention programs.

At Virginia Tech, a large percentage of African American students do not experience satisfactory progress towards a degree. For example, the number of African American students with overall QCAs of 2.0 or above remained fairly steady from 1985 through 1989. In 1990, however, there was nearly a 10% drop in the proportion of students returning in the fourth year with QCAs of 2.0 or above (Giles, 1993b). Students with academic profiles such as these are at risk of not graduating from the University within four or five years because they do not meet the minimum QCA requirement for graduation from Virginia Tech.

For African American students at Virginia Tech, the four-year graduation rates have ranged from a low of 13% for the class of 1989, to a high of 23% for the class of 1987. For white students in the VTASP comparison group, the range has been from a low of 34% for the class of 1989 to a high of 55% for the class of 1987. The five-year success rate (the total of students who have either graduated or enrolled for a fifth year) for black students has ranged from a low of 48% for the 1985 class, to a high of 62% for the 1988 class. For white students, the range has been from 64% for the 1989 class, to 82% for the 1987 class (Giles, 1993c).

The academic performance of African American students should be a priority in an institution's commitment to diversity. If students do not perform satisfactorily as prescribed by university policies, they will likely be at risk for both voluntary and involuntary departure from the University. It is, therefore, imperative that colleges and universities focus not only on improved retention and graduation rates, but also on the level of achievement of students.

Academic success for African American students requires student participation and institutional commitment. Richardson and Skinner (1991) believe that:

minority participation and achievement is a complex phenomenon that is influenced by the state policy environment, characteristics of the minority and majority populations served, and institutional mission and selectivity, in addition to the more obvious variables related to administrative leadership and institutional programming. (p. XII)

Institutional Culture and Commitment

Creating an environment receptive to diversity influences degree attainment for African American students (Crosson, 1988), and requires institution-wide commitment (Green, 1989). Such commitment does not occur

fortuitously, but rather through a deliberate effort and understanding of the institution and its culture. A common theme throughout the higher education literature emphasizes the importance of strong leadership and vision in implementing programs to facilitate academic success for African American students. Richardson (1991), in a study of public colleges and universities reporting gains in graduating ethnic minorities, found high levels of administrative commitment to be one of two key components that contributed to their success.

Programs related to helping African American students succeed are sometimes in conflict with institutional ideologies and culture (Richardson, & Bender, 1987). This might well be the case at Virginia Tech. In a report responding to graduation rates at Virginia Tech, three of four recommendations addressed the importance of re-educating faculty and staff to the institution's changing culture, and to how that culture could influence the attrition and graduation rates of its students (McLaughlin, 1992). While these recommendations are made in response to graduation rates of students in general, it appears that they might be especially important to African American students because these students are more severely stricken by low grades, problems of high attrition, and low graduation rates than the mainstream population.

Administrators, faculty, and students at PWIs often believe that African American students are enrolled primarily for athletic prowess, or as a result of quota systems or affirmative action. Consequently, they perceive that these students do not have the ability to excel academically. Such beliefs are difficult to combat and should be addressed proactively by institutional leaders.

To address these issues, leadership is challenged to set the tone for encouraging a supportive and inclusive environment. This begins with a judicious assessment of the institutional climate, policies and practices, and an understanding of the politics and culture of the institution (Crosson, 1988; Richardson & Bender, 1987). Further, concise policy statements should be communicated throughout the institution to ensure a clear understanding of the institution's position on student success and diversity. Without such prescience, vision, and commitment on the part of the chief executive officer, it is unlikely that efforts for diversity in general, and for facilitating the success of African American students in particular, will be successful.

At this time, there is clearly no single diagnosis for symptoms that deter academic success for African American students enrolled in predominantly white institutions. However, at the very least, administrators are challenged to assess their environments and examine the legitimacy of traditional pedagogies, assess attitudes and perceptions regarding African American students, evaluate the effectiveness of student support services, assess student behaviors and attitudes about the environment, and identify institutional structures that might inhibit the success of African American students. For many institutions, such an examination could result in the need for a major departure from tradition in order to assure success for African-American students (Mitchell, 1991).

Retention Programs

Colleges and universities have an obligation to assist students in overcoming personal and academic barriers (Fordyce, 1991, Hawkins, 1989). This philosophy was apparent as early as the eighteenth century, with courses

such as the developmental freshman English course offered by Harvard University in 1874, along with the addition of college preparatory departments and high schools that were connected with institutions of higher learning.

In the early years, academic support and student retention were provided by the University in conjunction with student personnel services. The student personnel philosophy was interested in facilitating the development of the whole student. In the decade of the nineties, this continues to be the philosophy of student affairs professionals, which to a very limited extent, has expanded through academia as institutions begin to embrace the practice of holistic education. Educating through a holistic approach and implementing effective retention programs go hand in hand. Stodt (1987) noted that the driving force for any effective retention program must include collaboration between student affairs and academic affairs. Tinto (1987) suggested that elements of effective retention programs are (a) institutional commitment to students, (b) orientation of faculty and staff toward student learning, and (c) the presence of communities that actively engage students in learning.

The intervention method most often used to assist African American students to succeed is retention programs. Since the 1800s, such programs (although not exclusively for minorities) have become more comprehensive and have evolved from unidimensional programs which focused primarily on remediation, to comprehensive support programs that include a variety of interventions for individuals and groups. These initiatives exist in the form of pre-college programs, summer enrichment programs for entering freshmen, and academic and peer support programs for undergraduate students. Specific retention interventions include tutoring, academic advising, peer and faculty

mentoring, research opportunities, and assistance through remedial or developmental programs (Levin & Levin, 1991). Administrative interventions to enhance the experiences of African American students include examining institutional policies and procedures, intervening through legislative action, and formulating committees and commissions to study the issues related to African American student retention (Clewell & Ficklen, 1986; Crosson, 1992).

Initiatives to retain minority students are commonplace throughout higher education. The availability of retention programs and administrative initiatives that examine institutional culture help to promote academic success and to facilitate "effectiveness and efficiency" in managing administrative functions throughout higher education (Ferguson, Wisner, & Discenza, 1986). Crosson (1987; 1988) in her examination of environmental factors that relate to minority degree achievement in predominately white four-year colleges and universities, found that developing initiatives that place emphasis on pre-college programs, improving institutional environments, proactively intervening to circumvent financial aid problems, and making campus housing available were important.

Exemplary student support programs for African American students can be found throughout the nation. For example, the retention program at the University of Virginia (UVA) has a national reputation for its success. The six-year graduation rate for African American students for the class of 1985 was 71.5 percent (Townsend, 1994). The components of the UVA retention program include financial aid, mentoring, a critical mass, faculty involvement, and institutional commitment. Each of these components is consistently listed throughout the literature as being important to student success. Although

funding such initiatives to promote participation of ethnic minority students in higher education is a high priority among states (Berdahl & Holland, 1990), few institutions have been successful in bringing the performance levels and graduation rates of African American students to parity with the majority population. An important observation, however, is the individual benefits derived from these programs. That is, although there is little substantial cumulative improvement, support programs do positively influence academic performance of some students. Although a handful of institutions report significant improvements in graduation rates (Richardson & Skinner, 1991), most PWIs still experience low success rates and undesirable outcomes.

While the presence of academic support services and other student support initiatives have not dramatically improved the academic performance of African American students in higher education, some improvements can be found. Kulik, Kulik and Schwalb (1983), in an analysis of college programs for high-risk and disadvantaged students, found that students who actively participated in special support programs remained in college and earned better grades than their peers. The results of this study also concluded that consistent participation in support programs could raise the GPA as much as one letter grade, or increase the retention rate by up to 15%.

One study at Virginia Tech found that less than half of eligible African American students use the advising component of the Virginia Tech Academic Success Program (Giles, 1993e). Out of 150 students who made visits to VTASP advisors, 38 were white and 112 were black. This number represents about 15% of the black students eligible to use the service. Repeat visits were made by more than half of the black students. Black students most often cited:

"to talk about performance in class and/or academic progress" (48%), and "to visit and talk about things in general" (38%) as the reasons for visits to VTASP advisors. (p. 17)

The African American students visiting the VTASP advisors had significantly lower SAT scores than those who did not do so. However, at the end of the Spring term, there was no significant difference in the overall average QCAs of the two groups. A plausible explanation of this phenomenon might be that, even though there is no statistically significant effect, the assistance of VTASP advisors, and in particular the presence of African American VTASP advisors, could be advantageous to African American students. This postulation parallels Loo and Rolison's (1986) argument emphasizing the importance of more African American role models in PWIs.

Pre-College Preparation and Academic Performance

African American students in post-secondary institutions are often characterized as high-risk students. This characterization occurs as a result of factors such as under preparation, first-generation college attendance, or socioeconomic status. Based on graduation and retention rates of African American, Hispanic, and Native American students at predominantly white colleges and universities, it could be concluded that enrollment at a PWI is a variable that puts these groups at risk.

The traditional criteria for admission to higher education are the Scholastic Aptitude Test (SAT) or the American College Test (ACT), class rank, and grade point average. However, there is little agreement regarding the usefulness of these measures in predicting academic success for African

American students at predominantly white colleges and universities (Breland, 1978; Nettles, 1988; Nettles, Thoene, & Gosman, 1985; Young & Sowa, 1992).

Woffle (1983) found that the process for degree attainment was the same for black and white students, and that academic success depended heavily on pre-collegiate preparation and academic skills. Astin (1982) found that the best predictors of academic success for African American students were GPA and SAT scores combined. Enrollment in a rigorous high school curriculum added stronger predictability to SAT scores and GPA (Astin, 1982; Young & Sowa, 1992). In a study that examined black and white students' achievement and experiences in college, Nettles, Thoene, and Gosman (1986) supported the importance of SAT and GPA in predicting success. However, they found that adding the variables of student satisfaction, peer relationships, and interfering problems increased predictability of cumulative GPAs of black students more than for white students. Lunnenborg and Lunnenborg (1986) conducted a study using high school GPA as a predictor of college academic performance. Their findings also showed that GPA did not adequately predict first-year performance for African American students. In this study, black students were more likely to drop out than white students, and they also completed fewer credits. This suggests that while pre-college characteristics are somewhat accurate in predicting achievement outcomes for African American students, other variables might be as important. Themes devoted to the importance of non-cognitive variables (Sedlacek, 1987) and environmental influences are prevalent in the literature on African American students in predominantly white institutions.

For African American students at Virginia Tech, Giles (1992a) found that the traditional measures of SAT scores, high school GPA, and rank did not help to predict academic performance. Giles found that “even with the best regression models, over 85% of the variance for the first year performance is unexplained by the information available prior to enrollment.”

In a study to determine the differences between academically successful and unsuccessful black freshmen at the University of Oklahoma and the University of Texas, Steward (1984) found that neither grade point average nor standardized test scores were significant predictors of academic success. Breland (1978) found that traditional entry characteristics tended to over predict the college performance of African American students.

A prevailing theme in the literature on African American students is the quality of preparation for the rigors of higher education. As a matter of fact, much of the published research assumes that blacks are educationally disadvantaged. For example, in his book Illiberal Education, D'Souza (1991) attributed the low success rate of minority students at the University of California to lack of high school preparation. While under-preparation may be a consideration, African American students at Virginia Tech are as prepared as their white counterparts in the VTASP, yet do not experience the level of collegiate success that their pre-collegiate academic preparation or performance might suggest. This conclusion is based on the entry characteristics of African American students, as compared to those of white high-risk students. African American students, for unknown reasons, encounter a great deal of academic difficulty in the Virginia Tech environment.

A preponderance of the literature suggests that pre-college programs are successful in enhancing the preparation of African American students (Nettles, 1988; Peterson, 1978 et. al.). These programs, usually joint ventures between primary and secondary education, higher education, and/or industry are intended to provide academic support and guidance for disadvantaged students in an effort to encourage them to pursue higher education and to better prepare them for success in college.

The Mathematics, Engineering, Science Achievement (MESA) program at UCLA is such a model. This program was designed to increase the number of minority students who enroll and graduate from four-year colleges and universities in Engineering and other math-based disciplines. Since the program's inception in 1970, MESA reports an overall retention rate of about 63.3% for blacks and Hispanics, as compared to the corresponding statewide retention rate of 20 percent. There are numerous other program models throughout the country that have proven successful in assisting minority students in obtaining access to, and success in, higher education. Although such programs have been relatively successful, the participation rates, academic performance, retention rates, and graduation rates of African American students and other ethnic minorities are still not in parity with their representation in the American population.

Academic achievement is necessary if students are to be successful in college. Edwards (1970) and Steele (1992) contend that the problems related to achievement of African American students can be attributed to low expectations held by non-minorities. Howard and Hammond (1985) suggest that the myth of the intellectual inferiority of African American people has

created a self-fulfilling prophecy for students, thus influencing academic performance. These postulations appear to be in direct conflict with Astin's (1990) assertion that African American students' academic self-concept and academic expectations are growing at a greater rate than for white students, and Giles' (1993a) findings that African American students at Virginia Tech enter college with high levels of self-confidence.

An analysis of the Special Survey For VTASP Students (Giles, 1993a) revealed that for at least six years, African American students have expressed greater confidence in writing, mathematics, science, and reading skills than have white students in the comparison group. However, this high level of confidence is not reflected in the academic performance of African American students at Virginia Tech.

Less than 15 percent of all students who leave college do so for academic reasons (Tinto, 1987). While poor academic performance may not generally be the primary impetus for college withdrawal, for African American students at Virginia Tech, it is a factor that must be considered (Giles, 1993d). This is because of the reported low QCAs, slow progression rates, and low retention and graduation rates experienced by this group. Allen (1988a) examined the factors that lead to unsuccessful educational experiences for African American students in a large, predominantly white, public universities. His findings revealed that black students were more than three times as likely to leave college for academic reasons than were students in the general population. This finding seems to parallel the withdrawal patterns of African American students at Virginia Tech as Stringer (1994) found that over 70% of

the withdrawals between Fall 1993 and Spring 1994 were due to poor academic performance.

Giles (1993c) found that for African American students at Virginia Tech, the overall average QCA was less than "C+", while for white students in the high risk group, the average QCA was at the "B-" level (QCA and GPA are used synonymously). She found further that even though African American students attempted, on average, approximately the same number of hours as did white students, they passed only 89% of the attempted hours, as compared to a 96% pass rate for white students.

Mow and Nettles (1990) found that black students completed 14.4 hours per semester, as compared to an average of 15.3 credit hours per semester for white students. In this same study, they found that the average GPA for black students at the end of the freshman year was between "B-" and "C+," as compared to an average of "B" or better for white students .

An observation worth noting about the African American students at Virginia Tech is that for a six-year period, more than 37% of the students surveyed considered the availability of academic support services as "very" or "extremely" important to their decision to attend Virginia Tech (Giles, 1993f). On the other hand, only 17% percent of white students surveyed considered them "very" or "extremely" important. It seems paradoxical that the African American students surveyed expressed high levels of confidence in their ability, yet gave high priority to the availability of academic support programs and earned lower grades while enrolled. Conversely, white students perceived academic support programs as being less important, yet they achieved better grades and graduated at higher rates.

A review of the use of services by VTASP participants indicates that African American students used the services at higher rates than did white students. An example of this trend can be found in reviewing the use of the VTASP tutorial service by black students at Virginia Tech. In Fall 1994, 10.6% of the eligible African American student population used the tutoring program, as compared to 4.1% of the eligible white population (Giles, 1994a). This data is somewhat inconsistent, given the expressed importance of support programs by African American students. Furthermore, the tutoring support service was more likely to be used by students of both races who ended the previous term with QCAs higher than 2.5. Only 8.8% of African American students and 2.3% of white students with QCAs less than 2.0 used the service. If Abrams and Jernigan (1984) were correct in their assertion that the most accurate predictor of potential success is the student's willingness to seek assistance, then a plausible conclusion could be that students with lower QCAs might continue to experience academic difficulty.

Academic performance is an important topic for review. Not only is it important in examining the amount of learning that has taken place, but it is also beneficial in formulating a framework to identify characteristics other than academic preparation that lead to attrition. If students experience success early in their academic careers, they will be more likely to continue having successful academic experiences (Wiener, 1985). Fundamental to improved graduation rates is achieving better grades and passing academic courses at reasonable rates. For African American students at traditionally white colleges and universities, this goal, for the most part, is rarely obtained.

Person - Environment Theories

Theories that explain student behavior and achievement are grounded in psychological theory and research. Among them are the theories known as person-environment interaction, which emphasize the importance of an optimal fit between the student and the chosen institution. The degree of fit or congruence between the institution and the student can affect self-concept (Bradley & Stewart, 1982), academic performance (Centra & Rock, 1971; Huebner 1979), student involvement and success (Spaights, 1986; Richardson, Simmons, & de los Santos, 1987), persistence (Astin, 1975), behavior (Paul, 1980), and the likelihood of withdrawal and/or transfer (Cope & Hannah, 1975; Tinto, 1987).

“Congruence is perhaps the most widely used and most powerful concept in the person-environment literature . . .” (Huebner & Lawson, 1990, p. 134). This term is used to describe the importance of the “fit” between the student and the college environment. Congruence assumes that the most desirable outcomes occur when there is an “optimal mismatch” between certain environmental characteristics and the student.

In discussing person-environment theories, Huebner and Lawson (1990) called attention to the sub-environments that are present within a university. Sub-environments are defined by one or several student and institutional characteristics. An examination of the characteristics of predominantly white institutions and African American students leads one to believe that, indeed, a sub-environment might exist that caters to the needs of the majority population, but that could be in conflict with the needs of African American students. The choice of a college that is not incongruent with student needs is a primary

cause of departure for at least 20 percent of students who transfer (Tinto, 1987). According to Huebner (1987), if the environment provides for the person's needs or desires, that individual is congruent with the environment. Conversely, if the environment does not meet the needs of the individual, then a state of incongruence exists.

A predominantly white institution is oftentimes not a good fit for black students because, as Hall and Allen (1989) note, the economic, educational and cultural differences of African American students may be incongruent with those of the predominantly white institution. This could result in environmental maladjustment. The presence of adequate academic support programs and intentional opportunities for intervention within the environment can help to circumvent these challenges. Crosson (1987) recommends a multicultural environment and a critical mass of minority students to help facilitate a more comfortable environment for culturally diverse students.

In discussing the fit between African American students and white institutions, Prillerman, Myers, and Smedley (1989) contend that "perceived supportiveness of environment" is one of four variables influencing success and failure, and suggest that the absence of a good fit could result in alienation and consequent maladjustment. They note "it is not clear if alienation is the cause of academic difficulty or the result of academic difficulty" (p. 201).

For African American students in PWIs, the challenge to adjust socially, academically, and psychologically appears to be a key to academic success. Tinto (1987) contends that for all students, the likelihood of student persistence to graduation is related to the extent of a student's goal and institutional commitments. Goal commitment refers to an individual's commitment to his/her

education and occupational goals, while institutional commitment refers to an individual's commitment to a given institution. These two factors ideally work together to determine persistence to graduation. Weak commitment could result in poor academic performance (Tinto, 1987).

Tinto's model has been tested throughout varying types of institutions and has been found to be valid for predicting attrition. Tinto (1987), himself, notes that the model has not been adequately tested on minority students to validate its relevance to this group. Nevertheless, the model is widely accepted throughout higher education.

Of particular importance to this discussion are social and academic integration. Academic integration is concerned with the formal interaction of students and faculty, and with classroom and laboratory learning (Tinto, 1987). How well a student integrates influences his or her sense of fit (Bean, 1985). Academic integration is vital because of its direct link to achievement, persistence, and graduation (Munro, 1981; Tinto, 1987). Tracey and Sedlacek (1985) contend that their non-cognitive variables of realistic self-appraisal, demands of the institution, familiarity with academic requirements, and a positive academic self concept contribute to a student's successful academic integration.

Social integration is concerned with the personal lives of students and the interactions outside of the classroom with peers, faculty, and staff. Social integration helps to deter isolation and creates a strong commitment to obtaining goals (Tinto, 1987). For students who attend four-year residential institutions, Pascarella and Chapman (1983) found that social integration had a direct affect on persistence, and that social integration was more important for

students enrolled in these institutions than was academic integration. In short, when students do not integrate and become involved in the campus community, isolation can occur.

Numerous studies differentiate between black males and females and the importance of social and academic integration. Hare (1982) and Kraft (1991) conclude that social integration is often more important to black males than to black females. According to Hare, when black males favor social integration over academic integration, it could seriously hinder their academic performance. Pascarella (1985) found that social integration was twice as accurate as academic integration in predicting the likelihood of graduation.

A student can integrate into the academic system without social integration and still be successful. However, integration into the social system without academic integration might result in low grade performance and possible academic dismissal.

In considering the academic performance of African American students at Virginia Tech, this theory offers some direction. One might conclude, based on the performance of low achieving students, that they have not been successful at integrating academically at Virginia Tech. Furthermore, because there appears to be a high level of involuntary departure, one might also conclude that even though they may not have integrated academically, the students could still have a strong level of institutional commitment.

Student intentions are important predictors of success. For African American students at Virginia Tech, however, this may not be the case. Students in the pilot study for this project all indicated that they anticipated maintaining at least a "B" while in college, but were generally unable to do so.

Furthermore, a group who participated in the Student Transition Program also received lower grades at the end of the first semester than they had projected at enrollment.

Adjustment and Academic Performance

One approach to understanding academic success and failure is through motivation theory (Cataleno, 1985; Gibbs, 1973; Pruitt, 1973), which posits that motivation is the foundation for how well a student is able to perform. Clark and Klotkin (1964) suggest that, regardless of academic preparation, African American students' academic performance is dependent on their level of motivation. Attribution theory (Weiner, 1965) has also been used specifically to help understand academic success and failure of college students as it relates to motivation.

Attribution theory (Weiner, 1965) has recently received a great deal of attention in education. This theory attempts to answer the question "Why" as it relates to success and failure. According to attribution theory, the explanations people give for their behaviors (particularly regarding failures and successes) have a strong influence on their performance and future plans. Within this theory, beliefs about effort, task difficulty, ability and luck are categorized among three dimensions: locus (location of the cause, internal or external to the person), stability (whether the cause stays the same or can be changed), and responsibility (whether the person can control the cause). The theory specifically addresses the connections between a student's beliefs about the causes of success and failure in an academic setting, academic performance, and expectancy for future success. For this study, attribution theory will help

explain the relative importance of effort as it relates to academic success and failure, and the influence of prior success on future performance.

Examination of the freshmen year performance of African American students at Virginia Tech, unfortunately, reveals a high failure rate. Giles (1992b) found that at the end of the first academic year, African American students had attained QCAs significantly lower than the white students in the comparison group. Furthermore, an analysis of the Freshman Rule use revealed that over a five-year period, between 70% and 76% of the African American student population used the freshman rule, as compared to 38% of white VTASP students (Giles, 1992b). This confirms that African American students experience a high number of failures during their freshman year at Virginia Tech. If, as attribution theory suggests, failure influences future plans and performance, then understanding locus, stability, and responsibility could assist students in identifying strategies that lead to academic success and/or enhancement.

Success in college requires that students adjust to new academic and social environments (Tinto, 1987). Anderson (1989) contends that the optimal conditions for success are present when there is a balance between the amount of energy invested and the opposing forces a student must overcome. For black students in predominantly white institutions, the challenge to be successful is often compounded by a myriad of issues ranging from campus climate to academic preparation, and may require unique coping skills that are not necessary for white students. If African American students do not successfully adjust to these challenges, the stresses they experience may result in poor academic performance and attrition (Centra & Rock, 1971).

Developing appropriate coping mechanisms can be a challenge for African American students at predominantly white institutions. For most students, these challenges are apparent, regardless of socio-economic or educational background, or previous exposure to white students.

Tinto (1988) likens the experience of students going to college to the Rites of Passage described by Van Gennep (1960). He hypothesizes that for students to successfully integrate into the new environment, they must successfully separate from the former environment, and move into the new environment. Completion of this passage occurs when a student becomes integrated into the new environment. This does not always occur for African American students in white institutions.

Abatso (1987) and Stamps (1988) found that identification and use of appropriate coping skills were important to academic success for African American students. In Abatso's study, students who were taught coping skills in a predominately white environment outperformed those who were not taught these skills. This finding reinforces the need for effective coping skills for African American students as they attempt to negotiate a predominantly white institution.

Gibbs (1974) examined the coping behaviors used by African American students at Stanford University, and found that withdrawal constituted the most dominant behavior. When students withdrew from the environment, they become isolated from the social and academic mainstream. Such behaviors affect academic achievement, retention rates and graduation rates. Hawkins (1989) and Tinto (1975) found that students who were isolated from peers and the social environment were those most likely to withdraw from college. Allen

(1988a) found that the problems encountered most often by African American students were adjustment problems related to cultural differences and social isolation.

Sedlacek (1987) posited that success for African American students at PWIs depends on eight non-cognitive variables. These variables, (a) realistic self-appraisal, (b) understanding racism, (c) community service (d) the presence of a strong support person, (e) a positive self-concept, (f) acquired knowledge in a field, (g) ability to delay gratification to meet long-range goals, and (h) successful leadership experience, are important in assisting African American students to adjust to a predominantly white college environment. For African American students, non-cognitive variables were also found to be related to first semester GPA (Tracey & Sedlacek, 1985), and graduation rates (Sedlacek & Tracey, 1987).

According to Schollossberg, Lynch, and Chickering (1989), "mattering theory" is helpful in understanding how well students adjust to college. This theory asserts that students entering a "foreign" setting tend to adjust and perform better if they believe they "matter" in the new environment. A strong sense of belonging contributes to a student's perception of how much he or she matters, and to social adjustment (Pounds, 1987).

The question of adjustment for African American students in higher education is encompassed in the issue of psycho-social development. A prominent theme is the ongoing debate about whether black students are best served by attending HBCUs or PWIs. This discussion is important because the solution to African American student success may, indeed, be a marriage of the strengths between the two types of institutions. Therefore, the more appropriate

question for discussion might be, "What can educators do to ensure academic success for African American students, irrespective of the type of institution."

The literature on this topic is quite controversial. Given enrollment declines at historically black colleges and universities during the seventies and eighties, one might conclude that these institutions had become less popular among African American students. But, a review of enrollment trends for the nineties indicates a resurgence of black student enrollment in HBCUs. This trend suggests that African American students believe there is value in attending black institutions, which supports Allen (1986; 1987), Dawkins and Braddock (1982), Fleming (1984), and Pascarella, Smart and Stoecher (1989) in their research that black students at HBCUs experience higher levels of satisfaction than blacks at PWIs. To further support these advantages, Pascarella, Smart and Ethington (1989), concluded that better opportunities for cultural, social, and psychological development for black students occurred at historically black institutions.

Conversely, Astin (1982) concluded that, even though black students attending HBCUs earned higher grades, attendance at a black college was a negative factor in predicting graduation, and that black students tended to be less satisfied at these institutions. Astin's findings are in line with those of Cheatham, Slaney and Coleman (1990), who found no support for the theory that black students experience higher levels of psycho-social development at HBCUs.

In a nationwide study of African American students enrolled at large public universities, Allen (1988b) found that 45 percent of the students surveyed felt themselves to be either "very little" or "not at all" connected to campus life

(p.179). Ansley and Jacobs (1990) found that only about one fourth of the students surveyed (black and white), said they felt "part of the school spirit," and only 43% of black students felt that the administration was aggressive in their efforts to help them feel that they belonged. When students experience such feelings of estrangement, they undoubtedly question if they belong and where they fit in the PWI.

Many factors influence how black students perceive themselves in a predominantly white environment. Campus climate is especially important for African American students because they often encounter problems of individual and institutional racism not faced by white students (Sedlacek, 1987). Institutional racism is sometimes exacerbated by racial conflicts on campus.

In recent years, there has been a resurgence of racially motivated conflicts at predominantly white institutions. In a content analysis that examined the experiences of minority students on white campuses as they relate to ethnic violence, Farrell and Jones (1988) found that more racial incidents were reported involving African American students than any other ethnic minority.

Campus climate issues are not limited to ethnic violence and other racial incidents, but extend to institutional culture, policies and procedures, attitudes of support staff, and physical surroundings that might contribute to dissatisfaction and discomfort (Crosson, 1987). Living under such conditions stultifies the student's ability to achieve, and contributes to high attrition rates for African American students (Ponterotto, 1990).

Adjustment is not limited to coping skills, campus climate, and a sense of belonging, but permeates each campus experience. Whether a student lives on or off campus, the resulting environmental conditions are important. Living

on campus for the first year is positively correlated with persistence (Astin, 1975, 1985; Pascarella & Terenzini, 1980; Tinto, 1987), and appears to have the same benefits for African American students in PWIs (Galicki & McEwen, 1989).

Trippi and Baker (1989) found that living in a residence hall where there were many other black students positively affected the academic performance of black women. This is indicative of the importance of close-knit relationships. In fact, Rogers (1984) points out that for black women, having support in college from friends and relatives was very important and positively influenced GPA.

A prominent theme for African American student success addresses the issue of separate housing for ethnic minorities and other groups. Many colleges and universities have "theme houses" or areas reserved in residence halls based on student ethnicity. Other special purpose housing includes such options as language specific housing, fraternity and sorority housing, and academic major housing. Opponents of race specific housing suggest that ethnic housing promotes separatism and segregation. Supporters, however, contend that such options provide an environment that engenders a sense of belonging and family. A review of the literature reveals no evidence that housing arrangements based on ethnicity influence retention or academic performance either positively or negatively. To expand on this discussion is beyond the parameters of this review, but is a topic that warrants further research.

Isolation

The topic of isolation is related to academic success and the development of college students. It is one of the most serious problems faced by African American students at white institutions (Allen, 1992; Lunnenborg & Lunnenborg, 1986). Students become isolated when they do not integrate into the college environment (Tinto, 1987). A review of the literature reveals that feelings of isolation occur more often for African American students (Bradley & Stewart, 1982; Feagin, 1992; 1978; Suen, 1983) and other minorities who attend predominantly white institutions, (Farrell & Jones, 1988; Smedley, Myers, & Harrell, 1993) than for African American students at historically black institutions (Fleming, 1984), or for white students who attend predominantly white institutions (Allen, 1987).

African American students who enroll in white institutions often enter an environment where there are few other black students and role models. This observation is important for at least three reasons. First, the paucity of African American students and faculty is cited by African American students as a major concern at white institutions (Loo & Rolison, 1986; Nottingham, Rosen & Parks, 1992). Second, the absence of "like" peers and role models often results in the absence of social and academic integration. African American students often complain that they are not embraced by their white peers in social and academic activities (Allen, 1988b). This places African American students at a disadvantage in terms of their personal and academic development, and forces them to seek their primary support away from the campus mainstream. Third, the racial attitudes of white students regarding the inclusion of blacks socially, academically, personally, and in work situations have not improved

over the last ten years (Balenger, Hoffman, & Sedlacek, 1992). Qualls, Cox and Schehr (1992), found that white males, who comprise a larger percentage of the faculty and student body in higher education, tend to be more prejudiced than females. The aforementioned observations are especially important given the strong influence that peers have on student learning (Astin, 1993), and on personal development (Bean, 1985).

Issues related to isolation become salient when African American students express their feelings about being a part of the campus community. This is especially important because having a sense of belonging influences student satisfaction, the ability of an institution to retain students (Astin, 1977), and a student's commitment to persist to graduation (Bean & Hull, 1984). Peterson et. al. (1978) found that a critical mass of African American students is important in increasing the level of comfort experienced in white institutions.

Students who withdraw from college tend to be those who are isolated from their peers and from the college environment (Pascarella & Terenzini, 1980; Tinto, 1975). In a study conducted at UCLA, Loo and Rolison (1986) interviewed 814 minority and 4,814 white undergraduate students. They reported that minority students felt more socially isolated, more socially and culturally alienated, and less socially integrated than did white students. In this study, 63% of white students perceived the university as supportive, as compared to 28% of minority students. They also found that minority students had difficulty locating and becoming a member of a support system, and as a result, engaged more often in relationships with students of their own race.

The literature is replete with explanations of the role that peers play in student retention. Peer groups have a significant influence on attitudes (Bean,

1982) and growth and development (Astin, 1992) during the undergraduate years. In an earlier study, Astin (1977) concluded that interaction with faculty was most important.

African American students consider alliances with other black students necessary for survival, while white students, faculty, and administrators sometimes perceive these relationships to be a form of racial segregation. Although such alliances sometimes remove students of color from the mainstream of the university community, they are very important support mechanisms for African American students. Jones (1987) notes that if minority students are to be successful in white majority institutions, they must take responsibility for identifying their needs and helping to create initiatives to meet these needs.

Faculty-Student Interaction

Discussions related to the influence of faculty on students are prominent throughout the literature. Much of the research points out that interaction with faculty inside and outside of the classroom positively influences student learning (Centra & Rock, 1971; Endo & Harpel, 1982; Pascarella, 1984; Terenzini & Pascarella, 1980), and that access to faculty tends to positively influence educational aspirations (Pascarella, 1984). An alarming precursor to this finding is the contention that faculty appear to have failed to fulfill their potential influence on student learning because of the limited amount of time spent engaging students outside of the classroom. This is especially true in large research institutions. Boyer (1987) contends that this is mitigated by a mismatch between student and faculty goals in higher education.

A familiar theme in the discussion of academic success in college is the role of faculty-student interaction. Researchers have accumulated evidence to support the importance of interactions both inside and outside the classroom. These investigations conclude that students who develop productive relationships with faculty are more receptive to learning, are more likely to be satisfied with the collegiate experience (Decoster & Brown, 1982), and demonstrate greater academic success (Allen, 1992). For African American students at predominantly white institutions, interaction with white faculty is limited, and in some cases counterproductive; that is, when faculty-student interaction does occur, students often feel isolated and not a part of the community (Allen, 1986; Feagin, 1992; Fleming, 1988; Kraft, 1991). Tinto (1987) notes that faculty behavior in the classroom influences academic performance and sets the tone for interactions outside of the classroom.

The literature regarding academic success of African American students advocates that comprehensive retention programs should extend beyond the boundaries of the classroom (Hamburg, 1989; Lang, 1992; Lang & Ford, 1988; Rendon, 1989), and should include faculty interaction with students (Centra & Rock, 1971) as well as support from academic and student affairs. This philosophy dates back as far as 1935, with Cowley & Waller's discussions regarding the importance of collaboration between academic and student affairs. This is especially important given postulations that academic achievement for African American students might be as much a function of what goes on outside of the classroom as inside (Allen, 1988a; Fleming, 1984; Lang & Ford, 1988).

Reports on faculty interactions with African American students in traditionally white colleges and universities are varied. White faculty often view black students differently than they do white students (Sedlacek, 1987). Peterson and Blackburn (1978) found that faculty who taught large numbers of African American students were frustrated and discouraged. White faculty members in this study also felt that they interacted less with black students than they did with white students. This observation suggests a parallel with Willie and McCord's (1972) findings that white faculty do not meet the expectations of black students; Smith's (1986) findings that black students at white colleges sometimes perceived relationships with faculty as demoralizing; and the research of Astin (1982) that negative or indifferent faculty attitudes have an adverse effect on attainment of the baccalaureate degree for African-American students. Katz (1991) interviewed white faculty members and concluded that they "think the grade performance of black students is lower than that of white students " (p. 188).

In Edmund's (1984) attempt to develop a needs assessment device to assist with program development for black students, he found that insensitive attitudes existed among both white and black faculty toward students. His findings also noted unfair grading practices and poor academic advising as concerns expressed by black students at white institutions. Attitudes and behaviors such as these could insidiously influence the intellectual and psychological development of students.

Allen (1988a) found that African American students felt awkward about relationships with white faculty, adding that white faculty avoided interactions with them. He noted in an earlier study (1985), however, that when black

students reported favorable relationships with faculty, they did earn better grades. Mannan, Charleston, & Saghafi (1986) reported that African American students are more likely to feel that they receive unfair or inferior treatment and that they distrust white faculty. Furthermore, they maintain that students felt that professors did not care. The reasons for these challenges are connected to the campus climate and environment as well as the comfort level that students might find in a predominately white environment.

Black students continually report feelings of discomfort with white faculty and staff. Such experiences often result in feelings of isolation and, in some cases, perception that faculty are uninterested in their learning. Richardson (1991) crystallized these sentiments in an interview with a black student who expressed her feelings that faculty did not expect black students to succeed, and Edmund's (1984) observation of perceived unfair grading practices reported by black students.

While there is great concern about the negative influences that black students experience with white faculty, white faculty members can be beneficial in helping black students to succeed. Allen, Epps, and Hanniff (1991), Kobrak (1992), and Stikes (1984) emphasize the importance of building relationships with white faculty members who genuinely care. White faculty who believe that African American students can excel academically are a valuable resource that can be effective in helping students to negotiate the educational system, and in assisting to eliminate racism within the academy.

Students who report favorable relationships with faculty have significantly better grades. Allen (1988a) found that African American students who expressed higher levels of academic achievement and who were involved

socially with faculty, viewed faculty as less threatening. He also found that these students sought interpersonal relationships with faculty. Furthermore, black students on black campuses were nearly twice as likely to report excellent relationships with white faculty as black students on white campuses. At Virginia Tech, African American students who participated in a goal setting and self-assessment seminar (Project Success), reported that they rarely interacted with faculty prior to this program. They further noted that after talking to faculty members, they perceived them as being interested in their well being and willing to be helpful to them.

While there appears to be a great deal written on the interaction between black students and white faculty at predominantly white institutions, there is little research concerning black faculty and black students at PWIs. This is, in part, due to the low proportion of black faculty and administrators at white colleges and universities.

This section has provided an overview of the importance of faculty participation to the success of African American students. Based on this review, it can be concluded that relationships between black students and white faculty at PWIs are at the very least strained, and at most, distant. Perhaps one method of eliminating these gaps might be to encourage students to become more involved in their education. This will require involvement and effort on the part of both students and the institution. The next section will discuss the importance of student involvement and effort in their own education.

Student Effort and Involvement

Student learning is a complex process that involves the student's own effort and involvement, environmental factors, interactions with faculty, peers,

staff, administrators, and the campus culture. Learning is not limited to the classroom, but extends throughout the campus (Pace, 1984). The use of laboratories, residence halls, student centers, and other campus facilities, as well as involvement in social, extra-curricular, and academic activities influence the amount of learning and personal growth that takes place during the college years.

Involvement is defined as "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1985, p. 297). The theory of student involvement extends beyond classroom interactions and expands to include how, and the extent to which, a student engages various aspects of the institution. Peers, faculty, resources, and policies are variables in measuring the extent to which involvement occurs. Other factors include participation in organizations, amount of time spent on campus, study habits, use of library, and part-time or full-time enrollment status. Students who are actively involved in the undergraduate experience are more likely to persist (Astin, 1975), and experience greater academic success (Astin, 1975; Frost, 1991).

Involvement is important for students, regardless of the type of institution they attend. In a study to identify qualitative differences in the outcomes between black students attending HBCUs and those attending PWIs, Allen (1987) found that 26% of the students at HBCUs were involved in campus life, as compared to only 8% of those enrolled at a white institution. He also found that academic performance was strongly related to involvement and satisfaction for both black and white students.

DeSousa and King (1992), in a study to examine the amount of involvement and effort that black and white students invest in college activities, found that black students used the library more often than white students, participated more in student activities, and were more involved in clubs and organizations. They noted that involvement with the student union and participating in clubs and activities might be construed as a means of establishing social support networks within the black community.

Quality of effort is also related to student learning and development (MacKay & Kuh, 1994; Pace, 1984). While institutions are responsible for providing adequate resources, facilities, and stimuli to encourage learning, students are responsible for investing the quantity and quality of effort necessary to succeed. If students do not engage in activities that will enhance their learning, they will be less successful.

Pace's (1984) quality of effort scale was developed to measure the amount of effort students expend in learning. Effort, according to Pace, does not simply suggest that students complete required assignments and meet minimum expectations, but that they explore and use all campus resources, facilities, and opportunities. He contends that what a student does once enrolled in college, is more important than the race of the student or where he or she is enrolled. This parallels Tinto's (1987) claim that what happens to a student once enrolled is more influential than what happened prior to enrollment. If this research is accurate, then it could be concluded that the difficulty encountered by African American students might in part be due to a lack of effort invested in their own education. In short, if African American students do not work as hard as their white counterparts, it is necessary to ask

why. Pace (1984) concluded that the quality of effort predicts the quality of achievement; the quality of achievement is the best predictor of satisfaction with college.

Pace (1984) also contended that student initiative generally plays a more important role in determining what a student learns than environmental or cultural factors. This finding conflicts with Sedlacek's (1987) proposition that non-cognitive variables are most important in predicting success for African American students. A plausible conclusion regarding student learning might be that student initiative, combined with non-cognitive and environmental factors, indirectly influences student learning, effort, and behavior. This is exemplified in a comment from a Virginia Tech student who felt that one reason African American students experienced problems at Virginia Tech was because "they choose the wrong major, and then they don't go to class, and then they don't do their work, and they flunk out." This statement implies a relationship between effort and other factors that might be connected to environmental influences, motivation, and reasoning skills.

While quality of effort is important, quantity cannot be overlooked. Astin (1984) notes that time is an important resource that is critical in assessing student involvement. Boyer (1987) notes that only about 48 hours of a typical college student's week is spent attending class and studying. If this is correct, then student effort and involvement are falling short.

Identity

Establishing identity is a crucial task in the development of college students (Chickering, 1969). Although the evolution of identity spans a lifetime, it is most pronounced during adolescence and college. Identity formation is

influenced by numerous factors, including life experiences, sex, and race. Tasks to be accomplished during identity development include assessing personal strengths and weaknesses, establishing a career, developing interpersonal relationships, and assuming a social role. The task of achieving identity is complete when an individual has established his or her own philosophy of life.

The term "racial identity" is based on one's perception that he or she shares a common racial heritage with a particular group. Proponents of racial identity theory contend that establishing identity for ethnic minority students occurs differently than for majority students, and that establishing a positive identity is especially critical in developing academic, social, and personal success (Ford, Harris, & Schuerger 1993; Sowa, Thompson & Bennett, 1989). In recent years, there has been a great deal of interest in the importance of racial identity to the adjustment of African American students in PWIs. This interest has developed, in part, as a result of African Americans' poor academic achievement, high attrition rates, and low graduation rates. Although ambiguity still exists, racial identity theories are believed to be helpful in understanding the dynamics of identity for African American students.

Racial identity theories have been of particular interest to higher education for at least two reasons. The first is simply due to the importance of identity to student development. If a student does not complete the task of developing identity, it will impact development in other areas. Secondly, there is some evidence that the absence of a healthy racial identity can negatively influence academic achievement (Gay, 1985).

Cross' (1971; 1976) theory of nigrescence is the most prominent theory of racial identity. This theory describes a series of stages that individuals must complete in order to establish a healthy racial identity. The four stages in Cross' model, (a) pre-encounter, (b) encounter, (c) immersion/emersion and (d) internalization occur progressively and range from a state of insecurity to one of having achieved "black identity."

In the pre-encounter stage, individuals view themselves and the world as being non-black, anti-black, or the opposite of black. In this stage, individuals act in ways that devalue their black identity. Once an individual completes the pre-encounter stage, he or she moves to the encounter stage after having experienced a social event that challenges their former outlook. At this stage, the individual is usually receptive to approaching the world differently, and begins to search for black identity. In the immersion/emersion stage, a sense of black pride begins to develop. It is during this stage that the individual assumes a pro-black, anti-white position and gains an elevated level of black awareness.

The internalization stage is characterized by feelings of security, confidence and satisfaction with being black. The individual becomes flexible, is comfortable with interests and desires from non-black cultures, and is released from the strong anti-white feelings that existed in the immersion/emersion stage. While this concept of racial identity has not undergone rigorous empirical scrutiny as it pertains to student achievement, it has been used in helping to understand counselor-client relationships, degrees of self-regard and self-actualization, self-esteem, and anxiety levels (Parham, & Helms, 1981; 1985) for ethnic minority studies.

In contrast to some racial identity theorists who believe that developing racial identity is a key to academic success, White (1988) contends that racial identity has little or no influence on academic performance. White's study examined five variables: ethnic identity, student identity, adjustment to college, educational aspirations, and self-esteem. She found that ethnic identity had little influence on the performance of ethnic minority students, and that self-esteem was related to identity development for white students, while it was unrelated to identity formation for black students.

Kalsner (1991) posits that differences do exist in how black and white students establish identity. She contends that ethnic minorities are often subjected to judgments and expectations based on general observations about their physical and behavioral characteristics. Therefore, the development of racial identity is "ascribed" and could lead to a sense of role confusion.

Conclusion

The review of the literature reveals that there is little agreement about factors that influence the academic performance of African Americans students in predominately white colleges and universities. Research does support the contention that the experiences of African American students in predominately white institutions are different from those of majority students, and that these experiences in some way influence cognitive and psycho-social development. A conclusion that can be drawn from the literature is that what is known about the general college student population should be further explored to learn more about African American students and how they adjust. Salient observations from the review of the literature include the dangers of using pre college preparation alone to accurately predict grades of African American students, the

influence of environmental factors as they related to coping, adjustment, social and academic integration, and the importance of the presence of representative numbers of African American students, faculty, and staff.

CHAPTER III

METHODOLOGY

The purpose of this study was to discover and explore factors that related to the academic performance of African American students at Virginia Tech. The review of the literature revealed disagreement regarding what factors most strongly influence and predict academic success among African American students. However, a preponderance of the literature supports the proposition that environmental and other non-intellectual (Sedlacek, 1987) variables influence how African American students perform in, and adjust to predominately white institutions.

This topic of inquiry could best be investigated from a phenomenological perspective. Therefore, qualitative methodology was employed. The data were collected through conducting focus groups interviews and analyzed through the constant comparative method, as proposed by Glaser and Strauss (1967). This chapter provides an overview of qualitative research and a description of the procedures for conducting this study.

Qualitative Research

Qualitative research methodologies are viable for student affairs research (Carnaghi 1992; Kuh & Andreas, 1991; Manning, 1992; Patton, 1990) and allow for detailed descriptions and accounts of students' personal experiences and perspectives (Miles & Huberman, 1984; Strauss & Corbin, 1990). This methodology is especially helpful in identifying how conditional effects, such as race and behavior, influence student behaviors (Allen, 1986; Manning, 1992; Nettles, 1985; Patton, 1990; Pascarella, 1991; Terenzini &

Pascarella, 1991). Key concepts that are fundamental to qualitative research include human instruments and emergent design (Lincoln & Guba, 1985), in depth descriptions of individual opinions, experiences, and perspectives (Miles & Huberman, 1984; Patton, 1987; 1990), and a phenomenological perspective (Crowson, 1987). The goal when using the qualitative paradigm is to allow individuals to respond in their own words without preconceived notions imposed by the researcher. For this research project, a qualitative approach was used. Focus group interviews and a questionnaire were used to collect the data.

Historically, focus group interviews have most often been used in market research (Kreuger, 1988). In the past several decades, the use of this method has spread to other areas, including the social sciences and education.

A focus group interview involves a homogeneous group of people, convened by a researcher or interviewer, to participate in a focused discussion for the purpose of collecting data on a particular phenomenon (Morgan, 1988; Stewart & Shamdasani, 1990). Typically, the discussion lasts one to two hours and the participants are volunteers. It is not unusual for focus group participants to receive an incentive, most often in the form of a monetary allowance. However, other incentives such as certificates, coupons, or other allowances are sometimes used. Focus group sessions for this inquiry lasted approximately one and one half hours, and participants received an incentive of ten dollars.

Typically, the number of participants in a focus group range from four to twelve (Kreuger, 1988; Morgan, 1988; Patton, 1987; 1990; Stewart & Shamdasani, 1991). Factors determining the group size included:

manageability of the group, time, space, resources, the number of groups to be conducted, the type of data the researcher wishes to collect, the desired depth and breadth of the data needed, and the availability of potential participants. An average of five participants were involved in the focus groups for this study, which constitutes moderately sized groups (Morgan, 1988). Since both small and large groups present unique challenges, a group of five reduced the practical problems associated with either of the extremes.

The use of focus groups for this research project was appropriate for several reasons. The first had to do with interpreting data derived from focus group interviews to increase understanding of results from previous quantitative research (Muffo, 1991; Strauss & Corbin, 1990). Quantitative findings from 10 years of research indicate that African American students earn disproportionately low grades. Furthermore, the data show that although African American students enter Virginia Tech with equal or better entry characteristics than do their white counterparts, they are retained and graduate at lower rates. Focus group interviews were helpful in gaining an in-depth understanding of this phenomenon by exploring the students' experiences and perceptions.

Second, focus groups allow for interaction among a number of participants on a single topic. This type of discussion facilitates thoughtful reflection and allows participants to engage in conversation, and to react to and build on others' responses. As a result, synergism, snowballing, and serendipitous responses are likely to occur (Stewart & Shamdasani, 1990) resulting in richer and more reflective data.

Finally, the focus group method allows the researcher to record data in the participants' own words and to seek clarification when needed (Kreuger, 1988; Miles & Huberman, 1984; Morgan, 1988; Stewart & Shamdasani, 1990). This advantage was especially important to this research because it allowed the participants to use their own linguistic styles in conceptualizing and expressing their viewpoints, and because it permitted the researcher to explore ambiguous responses.

The limitations of using focus groups have to do with group interaction and interviewer bias. Both these factors, however, can be mediated by a carefully trained interviewer who is equipped to attend to problems, such as opinionated group members, non-responsive participants, or members who tended to monopolize the discussion. The skills of the interviewer are critical to the validity of qualitative research.

Krippendorff (1980) distinguishes between two kinds of data in qualitative research: etic and emic. When collecting etic data, the researcher imposes an a priori perspective. Conversely, emic data is less structured and allows individuals to respond to questions from their own perspectives and realities. This research project solicited emic data.

Interviews allow people to respond to issues and questions in their own words. The interview style used in this investigation was a combination of brainstorming and the general interview guide approach. The brainstorming part of the session followed the first two steps of Brassard's Affinity Diagram Model (1989). This model recommends gathering information through (a) writing ideas on note cards, (b) having participants silently cluster cards based on natural relationships, and (c) defining groups. The third step, defining

groups was not used. After clustering cards, discussions proceeded using the general interview guide approach. The general interview guide approach collects data through formulation of questions and probes during the interview process.

The combination of these procedures reduced interviewer bias and assisted data analysis. This methodology also ensured that each students' opinion was heard and discussed.

Theoretical Sampling

The purpose of sampling in the qualitative paradigm is to gain as much information as possible. The goal is not to seek information that can be generalized or to make causal inferences as in quantitative analysis, but rather to understand individual's unique experiences.

Theoretical sampling (Glaser & Strauss, 1967; Lincoln & Guba, 1988; Strauss & Corbin, 1990) and purposeful sampling (Patton, 1987; 1990) are appropriate for qualitative research designs. These terms are often used synonymously and refer to a process whereby data are collected and analyzed simultaneously.

Theoretical sampling occurred throughout the research project. The goal of this strategy was to seek as much rich information as possible. As new information emerged, the researcher made decisions about what information was needed next. Strauss and Corbin (1990) assert that "sampling and analysis must occur in tandem, with analysis guiding the data collection" (p. 178).

Data collection was complete after redundancy and saturation had occurred. Redundancy and saturated had occurred, when there was no new information forthcoming. Lincoln and Guba (1988) suggest that:

Initially, any sample unit will do as well as any other, but as insights and information accumulate, and the investigator begins to develop working hypothesis about the situation, the sample may be refined to focus more particularity on those units that seem more relevant. (p. 202)

The theoretical sensitivity of the researcher and the theoretical relevance of the data are important. Theoretical sensitivity is concerned with the researcher's insight and skill in understanding and filtering the data, and is developed through personal experience, familiarity with the literature (Strauss & Corbin, 1990), and professional experiences and insights (Glaser & Strauss, 1967). The theoretical sensitivity of the researcher occurred largely as a result of her ongoing work with African American students. She has had professional experience in both recruitment and retention of college students. Her extensive preparation for conducting the study through reading the literature and discussions with experts also contributes to her sensitivity.

Theoretical relevance (Glaser & Strauss, 1967) is concerned with selecting groups that will help generate, to the fullest extent, as much information as possible. This concept ensures that subsequent groups will continue to enrich the data already collected. The term "proven theoretical relevance" identifies concepts that are significant because of their recurring tendencies or obvious absence throughout data collection (Strauss & Corbin, 1990).

Pilot Study

In Spring 1993, a pilot study was conducted to examine possible explanations for the problem studied. The pre-existing group interviewed consisted of eight African American students and one white student who were participants in an academic support group for students with QCAs under 2.0. The group consisted of third, fourth, and fifth-year students who had experienced varying levels of academic failure at Virginia Tech. The five themes that emerged from this interview that relate to academic performance of African American students were: (a) a paucity of African American students and faculty, (b) an absence of coherence within the African American community, (c) an absence of a sense of belonging, (d) wrong choice of major, and (e) experiences and pressures that resulted from being the only African American student in the classroom.

Participants

This research involved conducting focus group interviews with three types of African American students: students who had experienced low levels of academic success, students who had experienced high levels of academic success, and students who had achieved at satisfactory levels of academic success. For this study, students with QCAs of less than 2.0 were characterized as less successful, students with QCAs of greater than 3.0 were characterized as successful, and students with QCAs between 2.0 and 3.0 were characterized as satisfactory.

The major thrust in identifying and selecting participants for focus groups is the purpose of the study (Kreuger, 1988). To identify potential participants, the researcher obtained a listing of all African American students who enrolled

at the University as freshmen between Fall 1989, and Spring 1994, and who were still enrolled full-time as of January 10, 1995. There were 534 students; 180 less successful (less than 2.0), 358 satisfactory (2.0-3.0), and 58 successful (greater than 3.0). This is the population from which the sample was selected.

Participants for the initial group were selected by stratified purposeful sampling. This method allowed for variation in the sample and produced a heterogeneous representation of the academic performance levels of students. Using this method, the researcher ensured that there was variation of academic levels and QCA range within the groups.

After identifying the initial sample, the researcher contacted students by phone to screen for interest and fit. The questions asked were designed to determine if the students were interested in participating in the focus group discussion, and to determine their willingness to express their opinions in a group setting. During the phone interview, participants were given the topic and background of the research, and alerted that they might be in discussion groups with acquaintances. This was especially important for the less successful group because of the potential sensitivity of the topic. Actual participants were selected based on willingness to participate, and interest in the research project.

Six students were invited to participate in each group. Selected participants were notified by letter within a week of the phone contact to alert them of the time and date of the interviews. Included in the letter was details regarding the interview, including date, time, and format (see Appendix A for letter). An attachment containing general guidelines was also included. (See Appendix B.)

Data Collection and Analysis

During the pilot study and the literature review, numerous factors were identified as being related to the academic performance of African American students. However, the exploratory nature of this study directed the researcher to give participants an opportunity to list the factors from their personal experiences, independent of the literature.

Before data collection began, the interviewer provided the participants with an overview of the study, and discussed general guidelines for data collection and proceeding with the interview. (See Appendix C.) Part I of the data collection involved participants listing the factors they believed affected their academic performance on 4X6 note cards. This method was derived from the Affinity Diagram as described by Brassand (1989). These factors, or determinants of student academic performance, were clustered to form themes.

The students directed development of themes by putting the cards (factors) into what they believed were related clusters. This part of the exercise was done without verbal communication. After clustering the cards, the factors were placed on a flip chart and discussed. (See Appendix D for the protocol for discussion.) The discussion followed the general interview guide approach. Although some questions were formulated during the interview, an interview protocol was constructed prior the interview to guide data collection. Interviews were tape recorded, and later transcribed by a paid outside transcriber.

Part II of the data collection entailed students completing a questionnaire. (See Appendix E.) This instrument provided participants an opportunity to expand on or introduce issues they considered important.

General information was also solicited to gain an understanding of the participants' expectations and opinions about academics at Virginia Tech.

The first group to be interviewed was the less than 2.0 group. The second group was a greater than 3.0 group and the 2.0-3.0 group was the third interviewed. This allowed the interviewer to identify and compare themes that emerged across groups in the beginning phases of the research. The order of interviewing other groups was contingent upon student availability.

Data analysis occurred throughout the research project. This follows the paradigm of the constant comparative method (Glaser & Strauss, 1967). The methodology involves joint collection, coding and analysis of data. The following section describes the procedures for data analysis.

Immediately after each interview, the researcher and co-facilitator discussed field notes and reviewed the clustered note cards. Questionnaires were also reviewed at this time. This was done to compare similarities between the discussion and responses to questionnaires, to determine the appropriateness of clusters, and to assign these clusters to themes. Themes were titled from student responses in the discussion, the literature, and the researcher's own judgment.

After each interview, the tapes were transcribed by an outside party. The transcriptions of the interviews provided added credibility to data collection by providing a paper copy of the interviews.

Upon receipt of the transcripts, (usually within two to three days), transcripts were reviewed. Data were then coded by paragraph in conjunction with listening to the audio tapes. Coding involved marking passages and making notes in the margins of the transcripts by designated themes. The

researcher then reviewed the themes that were derived from the debriefing to ensure that they were consistent with the themes coded on the transcripts. Throughout this process as new data were collected new information was compared and contrasted. These steps were followed throughout data collection and analysis.

By the end of the second interview, 11 general themes had emerged. These themes were: (a) adjustment, (b) responsibility, self-blame, and guilt, (c) study habits and skills, (d) goal commitment, (e) major, (f) “learning the game,” (g) effort and involvement, (h) peer interactions, (i) parental influence, (j) faculty issues, and (k) African American presence on campus. By the end of the third group, no new themes emerged, and all subsequent data fit into one of the existing themes.

The next step was broadening the themes. In preparation for broadening the themes, the researcher read and re-read transcripts and listened to tapes. She also met independently with the dissertation advisor and the third party reviewer to consult on this process. Categories were discussed, and broadened by first placing all of the data within appropriate existing categories. The next step was to identify similarities and overlaps within data and merge the categories accordingly. By the end of this process, three themes emerged: (a) achievement motivation, (b) social infrastructure, and (c) faculty issues.

Trustworthiness of Study

In qualitative research, the researcher is the instrument (Caple, 1991; Patton, 1990). Therefore, credibility of the research project relies largely on the researcher’s objectivity and impartiality. Objectivity is the cornerstone in conducting rigorous qualitative analysis. It is, therefore, incumbent upon the

investigator to be aware of and report personal biases or special circumstances that might occur, which could influence the researcher during the data gathering, analysis, and reporting.

For a study to be credible, the subjects and their responses must be accurately reported and represented in the data. To guard against researcher bias and improve the credibility of data analysis, peer debriefing and member checks were used. Peer debriefing is a process whereby a colleague assisted the researcher in objectively differentiating between personal perceptions and perceptions expressed by the participants. Member checks involved verification of tentative conclusions with participants. This was done by providing the participants from each group with a list of issues that emerged, and asking them to report back on any data that they felt were not reported accurately.

Two colleagues from the Office of Academic Enrichment Programs (OAEP) assisted with the research. One colleague assisted in conducting the focus group interviews in the capacity of co-facilitator. Meetings occurred with her after each interview for discussion of observations during the interview, and to discuss and make decisions about the next group.

Another colleague assisted in validating the conclusions drawn by the researcher. This validation occurred by independent reviews of the transcripts and tapes, and meetings with the researcher to discuss the conclusions drawn from the data.

Logistics of Study

Crowson (1987) notes that simplicity and accessibility are key considerations in selecting a site for conducting the interviews. This study was

conducted in the Student Union at Virginia Tech. The building is easily accessible and located in an area where students are comfortable and congregate regularly. The room selected for the interview was a small conference room. Participants and interviewers were seated in the same area, and a tape recorder was used to ensure accuracy of student responses.

The interviews took place during the month of February 1995. This time period was selected to eliminate any stress that might have been imposed by mid-term or final examination pressures. By this point in the semester, students will have had an opportunity to experience successes and failures and to reflectively evaluate them in the context of their past and present experiences. Gaining access to the participants to be studied was done by securing permission from the Institutional Review Board for Human Services, and the Vice Provost for Undergraduate Programs (see Appendix F). Permission was also granted to utilize university reports and documents in conducting this study.

Each of the participants from whom data was sought completed and signed a consent form prior to the group interviews. (See appendix G.) Information regarding consent included explanations of confidentiality, the option to withdraw at any time during the study, and permission to use quotes.

This chapter has provided an overview and description of data collection and analysis. The steps involved ensure data collection and analysis from a phenomenological perspective.

CHAPTER IV

RESULTS OF STUDY

This chapter presents an overview of data collection and a summary of the findings. Throughout this chapter, the terms “students,” “participants,” and “respondents” will be used interchangeably.

Description of Interview Groups

Thirty-five students participated in this research project. The students were divided into seven groups; 15 students with QCAs less than 2.0 (three groups), six students with QCAs between 2.0 and 3.0 (one group), and 14 students with QCAs greater than 3.0 (three groups). For the purposes of this study, students with QCAs less than 2.0 are referred to as less successful, students with QCAs between 2.0-3.0 are referred to as satisfactory, and students with QCAs greater 3.0 are referred to as successful.

Less Successful Group. There was a discrepancy among the students interviewed in the less successful group. One participant had a QCA of 2.25 instead of less than 2.0. This discrepancy occurred because the student in question applied the Freshman Rule after the interviews were scheduled. Discovery did not occur until all of the interviews were complete. At the time the interview was scheduled, this student’s QCA was 1.59. Table 1 lists the academic characteristics of students in the less successful group.

After discussing the responses from this participant with the co-facilitator, reviewing the interview tape and debriefing tape, and review of transcripts, the researcher made the decision to report this student’s responses with the less successful group. A major factor in this decision was that the student talked at

Table 1

Characteristics of Less Successful Students (<2.0)

Student	QCA	Major	Academic Level	Sex
Ruth**	2.25	LASC	Sophomore	F
Larry	1.98	Tech. Education	Junior	M
Christopher	1.95	Finance	Senior	M
Hillary	1.92	Marketing	Sophomore	F
Jonathan	1.91	Electrical Eng.	Sophomore	M
Amber	1.88	History	Senior	F
Ann	1.79	Biology.	Junior	F
Robin	1.77	Sociology	Senior	F
Arnold	1.75	Architecture	Sophomore	M
Alfreda	1.62	Biology	Sophomore	F
Artemus	1.59	General Eng.	Sophomore	M
Hope	1.56	University Studies	Sophomore	F
Lorenza	1.55	Physics	Sophomore	M
Jonesia	1.44	General Eng.	Sophomore	F
Jerry	1.33	Physics	Freshman	M

Note. **This student was interviewed with the less successful group, even though her QCA was higher. Her responses were more similar to the factors that emerged from the less successful group than those from the satisfactory group, therefore all responses from this student are reported with the less successful group.

length about the difficulties she had encountered with study skills and in her chosen major. This was a predominant pattern among most of the less successful students, but not among the satisfactory students.

Students were comfortable in the discussion and were responsive to the task. The note card exercise was especially effective for directing the discussion toward topics of importance for the study.

Keeping students focused on the subject matter was not a problem, however, there was a tendency among some group members to stray from the subject. To eliminate this, it was necessary on numerous occasions for the researcher to guide the discussion by asking, "so how does that influence your academic performance."

Overall, data collection was effective. Students willingly participated and discussed issues that were significant to the study.

Satisfactory Group - Six students with satisfactory grades participated in this study. Table 2 shows characteristics of students interviewed in the satisfactory group. The group dynamics were challenging because of the varying opinions regarding issues related to race, and specifically peer relationships. While the themes that emerged were similar to those in both the less successful group and the successful group, some opinions evoked disagreement from other group members.

For this group, the responses were influenced by the group dynamics. An important observation is that on several occasions, participants took issue with statements made by other participants. As a result, the dynamics of the group were such that some students may have been less frank and assertive in expressing their views.

Table 2

Characteristics of The Satisfactory Students - (2.0-3.0)

Student	QCA	Major	Academic Level	Sex
Albert	2.90	Con. Stud.	Junior	M
Myrlin	2.66	Res. Prop. Mgt.	Sophomore	F
Frank	2.54	Psychology	Sophomore	M
Louise	2.29	Build. Const.	Senior	F
Herbert	2.21	General Eng.	Sophomore	M
Alonzo	2.03	Psychology	Senior	M

Three topics emerged during the discussion that set the stage for the remainder of the interview. First, one student talked about having had all black friends her freshman year, whom she felt had betrayed her. Consequently she chose “not to hang around black people anymore.” A second student commented that she thought “those” black students didn’t have a good understanding of the subject matter. She said that as a result of this experience, she studied with white students because she thought they had a better understanding of the material. This elicited disapproving body language and later responses from other students in the group. Finally, one group member talked about “loud and angry” black students, and how he could not identify with them. This statement was also rebutted by several members in the group.

These three statements resulted in the group being somewhat guarded in their responses after their initial responses which were more open. It is the belief of the researcher that the students responded honestly to the issues raised. However, it was apparent that they searched carefully for the correct words so as not to offend other students. These dynamics made this group more difficult to facilitate. While the data appear to be valuable, there is a possibility that it was tainted by the students level of comfort.

Successful Group

Fourteen successful students were interviewed. Table 3 provides a description of characteristics for the participants in this group. The interviews were successful in soliciting relevant data for the research project. The group members engaged in reflective discussion with little rambling.

Table 3

Characteristics of The Successful Students - (>3.0)

Student	QCA	Major	Academic Level	Sex
Anita	3.79	Accounting	Junior	F
Felix	3.52	Accounting	Sophomore	M
Jocelyn	3.50	Sociology	Sophomore	F
Tess	3.47	Ind. Eng.	Sophomore	F
Harold	3.37	Engineering	Senior	M
Angela	3.30	Fam. Child Dev.	Senior	F
Clara	3.26	Art	Junior	F
John	3.19	Political Sc.	Senior	M
Marlon	3.15	Psychology	Senior	M
Carl	3.14	Civil Eng.	Senior	M
Thomas	3.12	Comp. Science	Junior	M
Jennifer	3.09	Comm.	Sophomore	F
Blake	3.05	Accounting	Senior	M
Porscha	3.00	Health Ed.	Junior	F

The members occasionally became unfocused, but the researcher was able to redirect them by asking the question, “so how do you think this has influenced your academic performance?”

Overall, the interviews went very well. Respondents were participatory and appeared to provide genuine responses to issues raised. The data collected was rich and descriptive. It provided substantial information for this research project.

Observations About the Protocol

The method for data collection was successful in gaining insights into students' perspectives. Two modifications were made. The first was to change the meal from after the interview to during the interview. This change was made because at the termination of the first interview, and during the meal, the discussion revealed information valuable to the research project. In later groups, this change was effective in adding to the level of comfort in the groups.

All subsequent groups were given five cards and additional cards were placed in close proximity to them with instructions to use additional cards if they had more than five experiences. This was an effective change and resulted in observed differences in the number of cards completed by the less successful group, and the successful group. The difference observed was that while most of the students in the less successful group used exactly the number of cards that they were given, 11 of the students in the successful group filled out more cards than they were given. This observation is important because it leads to speculation whether this pattern of doing the minimum expected in this project could have implications for how students approach their academic responsibilities at Virginia Tech.

An issue of concern at the end of the first interview was the relevance of the data collected. This was of concern because during the first interview, two unexpected factors evolved. For the less successful students, there was a strong sense of responsibility, self-blame, and guilt for their low performance. Parental influence also emerged as important in students intense verbal and emotionally charged comments. These factors had not emerged in the literature review or the pilot study. After reviewing the interview tape, the researcher concluded that, because of the intensity with which students discussed these factors, they were indeed valid. The analysis revealed that these phenomenon were pivotal to the findings of this study, and in helping to tell the students' stories.

Students were also asked to complete a follow-up questionnaire at the end of each interview. Part I of the questionnaire collected personal data about each participant. Part II requested that participants list issues of concern, and potential strategies that Virginia Tech could implement to address these concerns. At the end of the first interview, the researcher was concerned that the questionnaire did not meet this intent because the responses given by the students in less successful group were related to study habits, effort and the need for personal change, rather than to issues related to the Virginia Tech environment. Likewise, the possible solutions listed were related to changes that the students felt they needed to make, rather than to changes that needed to occur within the institution.

After considering the literature on effort and involvement (Astin, 1987; Pace, 1984), attribution theory (Wiener, 1985; 1969), and the findings of a study

by Kraft (1991) in which African American students indicated that hard work and effort were the strongest factors relating to their academic performance at a PWI, the researcher decided to administer the questionnaire to the second group before making a decision regarding the effectiveness of the instrument for this study. The responses from the second group resembled the literature, but stronger emphasis was placed on environmental and external factors. Therefore, the decision was made to continue using the questionnaire. Findings from the questionnaire are listed on Tables 4 and 5.

It is important to note that the responses to the questionnaire in each group was similar to the factors raised in the interviews. This added trustworthiness to the themes that emerged.

In subsequent groups of both the less successful students and the successful students a pattern emerged. The responses from most of the students in the less successful were primarily related to personal issues and individual change that they felt needed to occur. Conversely, the responses of students in the successful group were primarily related to institutional issues. The responses from the students in the satisfactory group represented a combination of those from the other groups, but most often resembled those of the successful group.

With the exception of the above mentioned changes, all other groups were conducted using the protocol as described in Chapter 3. The researcher concluded that while the information gained was somewhat different from what was expected, the data collected were rich and provided adequate information for the researcher to tell the students' stories.

Table 4

Results of Follow-Up Questionnaire-Part I

Name	Expected QCA	Actual QCA	Academic Level	Successful	Probation or Suspension
Anita	3.50	3.79	30	YES	NO
Felix	3.40	3.52	20	YES	NO
Jocelyn	3.00	3.50	20	YES	NO
Tess	3.00	3.47	20	YES	NO
Harold	3.00	3.37	40	YES	NO
Angela	2.80	3.30	40	YES	NO
Clara	3.40	3.26	30	YES	NO
John	3.5+	3.19	40	NO	NO
Marlon	3.00	3.15	30	YES	NO
Carl	3.50	3.14	40	NO	NO
Thomas	3.7+	3.12	30	YES	NO
Jennifer	3.50	3.09	20	YES	NO
Blake	3.00	3.05	40	YES	NO
Porscha	3.0+	3.00	30	YES	NO
Albert	3.00	2.90	30	NO	YES
Myrlin	3.00	2.66	20	NO	YES
Frank	3.20	2.54	20	YES	YES
Louise	3.0+	2.29	40	YES	YES
* Ruth	-	2.25	20	YES	YES
Herbert	3.00	2.21	20	NO	NO

Table 4

Results of Follow-Up Questionnaire-Part I (cont.)

Name	Expected QCA	Actual QCA	Academic Level	Successful	Probation or Suspension
Alonzo	3.00	2.03	40	NO	YES
Larry	2.50	1.98	30	NO	YES
Christopher	2.80	1.95	40	NO	YES
Hillary	3.00	1.92	20	NO	YES
Jonathon	3.00	1.91	20	NO	NO
Amber	2.20	1.88	40	NO	YES
Ann	3.00	1.79	30	NO	NO
Robin	2.50	1.77	40	NO	YES
Arnold	2.8-3.0	1.75	20	NO	NO
Alfreda	2.50	1.62	20	NO	YES
Artemus	2.5+	1.59	20	NO	NO
Hope	2.20	1.56	20	NO	NO
Lorenza	-	1.55	20	YES	YES
Jonesia	2.50	1.44	20	NO	YES
Jerry	3.00	1.33	10	NO	NO

Note. Students are listed in descending QCA order.

* Student did not list an expected QCA.

Expected QCA - Refers to students' overall QCA upon matriculation at Virginia Tech.

Actual QCA - Refers to students' actual QCA at Virginia Tech at the time of the study.

Academic Level -10 Freshman, 20 Sophomore, 30 Junior, 40 Senior.

Successful - Refers to students' perception of whether they have been academically successful.

Probation or Suspension - Indicates if a student has been on probation or suspension since matriculation at Virginia Tech.

Table 5

Frequency of Responses of Follow-Up Questionnaire-Part II

Issue	Successful Group >3.0	Satisfactory Group 2.0-3.0	Less Successful Group <2.0
Achievement Motivation			
Study Habits / Time Management	0	0	8
Adjustment	3	0	4
Determination / Motivation	5	0	0
Goals and Priorities	0	0	4
Major	0	0	1
Social Infrastructure			
Low # of Black Stu. More AA Tutors	2	1	3
Black Student Cohesiveness	3	2	0
Dating Relationships and Peer Pressure	2	0	3
Family/Parental Support/Relationships	1	1	1
Loud Angry Blacks	0	1	0
Faculty Issues			
Lack of Black Faculty	6	3	3
Faculty/Student Relationships	5	1	4
Racial Tension Negative Stereotypes	6	2	1
Caring, concerned Faculty	0	0	6

Note. Indicates frequency of thematic factors within QCA ranges.

General Observations

Nonverbal communication and body language are important when collecting qualitative data. These factors were important to this research project.

An important observation about the physical occurrences during the interview was the way in which students approached completing and clustering the note cards. Each student was given five cards, and asked to write one response on each note card to the question, "what experiences stand out for you because they have affected your academic performance at Virginia Tech?" After the first group, additional cards were made available for students who needed more. Most of the less successful students filled out only the five cards given to them, and there was minimal non-verbal communication while clustering the cards. The researcher noted that during the process of clustering cards, a number of the cards in each less successful group were placed in clusters that had no common characteristics. There was no noticeable pattern in the satisfactory group.

On the other hand, the successful group approached the task of completing and clustering the cards differently than the students in less successful group. Ten of the students in successful group filled out more than five cards. Although like other groups, they could not talk, there was collaboration through body language and eye contact. These students gave cards to each member and from the beginning, they collaborated in determining clusters. In the less successful group, one person kept all of the cards, and that individual started the clustering by laying them on the table with the other

students then moving them around. In short, the successful students were much more involved and methodical in how they clustered the cards.

Because of variation in academic level within the groups, the researcher was prepared for difficulties that might have occurred in encouraging all members to participate. It is noteworthy that in all groups, the freshmen and sophomores were equally as participatory as juniors and seniors. While there were some challenges in encouraging the less outgoing students to talk, there was apparently no relationship between level of participation and academic level.

Discovering Themes

During the literature review, numerous factors were identified as being related to the academic performance of African American students. However, the exploratory nature of this study directed the researcher to give participants an opportunity to list the factors from their personal experiences, independent of the literature.

Part I of the data collection for this study involved participants listing on 4X6 note cards the factors they believed affected their academic performance. This method was derived from the Affinity Diagram described by Brassard (1989). These factors, or perceived determinants of academic performance, were clustered, and later helped to determine themes.

The cards (factors) were then combined, and given back to the participants with instructions to place them into clusters. This part of the exercise was done without verbal communication. The clustered factors (from the note cards) were then listed on a flip chart and discussed by the students. The clusters were not listed or discussed in any particular order.

At the end of each discussion, the researcher and co-facilitator met to discuss the dynamics of the interview and to identify emerging themes. Themes describe the interrelationship and connectedness within and between clusters. In essence, each theme was a heading or title under which large groups of factors were placed.

Interviews were tape recorded and later transcribed. The transcripts were used to code the data.

Part II of the data collection entailed students completing a questionnaire. This instrument provided participants an opportunity to expand on, or introduce issues they considered important. General information was also solicited to gain an understanding of the participants' expectations and opinions about academics at Virginia Tech.

Summary of Findings

The beginning of this chapter described the procedures for data collection. The remainder of the chapter summarizes data from each group through the themes of: (a) achievement motivation (the personal attributes and commitments a student brings to the institution, (b) social infrastructure (the relationship and interaction patterns that occur with peers and family, and (c) faculty issues (the interactions of between white faculty and African American students.)

In reviewing the data between groups, findings suggest that the students in the successful and satisfactory groups had similar academic behaviors and issues. Although there were some differences, these two groups most closely resembled each other.

There were also some similarities between the less successful and satisfactory groups. An interesting observation about the satisfactory students is that most topics that emerged appeared to be of moderate importance. Students in this group for the most part did not discuss issues as passionately as in the other two groups.

One issue evolved among the satisfactory students that was inconsistent with the data collected from other groups. A participant was concerned about *loud and angry black students. This was a factor that did not emerge in the other groups. It is important to note this because this opinion contradicts the perceptions of all other participants regarding black students at Virginia Tech. It is beyond the scope of this study to expand on this, but there may be implications in this phenomenon regarding identity.

The data most important to this study was gained from discussions with the less successful and successful groups. This conclusion is based on the fact that most of the information gained from the satisfactory group was redundant. Further, most of the responses did not have a strong tendency one way or the other. Students responses were moderate. They did some of everything that was mentioned by other groups, but nothing to the extreme of either. The underlying implication for all findings was that conditions that influence the academic performance of African American students are related to the interactions that occur between the student and the environment.

Numerous achievement motivation issues were raised that are important in understanding the factors associated with success for African American students. All participants interviewed agreed that effort and hard work were pivotal to their academic performance at Virginia Tech. They believed that

these things combined with the absence or presence of clear goals, and good study habits made a major contribution to their grades since enrolling at the university.

While all of the groups recognized the importance of these factors, there were major differences in how they were approached. For an example the successful students talked about investing extra study time, using campus resources, studying with peers, and talking to professors. The satisfactory students also engaged in similar activities but not to the extent as the successful group. The less successful students admitted that academics were not a priority and that they had not spent adequate time on their studies. They felt that on most occasions if they did study, it was only after having done other things they wanted to do. This group did not talk about any academic activities except in the context of faculty interactions.

An interesting phenomenon that emerged in the less successful group that might have some bearing on success is the enormous amount of responsibility, self-blame, and guilt expressed by these students. Students believed that, although there were other forces in place that could have impacted their performance, that ultimately they were in complete control of their academic situations. From their perspectives, their existence at Virginia Tech was most often built around themselves.

There was little interaction with the larger community and few efforts to seek help. It was not clear from this study if these students were in this predicament because they did not know how to move away from responsibility, self-blame, and guilt behaviors, or if they just chose not to.

Feelings of responsibility, self-blame, and guilt did not occur in either of the other groups. Students in the successful and satisfactory groups recognized the need to connect outside of themselves to facilitate academic success. This is found in how they built their peer social infrastructure.

Social infrastructure was important to all of the students interviewed. Three factors emerged. One had to do with peer influence on academics. Successful and satisfactory students discussed things they chose not to do with peers in order to excel academically. They talked about setting priorities and refusing to succumb to peer pressure if it would impact their academics. It appeared that this group often made decisions to separate themselves from friends. They also recognized early in their college career the importance of academics over social. This was not the case for less successful group.

Students in less successful group discussed the peer groups as the nucleus of their existence at Virginia Tech. They believed that they had allowed their peers to influence them to do things other than academics. What is interesting about this is that the students in this group still maintained that their failure was their own responsibility.

The second theme regarding peers had to do with support groups. The students in all three groups considered their *friends* and *support groups* to be other African American students. What was interesting is that, although most of the students said their friends and peers were other African American students, most did not engage in academic activities with them. According to the participants, this was primarily because there were such a low number of African American students at the university. This is one of the few factors that emerged as important to most students.

There was a clear distinction made in each group about how they interacted with white peers and how they interacted with black peers. The successful and satisfactory students felt it was important to academic success to interact with white students. One student said it was important to *utilize white students because they were at an advantage as far as *knowing the game. Successful students believed that they gained advantages by developing relationships with white students. They studied with white students, but in most cases described their friendship and support systems as being made up of other black students. The overall consensus of the group was that most of their interactions with white students were for the purpose of advancing themselves academically.

Less successful students rarely interacted with white students. Within this group, a salient *we - they theme emerged and African American students often referred to white students, and whites in general with some hostility. It can be concluded, based on the evidence in this study, that these students for some reason have isolated themselves from the white students and from the larger Virginia Tech community. Poor academic performance is inevitably a by-product of such isolation.

Differences in interaction patterns extended beyond individual relationships to extra and co-curricular activities. Students who excelled academically mentioned having participated in ethnic and non-ethnic organizations and activities. Discussions with the less successful group centered around participation in black student organizations and programs. They did not talk about being involved with the larger community or being in extra curricular activities. This finding supports the importance of integration

and involvement as theorized by Astin (1986) and Tinto (1987). What has occurred with the students in the successful group, and to some extent in the satisfactory group, that has not occurred with the students in less successful group are integration and involvement.

These findings suggest that students in the less successful group have not integrated into the larger community. They have limited themselves by not taking advantage of the many academic and extra-curricular opportunities available at the university.

The patterns of parental influence for less successful students were totally different than those for the successful and satisfactory students. The less successful group considered parental influence to be "stressful" and described it as "pressure." These students talked a great deal about family and parents not being perceived as supportive. Their discussions revealed emotional frustration and pain. The students did not believe they had the kind of support that could sustain them through their academic challenges.

For the satisfactory group, parental and family influence were discussed as being important, but nothing stood out as especially salient. The successful group used such terms as *support and *encouragement when describing their parents role in their education. In contrast to the less successful group, they considered their parents extremely supportive of their academic endeavors. The successful group noted specifically that parental support, encouragement, and expectations have influenced how they have performed academically.

Two factors that emerged from the successful group that did not emerge from the less successful group were a sense of responsibility to the community and "proving them wrong". Students were concerned that whites had negative

stereotypes about them, both socially and academically, and that through excelling academically they could help to dispel these myths and negative stereotypes. The consensus of the successful group was that they were driven to do well by the desire to *prove them wrong.τ Most often when students used this phrase they were referring to white faculty at Virginia Tech. When students discussed these two issues, they expressed them quite passionately.

How faculty issues affected academic performance had to do with the frustration students felt. This group appeared to be driven by negative faculty attitudes and expectations. They talked about other contributors to their performance, but these things seemed to be the driving forces. They talked about unfairness at Virginia Tech, absence of recognition by faculty for their accomplishments, and unfairness of the world and how their education would help to eliminate some of this.

The less successful group did not discuss faculty to the extent that the other groups did. They did not believe that the grades they earned were influenced by faculty. Although they had concerns about faculty behaviors and attitudes, they still believed that their performance was a result of things they did and did not do. This group was only moderately concerned about faculty. In contrast, the satisfactory group felt that faculty behaviors and attitudes did influence them at Virginia Tech. Like the successful group, they felt frustrated about their interactions with white faculty at Virginia Tech.

Students also felt strongly that more African American faculty and students were needed at the university. This factor emerged throughout each group and students discussed this concern with great conviction.

The findings of this study reveal that academic performance for African American students is related to numerous direct and indirect factors. The conditions that enhance academic performance include hard work and effort, clear priorities and goals, interacting with white students, and faculty behaviors and attitudes.

The things that directly impede academic performance include poor study skills and habits, wrong choice of majors, unclear goals and priorities, and *responsibility, self-blame and guilt.τ Although these were the primary factors identified by the less successful group, other factors worked indirectly to affect performance.

In conclusion, the findings of this study validate the postulation that the conditions related to academic performance of African American students are primarily related to the interaction with the social and academic environments. The conditions worked differently for students who have excelled academically and who have not. Likewise, the behaviors for students in the less successful students were very different than those of the satisfactory and successful students. Therefore, the findings regarding what is valid, but why remains an unanswered question.

The research questions for this study were (a) what conditions enhance the performance of African American students at Virginia Tech, and (b) what conditions impede the academic performance of African American students at Virginia Tech. The answers to these questions are related to interaction with the academic and social environments, and are found in the themes of achievement motivation, social infrastructure, and faculty issues.

The achievement motivation factors that enhance performance include determination, strong study habits and skills, hard work, clear goals, and satisfaction with major. The social infrastructure factors that enhance performance are parental support and *utilizing white studentsτ in academic activities. Within the theme of faculty issues, students reversed negative faculty attitudes and stereotypes into positive motivation that resulted in drive and determination to *prove them wrong.τ The presence of African American faculty and role models also enhance performance.

The achievement motivation factors of poor adjustment, poor study skills and habits, unclear goals, and dissatisfaction with major impede academic performance. The absence of a supportive parental social infrastructure and a racially exclusive peer infrastructure also worked against academic success for the less successful students. The faculty issues that impede performance are professors who don t care and who do a poor job at teaching the material. Racist faculty were also discussed, but only about half of the less successful students in the group considered racist faculty a factor in their performance. The absence of African American role models also impede performance.

CHAPTER V

DATA ANALYSIS AND PRESENTATION OF FINDINGS

This chapter presents a description of data analysis, an overview of the study, and the presentation of findings. The process of data analysis is described in detail. Quotes and vignettes are used to tell students' stories about their academic experiences at Virginia Tech.

Data Analysis

Data collection and analysis occurred in tandem and throughout the research project. Immediately after each interview, the researcher and co-facilitator discussed field notes and reviewed the clustering of note cards. Questionnaires were also reviewed at this time. This was done to determine the appropriateness of clusters, and to assign names to these clusters as themes.

Themes were titled from student responses in the discussion, from the literature, and from the researcher's own judgment. Upon receipt of transcripts (usually within two to three days), transcripts were reviewed. Data were then coded by paragraph in conjunction with listening to the audio tapes. Coding involved marking passages, and making notes in the margins of the transcripts by designated themes.

Following the constant comparative analysis method, data were coded into as many themes as possible (Glaser & Strauss, 1967). This yielded 11 themes. These themes were: (a) adjustment, (b) responsibility, self-blame, and guilt, (c) study habits and skills, (d) goal commitment, (e) major, (f) *learning the game, (g) effort and involvement, (h) peer interactions, (i) parental influence, (j)

faculty issues, and (k) African American presence on campus. By the end of the third group, no new themes emerged, and all subsequent data fit into one of the existing themes.

Thought was given to broadening the themes throughout the data analysis and collection. In preparation for broadening the themes, the researcher read and reread transcripts, listened to tapes, and interrogated the data. She also met independently with the dissertation advisor and the third party reviewer to consult on this process. Potential broader themes were discussed and later refined by placing all of the data under appropriate existing themes.

Themes should be broad and inclusive (Lincoln & Guba, 1985). Following this charge, the researcher collapsed themes by identifying similarities and overlaps within and between the initial themes. This was done until the initial themes were collapsed to three. At the end of this process, the themes that emerged were named: (a) achievement motivation, (b) social infrastructure, and (c) faculty issues.

Overview of the Study

The purpose of this study was to explore conditions that enhance or impede the academic performance of African American students at Virginia Tech. These conditions are explained through an understanding of the interaction between the students and the social and academic environments. Three themes emerged that help explain this phenomenon: achievement motivation, social infrastructure, and faculty issues. For the students in this study, these themes work in tandem to direct academic success or failure.

Achievement motivation is the stimuli which propel students to accomplish goals. Social Infrastructure is the personal relationships that influence how students manage their academic performance. Faculty Issues include interactions with and relationships between African American students and faculty. Also important to faculty issues is the importance of more African American administrators, faculty, and staff.

The findings most important to this study were derived from the less successful and the successful groups. This conclusion is based on the fact that most of the information gained from the satisfactory group was similar to that found for the other two groups. Overall, the satisfactory group most closely resembled the successful group, and will therefore, in most instances be discussed with the successful group.

Achievement motivation is composed of the personal attributes and commitments that students bring to, and are willing to invest in the educational process. It is unlikely that a student can be successful without exercising both attributes and commitments. Personal attributes for the less successful students, included poor adjustment and a severe sense of responsibility, self-blame, and guilt. These things work in opposition to the goal of academic success for the students interviewed. Personal attributes for the successful group were self-reliance, determination, anger, and the desire to *prove them wrong.τ Self-reliance and determination, combined with anger and frustration to *prove them wrongτ acted as a buffer to propel this group to academic success.

Personal commitments include effective study habits and skills, goals and choice of major. These factors were important to all students interviewed.

The difference is found in how the students approached these factors. The less successful students had poor study skills and habits, unclear goals and in most cases were displeased with their majors upon matriculation at Virginia Tech. Conversely, the successful students had good study habits and skills, clear short and long-term goals, and were pleased with their majors. The comments of the satisfactory group revealed that since matriculating at the University, they have developed strong study skills and habits, had clear goals, and were pleased with their current majors. All three groups agreed that a key to success was how hard a student was willing to work to earn good grades.

The social infrastructure consists of peer relationships and parental and family influences. This theme helps to explain how relationships contribute to performance. A common thread that ran through all groups interviewed was that their primary support group were other African American students at Virginia Tech. Aligned with this was the feeling that there needed to be more African American students at Virginia Tech. These things were important to 33 of the 35 students interviewed. The other two students indicated that they were either uncomfortable with black students or that they had experienced conflicts, and now chose to interact with white students. This finding is especially important because it has implications for how black students integrate with the larger Virginia Tech community.

The less successful students reported virtually no interaction with white students. Successful students indicated that the relationships they built with white students were most often for the purpose of academics. The satisfactory students interacted with white students more often than the less successful students, but less than the successful students. However, the interaction

behaviors of the satisfactory group most closely resembled those of the successful group. This finding is particularly important because the successful students believed that interaction with white students was a major factor in their academic success.

Parental influence was perceived as pressure and stress for the less successful students. They did not believe that their parents had been supportive, and they felt that parents had applied too much pressure about their grades. This was true for the group as a whole, but was not the case for at least half of the males. The data available did not provide adequate information to lead to conclusions as to why this occurred.

For the successful group parental influence was perceived as supportive and encouraging. The students interviewed felt that this was extremely important, and believed that encouragement and support from their parents had a significant impact on performance. The satisfactory group thought parental influence was important and they believed they had support and encouragement from their parents.

Faculty issues involve students perceptions about white faculty and their feelings about the under-representation of black faculty at Virginia Tech. The less successful students felt that caring faculty was important to student success. Half of these students felt that white faculty were racist. Half did not. They all agreed on two things about faculty. One was the need for more African American faculty, the other was that what was most important about faculty is that they should care about students and be effective teachers. This opinion was stronger than beliefs about more African American faculty and about racist attitudes of white faculty.

The successful and satisfactory groups had a great deal to say about faculty issues. These groups were angry and frustrated, and felt that white faculty at Virginia Tech were racist. Only two students in these groups shared positive experiences with white faculty. The negative experiences of these students with white faculty and others at the university were reverted into positive emotions that drove them to excel academically. The feelings of the satisfactory group were similar to those of the successful group. However, while there was some anger and frustration, this group did not feel that the anger drove them to success. They believed that their success was more related to their goals.

The findings from this study support the importance of non-cognitive factors and environmental influences on academic performance of African American students at Virginia Tech. This study combined the important factors for the students in this study within the context of three themes: (a) achievement motivation, (b) social infrastructure and (c) faculty issues. These themes work together to provide a framework for understanding the academic performance of the students in this study.

Presentation of Findings

The findings of this study will be presented through vignettes describing the students' stories. The vignettes will be followed by descriptions of the major findings and related data. Quotes are used to tell the students' stories about their academic experiences at Virginia Tech. The vignettes and stories will be presented in the context of the themes that emerged from the data.

Achievement Orientation

Jonesia is in her fifth year at Virginia Tech. She spent her first two years unmotivated and in a state of depression. She rarely went to class or studied. Jonesia's best friend, Larry, has been here for three years and has a QCA of 1.98 with 70 credit hours. Jonesia has a 1.4 and 60 hours. Larry and Jonesia say they are going to change their majors, but their QCAs are too low. Larry just decided to change his last week. Jonesia decided to do so after her first semester here, but has not had the grades to accomplish this yet. Both Larry and Jonesia blame themselves for their grades and believe that they deserve the guilt they feel. They say, *Hey, I screwed up, and it's all on me.τ They want to be successful and believe they will be, but they don't quite understand how to *play the game.τ Larry and Jonesia look up to their good friends, Blake and Anita. They talk about how they admire them. Larry says, *Blake and Anita study a lot.τ *Yeah,τ says Jonesia, and *Anita loves her major. I was talking to her the other day, and she has her goals set all the way through college, and she has only been here for two years.τ Blake starts feeling guilty, and says to Jonesia, *Let's go study.τ Jonesia tells him that she is too depressed and reminds him of the party Saturday night. Blake says, *Oh yeah, that's right. . . and I don't wanna let the fellas down, so let's chill. . .τ

The stories of Jonesia, Larry, Anita, and Frank help to explain the experiences of some African American students at Virginia Tech. Embedded in their stories are expressions of confusion about goals, uncertainty about majors, poor study skills and habits, responsibility, self-blame and guilt, and lack of effort and involvement. However, there are also stories of success, clear goals, correct choice of major, good study skills and habits, and drive and motivation to succeed. The stories of Jonesia and Larry tell one story. Frank and Anita illustrate another.

What factors influence the academic performance of African American students at Virginia Tech? What are the personal inputs and what are the corresponding outcomes? How do students explain their success and failures and who, if anyone, do they blame? The answers to these questions can be

explained by understanding achievement motivation in African American students at Virginia Tech.

The achievement motivation theme describes the stimuli that propel students to make choices that lead either to success or failure. Achievement motivation is controlled by personal attributes and personal commitments. Personal attributes are the intrinsic stimuli which influence success or failure. Personal commitments are the investments that students are willing to make to their academics. The findings from this study suggest major differences in achievement motivation for the less successful students, and the satisfactory and successful students.

For the less successful group, the personal attributes are adjustment, responsibility, self-blame, and guilt. Personal commitment includes study skills and habits, goals, and choice of major.

Personal Attributes. Adjustment to the college environment is important to the academic success of all students. For less successful African American students, depression, motivation, and *learning the game were considered important to a successful academic and social adjustment. *Learning the game, according to these students, relates to knowing how to manipulate the system to facilitate academic success. One student gave the following illustration.

. . . beating out the system, something like that . You have to play the system to win. You have to. Got to take risks. I know I have. Some backfire, some don t. You have to play along and beat the system at their own game. Especially as black students. We have two strikes against us, so we have to take risks. Got to.

Depression is a persistent problem, which left unattended, can result in a destructive and self-defeating cycle. When less successful students discussed depression, they did not use it as an excuse for their performance, but rather explained it in the context of their dysfunctional behaviors. Consider these comments made by Amber and Jonesia.

Once I get depressed, I don't want to do anything. . . and this depression . . . could be problems about family or anything, so I just forget everything and I sleep or pleasure read. . . anything but textbooks. So, I will just sit with a book that has nothing to do with what I'm supposed to be doing, which will depress me even more because I'm wasting time. So that affects me a lot, I spent the first half of fall semester depressed, so I just slept. . . It tends to get worst, like me I've been here five years so that just depresses me even more that I've been here this long. I just get even more depressed. I think of all the mistakes I made the first and second year.

I get down on myself because I don't do what I think I'm supposed to be doing . . . Like you set long-term goals for yourself and then you don't get them like you planned. . . It depresses you, this is my fifth year and I'm not graduating, I'm nowhere near graduating. . .

These statements suggest that Amber and Jonesia have levels of depression that have resulted in near isolation and academic paralysis. The experiences described by these students suggest a lack of motivation and an inability to move forward and overcome past failures.

Lack of motivation is related to adjustment. The participants explained that lack of motivation was a problem that could occur at any time and was difficult to resolve. Artemus, a second-year student, was extremely unmotivated because of his academic experiences since enrolling at Virginia Tech. He noted that he had tried several different ways of studying, but was still having a very difficult time. His experiences were very much like other students

interviewed in that he had difficulty motivating himself to study and complete assignments.

Jonathan had a particularly interesting story to tell about motivation. He believed that he lost his motivation while moving to Virginia Tech. This loss of motivation, according to Jonathan, occurred in part as a result of his *general contempt for this place.τ Jonathan described his circumstances.

I think I was very well prepared and very capable, so I'm still trying to figure out why that has no impact on my current academic success, and I attribute that to other things besides preparation. . . like I said, I just still have trouble dealing with this environment.

An interesting observation about Jonathan is that although he did not feel that Virginia Tech was a good fit for him, his intentions were to remain at the institution. He said that if he had it to do all over again, he would still come to Virginia Tech.

*Learning the game" emerged as important to adjustment and success in negotiating the academic system at Virginia Tech. *Learning the game,τ according to the participants, had to do with what one did to be successful at the university. The students believed that this "game" had implications for how well a student might adjust socially and academically. Students used this analogy to explain one process for achieving academic success at Virginia Tech.

This "game," according to the students, has several components, and knowing how to *play the gameτ could aid in earning *goodτ grades. When asked to explain the components of the *game,τ few of the participants were able to offer an explanation as to what they believed was involved in *the game.τ

Examples students gave of "playing the game" included such things as knowing how to get out of trouble with campus security, knowing how to interact with professors to get a better grade, and cheating. There was some discussion on who best played the game. Respondents concluded that, although there were others who knew *the game,τ (*athletes and white studentsτ), black students were severely disadvantaged. Christopher described *the gamet in the following way.

. . . there are those people that know the game. It just happened to be an athlete. . . I think it's anybody because I know white people who can go talk to their advisors and substitute a class they need to take for another class. . . it's just who you know. If you know the right people, you can do whatever you want, basically. . . I don't know if it is based on being African-American or not. It s just about who you know and what you can get out of it. . .

Alfreda, a second year student commented about "learning the game."

She said,

I just think it s a big game. . . Everybody's not studying all the time. . . it s not fair. . . I know people who go out drinking and a lot of the grades they are getting by cheating, so that's a big game to me. . . I haven't learned it all, that's what I am saying.

Another student elaborated,

I think what she's probably trying to get at is that it s not necessarily what you know as much as who you know. . . because we are African Americans, we have it harder, and we're not going to learn all the game because they don't want us to.

The students also talked about "the game" as it occurs in the corporate world. One student who has worked at IBM for four summers shared,

I don't consider it here at Tech as playing a game. The corporate world and here are two totally different environments. Where I work it is who we know, and not necessarily what you can do. Here it doesn't matter who you know. . . who your friends are or who your professors are. You show you have ability and you will get the grade. If you don't there is something wrong.

In discussing this idea of learning and *playing the game,τ the less successful students believed that there were strategies involved in being successful in the work environment that were not necessarily transferable to their experiences in college. Although this discussion did not elicit an understanding of *learning the game,τ this concept was very important to the students.

The students interviewed internalized and expressed feelings of responsibility, self-blame, and guilt for their poor academic performance. This is especially important because of the intensity and emotion with which students discussed this factor. A common thread among all students who were interviewed in the less successful group was a debilitating sense of responsibility for their academic demise. They consistently asserted that they were responsible for their own actions, or lack of actions, which impacted their academic performance. This behavior was only found in the less successful group. From the students perspective, their lack of success was primarily attributed to the things they did, or did not do.

Guilt, self-blame, and responsibility are important for several reasons. First, the passion with which the students expressed their feelings about grades was far more than just a sense of being responsible for having performed poorly. Their expressions and feelings about grades significantly impacted their ability to function. As an example, when Jonathan talked about how the

environment had affected his academic performance, he concluded with this statement. "I didn't list that as the major factor. . . that is one of the small factors . . . He then added emphatically, "The major factor is me. . . I should be able to be academically successful in any environment. . . τ When discussing why he did not seek help upon recognition of academic difficulty, self-blame and responsibility emerged again.

This is not because. . . I don't need help. That is obviously not true, because of my QCA standing, but I have always tended to be a very independent person, and I never asked anyone for help. But the reason I don't ask for help here and don't seek help is because. . . In the past I wasn't helping myself so I didn't feel right going and asking someone else to help me when I wasn't doing the studying that I knew I needed to do. I wasn't attending class at all, not at all but very rarely. So I didn't feel right going asking for help knowing that I hadn't begun to put in my fair share.

Passionate expressions of this phenomenon occurred throughout the discussions. One student said, "Usually if there is a problem with academic excellence, it's usually on my part." Another student added,

I think it has to do with the amount of responsibility that we have for ourselves. . . I mean we are now in college. . . we have to be responsible for our actions, what we have to get done. . . The people I hung around with my freshman year, they brought me down. . . they had to bring me down to reality because I got in so much trouble, and it just brought my grades down and I had to pick myself back up. . . I should have been like a monk. . . I just ran around and partied so much. . . it's all on me. I just did a lot of things I shouldn't have been doing. . .

This perspective of a sense of responsibility for academic outcomes is in line with Wiener's (1965; 1985) attribution theory regarding successes and failures. According to Wiener, the explanations that people give for their behaviors have a strong influence on their performance and future plans. The

students in the less successful group believed that they were primarily responsible for their academic performance. When the research question was posed, the responses of each student in this group hinged primarily on the quality and quantity of effort and commitment that they invested in their work. They felt that the locus of control was internal, that they could change the cause of their poor performance, and that they could control what happened to them academically.

Of the 14 students interviewed, only four discussed behavior modifications that they themselves had made. Three of the four students reported using support services in their colleges or in the Office of Academic Enrichment Programs, and one reported regularly seeing a tutor outside of the university. This limited change in behavior is an obvious contradiction between actions and beliefs for most of the less successful students interviewed. While the absence of action reported by these students might suggest that they are not committed to their academic performance, this is inconsistent with their expressed beliefs. Students say they want to succeed but their actions are inconsistent with their behavior.

Personal Commitments - Less Successful Group. Personal commitments for the less successful group include study skills and habits, goals, and choice of major. These factors relate to how much students are willing to invest in the learning process. From the perspectives of the participants interviewed, these combined variables had the strongest impact on their academic performance.

Poor study skills and habits emerged as one of the most important contributors to unsuccessful academic performance. There was vehement and

nearly unanimous agreement that these factors were the primary issues related to grades. Of all the students interviewed, only one felt that he had good study skills. However, he acknowledged that he had neither used his skills, nor employed good study habits during his time at Virginia Tech. The rest of the students overwhelmingly agreed that they had both poor study habits and study skills.

Students attributed their poor study habits and skills to a number of factors, one of which was not having had to study in high school to earn good grades. Examples of students' descriptions about their study habits and skills in high school and at Virginia Tech add insight into some of the challenges they faced.

In my school, basically you didn't have to study or do anything. . . I didn't really do any work and here, it's totally different. The first year and a half or so, I was in total adjustment, learning to study and all that stuff, starting at a big zero. . .

In high school, I had a 3.9. I parlayed through high school. I went to class. I didn't have to read. . . I came here and I have to read. I hate reading that boring stuff. . .

. . . I have bad study habits from high school. . . in some of my classes I took that same attitude with me, and I should have left it at home before I came here, but I didn't.

. . . Like my roommate. She is constantly in her room studying. It drives me crazy. . . She always has work to do and it bothers me because I don't have a whole lot of work. I just have tests. I have really bad habits. Study all week and party on the weekends. . . I don't put as much time into my studies as I should. . . I had a problem last year because I would study something and then I would get to a point or section where I didn't feel it was important. . . and then 25% of the test would be on the material I skipped. . . It seems like I always missed what I was supposed to be studying.

. . . some days. . . I can study. . . you kind of get into the groove. It's just nice, you know, like man I wish I could be like this everyday. You know it's there and you're understanding what you're doing. But then other days, you sit down and just stare at your desk because you can't do it.

These statements illuminate the difficulty students expressed about their efforts to study effectively, which was recognized as a serious deficiency. For these students, however, recognizing it and correcting it were two different things. For them, two dynamics were at work. First, adjusting to the idea that they could no longer do it on their own and that they did need help, and second, actually seeking help. Arnold's statement regarding seeking help provides additional insight.

. . . I had a 3.9 - 4.0. I was head of my class. It was always about ego to me. I didn't want to get help. If I accomplished it in high school by myself, then I'm going to do this by myself.

Within the constructs of study skills and habits, and willingness to seek help, the issue of effort emerged. Students noted that they put forth minimal effort, and that on most occasions, school work was not a priority. One student summarized the sentiments of the group regarding studying when he listed his priorities as friends, female companions, and then, if time remained, studies. While the students reported that their priority was not academics, it was unclear from the discussions if, in fact, any priorities had ever been set. Based on the students' responses regarding level of involvement in academic pursuits, it might be concluded that they not only do not know the rules of *the game,τ but they are also spectators in their own educational process.

The students interviewed talked at length about goals. One student who listed *unsure about goalsτ as a condition contributing to her academic

performance, expressed that goals were important because they helped add clarity to what she was doing and why she was here. It was her feeling that goals affected what she wanted to do. The consensus of the group was that unless one had clear goals, it was not likely that they would be committed to success.

Goals for these students included academic and professional aspirations. Students talked about their grades in the context of how they would influence their long-range goals. Some students shared that having thought about future plans had impacted how they now approached their academics. Arnold and Jonathan shared their perspectives of their academic performance as it relates to their lives after college.

. . . when I came here it was during the time when you would be watching TV and see all those people with masters and doctorates flipping burgers at McDonalds. . . I started questioning things. Why am I going to college if I am going to end up like this? Naw man! . . . I am trying to look at what I can do each day. Day to day, ten or 15 years down the road. Trying to be organized. . . There were steps you have to go through, and I was trying to rush things.

It has affected my outlook a lot from the past year. I have been doing everything else right as far as a resume is concerned. . . a large part of my goal here is to get a good job, make money. For the last three years I have been doing everything else right, being involved in student organizations, doing the required internships. I have been working for IBM for the past four years. I have been doing everything except for academics. That is not going to get me anywhere if I have everything else looking right with a little QCA. I feel I have to do better for myself if I plan to obtain any of these goals. . . It took me a while to realize that I have to be good at this in order to do better later.

Christopher explained how he set his academic goals at Virginia Tech.

. . . this is my fourth year, and it happens every year. . . you study, study, study for a test and you get a C+ or a C- on it, and the classes you don't really study for, like your non-major classes. . . you get the same grades. . . then, when I set my goals. . . I don't put down A for a class because

after three years of college, I tend to get the same grades throughout the years. . . so I don't set my goals for like A- because I'm trying to be realistic.

Goal commitments such as Christopher's were prevalent throughout the discussion. While the students seemed to believe that they could and would be successful at Virginia Tech, there were clear discrepancies between their beliefs, goal commitments, and academic performance. For example, Part I of the follow-up questionnaire shows that students expected QCA was as much as one and one half points lower than expected. Explanations for this might be found in students' perceptions of the importance of their choice of major as it relates to academic performance.

Goals and priorities were found to be related to the students' choice of major. According to Tinto (1987), if students are not committed to their goals, the likelihood of persistence to graduation is decreased. In that line of thought, if a student has not selected a satisfactory college major, the likelihood of having goal commitment is very slim.

The students talked at length about not having clear goals. They discussed the courses taken and their lack of interest in certain courses. They further discussed that they knew they would not do well in certain courses because they were not interested in them, and, conversely, if there were courses they were interested in, they would do better. Jonesia explained how she approached her classes at Virginia Tech.

It all depends on what my interests are. Something that interests me, I will probably do well in because I feel good. Things I tend to dislike, I know I probably won't do well in because you are already mentally conditioned.

Most of the variables discussed within the theme of achievement motivation were thought of as interrelated variables. This interrelationship, according to the students, was a factor in how well they performed. They believed that unclear goals and priorities were related to poor study habits. Ten of the students interviewed believed they had chosen the wrong major and that this influenced their study habits, priorities, and goals. Their assessment was that they did not study because studying was not a priority. Studying was not a priority because they were not clear about goals. Their goals were not clear because they were not happy with their majors and their academic performance.

For these students, there is a clear linkage between goal commitment and choice of major. Students spoke extensively about their choice of major and how it related to their academic performance. The students who were displeased with their majors spoke about the difficulties they had encountered with classes, setting priorities and being focused. They were often unclear about their career goals. This discussion ranged from having selected a major that was incongruent to students' interests, to selecting a major based strictly on parental expectations. The students spoke frankly about their experiences. Some recognized the mismatch in major, and the potential consequences, while others did not. Artemus and Jonathan discussed their dilemmas.

I'd like to do engineering. I'm still with it right now and I guess in my mind, I was close to switching majors. I want to do something like sociology or socio-economics. . . With engineering, the math classes, are hurting me as far as my QCA. Basically it just gets harder, and I have to do a lot of work. . . I do what I can. . . I think if I stay I would be happy. Cause sociology, I enjoy the subject and classes that I have taken. . . but where would I go after that. . . 20/20 or Prime Time Live. . .

My sophomore year, that is when I started getting into my major. I kind of screwed myself into believing I liked my major until I discovered it about a semester ago. . . My previous major was electrical engineering. . . It took me a good year to realize that this is not it, and I really wasn't interested. Now that I have changed majors, I have really been into the work.

Christopher wanted to make money. After three years at Virginia Tech as a TTTT major, he changed to a different department. In discussing his academic performance and the reason he chose this major, he talked about having worked closely with numbers in high school and how that influenced his decision to major in UUUU. After three years in UUUU, he realized he wanted to work with people rather than numbers, and changed his major. Christopher's primary motivation is no longer money, but in pursuing a career that will make him happy.

These examples amplify students' perceptions of how important major is to academic performance. Each of the less successful students had encountered some difficulty in their selected majors, and to some extent attributed their lack of effort, lack of goal commitment and study habits to the dissonance associated with their choice of major.

An important observation regarding the less successful students is that of the fourteen students interviewed, eight said they had changed their majors since enrolling at Virginia Tech, and six students indicated that they had no intentions of changing majors. Of the six students who do not plan to change their majors, three of them are in severe academic difficulty. Their most recent grades (Fall 1994) indicate no noticeable improvement in their performance.

A common theme throughout the responses of the less successful students interviewed was the need for change. However, what was absent was

an action plan to facilitate change. While all of these students believed that they were going to improve, they did not indicate that they would seek assistance through the university to do so.

Personal Commitments - Satisfactory Group. For the satisfactory students, achievement motivation had only a moderate influence as compared to other themes and other groups. In this group, personal attributes did not emerge as a salient issue, but the personal commitment factors of prioritizing and study skills did emerge as important.

Prioritizing emerged as a very important factor for this group. It is interesting to note that this topic emerged in the context of dating relationships. In addition, there were differences in how females and males discussed priorities as they related to their academic obligations. Consider the following statements made by Myrlin and Frank.

. . . when you get involved with someone. . . you stray away from other things and your friends. . . it becomes a problem because you try to choose between the two. . . Relationships with a significant other can cause problems. . . that spare time you have. . . free time that you could be studying, you want to be with that person you love.

. . . I find myself saying I m gonna read that chapter and then take her out . . . For me, it is my future on the line. . . I can t joke around. . . It s serious. In high school it was serious, but on a different level. It s my future.

These statements suggest differences in how Myrlin and Frank selected priorities and handled their relationships. For Myrlin, dating relationships took priority over academics; the opposite was true for Frank. There were three other males and one other female in this group. The responses of the other three males were similar to Frank s, and the response of the other female in the group was similar to Myrlin s.

While the males discussed relationships in terms of priorities, the females discussed priorities in the context of their relationships. This was the only time in the discussion with the satisfactory group that priorities emerged as important.

In response to a statement by Louise, that relationships were easier to develop and maintain for males than for females, Albert commented,

. . . it seems like our answers were totally different than your responses because you all were talking about it being an incentive for you doing well in school, but between us it didn't seem like it was an issue.

Albert's statement captures the difference in how males and females set priorities within the context of relationships. Based on his statement and the comments from other students in this group and in the less successful group, it might be concluded that relationships are not a predominant consideration in the academic performance for males, but are important for females.

Study skills and habits were also considered important for this group. One student said that study skills are *crucial at this school.τ Albert shared that he had a 3.5 when he was in high school. He did not have to study to get good grades. He added,

When I got here, I went to all my classes and took all my notes, and it was like. . . I got here. . . in my biology class and I got a *Dτ. I was like wait a minute, something's wrong. I never really studied before in high school, so I didn't know how to study. . .

Albert's experiences highlight the importance of good study skills and habits at Virginia Tech. All of the students in this group expressed the importance of knowing how to study and its relationships to academic success.

The only new finding added to achievement motivation by the satisfactory group was the perspective of viewing priorities in the context of relationships. Of additional interest is the suggestion that the females interviewed arranged their priorities around relationships. Males did not.

Personal Attributes - Successful Group. The theme of achievement motivation emerged continuously in discussions with the successful group. Anger, frustration, "prove them wrong," and respect were all terms used by the successful group as they passionately discussed the motivation that drove them to achieve academically. Participants told stories of differential treatment in the academic and social environments.

The anger described by these students was internalized and reversed into a determination to "prove them wrong." Students felt strongly about how they had been treated at Virginia Tech. Consider the following comments made by Angela, Carl, John, Harold, Marlon, and Blake respectively.

When they look at us, they are looking at a color. They don't know us as a person. And you always have to be ten times plus, just to be on an even playing field. I'm talking about white students in particular. It's like you always have to be an overachiever to be recognized. . . Why do I have to be ten times as good in order to be recognized or seen as a student. . . I have to be ten times better to be recognized.

As a black, you have to roll out all the credentials before you can even be considered a person. If you're the same as they are. . . Like our parents told us before, you gotta be twice as good. That definitely is still true today.

I see morale and stresses being some of the central constants in academic performance, regardless of the student. . . the problem with today is the fact that we have to think about race being an issue. . . The fact that you have to include race as being an issue -- whether or not it's attributed to race is a different story. But the fact that you have to rationalize whether it was because of race or not, is enough to add a greater burden.

They always look at you, especially for me as a black man. . . and say, criminals, thieves or somebody dealing drugs. I want to show them, the worst thing they fear is an educated black man, and that is what I m going to be.

My first year. . . a couple of friends and I were harassed by some policemen on campus. . . A white girl misperceived an object that one of my friends had in his hand. As a result, cops came from everywhere. They put us all in a line and humiliated us in front of a lot of white people. . . . My first year, I was mad all the time. And I think I just used that anger. I just internalized that anger and I made it positive. I used it to motivate me to help me to really achieve. I guess my whole thing was, I got to get out of here. And they re not just going to make me leave. I m going to get out of here with a degree. I just reversed the anger and made it more positive.

The department of **XXXX** has but this many black folk, and they don t expect us to do well. My whole thing the whole time has been to prove them wrong. I took the anger and the frustration and vented it out in a positive kind of way.

When I got here, I heard so many times, so many white people say that there are a lot of black people here because of Affirmative Action. And that s something that really upset me. . . I vented my frustration into something more adaptive. . . Wanting to achieve.

Feelings of anger and frustration were apparent throughout the discussions with successful students. Whether through interactions in the academic arena, or through social interactions, each student had a story to tell about problematic interactions with whites on campus.

The phenomenon of interest in these findings is that the students in the successful group re-channeled their negative experiences to help them adjust and achieve academic success. The students believed incidents such as those discussed drove them to succeed and *prove them wrong.τ *Them,τ according to the students, were primarily faculty and other whites at the university.

The hallmarks of success, according to these students, were anger and frustration, combined with competitiveness, self-reliance, determination, sacrifice and hard work. The participants believed that these factors combined propelled them to excel academically at Virginia Tech. In discussing his beliefs about academic performance, Marlon said, *having the belief that you can control your own destiny, and environment can't control you {is important} . . . He added, *despite all the obstacles that I have, if I fail, it's going to be because I [emphasis added] failed. No one made me fail.τ Other relevant comments included:

After the first year, I kinda got down on myself but then I just turned it around. Okay, I'm gonna do it. It's a challenge. To step up to this challenge and do well.

Some of it was personal sacrifice. I sacrificed some of the social bit, sleep, anything. There were a lot of times I sacrificed other things just to do what I had to do. I was a 1.9 after my freshman year. After the freshman rule, I had a 2.2, but I was a semester away from saying good bye. I was paying out of state tuition, so after a while I had to produce. . .

I have out of state tuition and once I achieved well and I got the scholarships, I said, well, if I continue to achieve well, I'll get more, and that was a determining factor.

It has to do with your personal attitude toward work and what you wanna get out of college. Because I know, I'm pretty much a hard working person.

Personal Commitment - Successful Group. Students also believed that hard work and effort were important. They discussed the importance of investing time and quality effort in their academics. Many of these students said they learned how to work in high school. They talked about how having studied

hard in high school had prepared them for the academic challenges at Virginia Tech.

Aligned with hard work and effort were the qualities of self reliance and confidence. One student said, *My support group is myself. I know what I m here for and I don t have time to waste.τ Other relevant comments were made.

If you don t believe you can do it, then I don t think you will be successful. I always have the attitude that if he can do it, I can do it. . . Self confidence builds as you grow. It is just something you obtain. I think having self confidence is a big part of. . . being successful academically and socially.

I have learned more to depend on myself than other people. . . Here, there are so many people. It is unrealistic to expect the professor to see one person doing bad and talk to them. When you are here, you are on your own. You have so many decisions to make, and it just adds pressure. You have to learn when to do what ≅s right on your own.

Goals and priorities emerged as important themes in these discussions. The importance of goals were discussed in the context of the short-term goals of academic success and graduation, and the long-term goal of giving back to the community. According to the students, having vision regarding how they would reach their goals, and the potential rewards associated with reaching them, was a motivation to excel academically.

Short-term goals helped the successful students to focus on their academics. Expectations from parents and supportive faculty, and being a role model for other students at the university influenced their short-term goals. They believed that because of their prior performance at Virginia Tech, other people expected them to continue to be successful, and this is what they wanted to do.

Long-range goals had to do with giving back to the community. Two themes emerged regarding community. Some students focused on the importance of giving back to the community at large, while others focused on the importance of giving back to the black community. Students' perceptions of how one gives back ranged from providing monetary assistance for college to less fortunate students, to living a life worthy of being a role model.

This section has summarized the theme of achievement motivation for all students. The factors of achievement motivation are personal attributes and personal commitments. For the less successful students, effort, hard work, choice of major, and adjustment were important to how they performed. Responsibility, self-blame and guilt also emerged as important factors. The less successful group is the only group in which this factor emerged. The satisfactory group added no new data except the connection between prioritizing and dating relationships.

For the successful students, effort, hard work, choice of major, and adjustment were important. New issues that emerged for this group were determination, self-reliance, anger, frustration. These are important because of their ability to drive students to excel academically.

Social Infrastructure

Marlon is president of the Black Organizations Council. He gets along with everyone. Marlon spends most of his time with his friends who are mostly black. His friends, Myrlin, Hope and Jonathan mostly hang out with other blacks too. But there are two differences between these four students. Marlon's and Myrlin's grades are better than Hope's and Jonathan's. Marlon and Myrlin study and interact with white students. Hope and Jonathan do not. One day Myrlin asked Hope and Jonathan if they ever studied with whites. Hope said, *no, for what? They wouldn't study with me even if I asked them to. Besides, white people really get on my nerves.τ Myrlin replied, *You know they have the koofers and

homework solutions. Sometimes they even have the inside scoop on tests. They're not my best friends, but when it comes to getting my academics they sure are useful. You oughta think about it. By the way, when have you talked to your mom? Is she still giving you a hard time? Hope dreads talking to her parents. She says they stress her out and are always pressuring her. Hope and Jonathan have something in common that way. They talk about Marlon and how he has changed his major four times since he got here and had no hassles from home. They talk about how they wished their parents were more like Myrlin's mom. Myrlin told them on a previous occasion. . . *my mom, she encourages me in whatever I do. She is always right there. Hope thought to herself, I wish my parents were like that.

The experiences of Marlon, Jonathan, Myrlin, and Hope tell the stories of their social infrastructure. It is composed of family friends, and peers. In the lives of the students interviewed, these relationships and interactions represent support, encouragement, stress, pressure, camaraderie, friendship, and resources. Friends constitute one kind of relationship, parents another, and peers still another. According to those interviewed, whites are *utilized* and African Americans are *friends*.

The one common thread in social infrastructure for all students interviewed was the importance of relationships with other African American students. Relationships and interactions with white peers and family varied. Students in the satisfactory and successful groups interacted with white peers primarily in academic settings. Unsuccessful students rarely interacted with white peers, socially or academically. For satisfactory and successful students, family and parental relationships were perceived as supportive. Unsuccessful students perceived their family relationships to be stressful. One student used the concept of *social infrastructure* to portray his perceptions of family and peer relationships.

My definition of infrastructure is not just the building we sit in. . . There s a social infrastructure that we have. Like, when we re born we have a relationship with our parents, different racial groups, friends -- everything. All that is how we interact with our own world. It s what makes our world possible. . . so when you all can t describe to me. . . why you ve been successful, and why your parents don t understand how they ve been able to get you here, and all that. What I m saying is -- infrastructure, and we take it for granted. . . The only time you know infrastructure isn t there is when it s not working.

The above quote is one student s description of how to understand what makes a student successful. Social infrastructure is characterized by the influences of interpersonal relationships of students at Virginia Tech. The social infrastructure is composed of relationships with peers, parents, and family. Inherent in these relationships are influences that affect a sense of belonging and how a student performs at Virginia Tech.

Peer Relationships. Peer relationships are important in establishing a sense of belonging in college (Astin, 1983). Two issues that emerged in the discussion of peer relationships were interaction with black students and interaction with white students. These relationships were perceived as very different and occurring for different reasons. Students comments suggests that while other African Americans compose their primary support system, that there is little interaction with or support from white students.

Relationships With African American Students - Less Successful Students. Throughout the discussions, the students identified their support systems as other African American students and sometimes African American faculty and staff. Their sense of community evolved around non-academic activities, usually social, which took place primarily in the black community.

Likewise, they spent most of their time during the past several years in activities not related to academic growth.

Participants considered their relationships with other African Americans of great importance to their adjustment at the university. They were unhappy about the low number of African American students enrolled at Virginia Tech. They felt that there should be more, and if there were more, Virginia Tech would be a better environment for them. Concerns regarding low numbers of African American students were mentioned both in the context of the classroom and in non-academic settings. Consider the following comments.

. . . Well, I felt like I couldn't relate to the white students and I just wished there had been more of us. Cause they played more than they worked. But, when they got down to their work they helped each other. I felt like I didn't have anybody to talk to about that.

. . . there were not enough minority students, and I didn't feel comfortable around white people. I mean, I feel comfortable, but it's like they're a different type of white person. . . I just didn't feel like I could relate to them.

. . . I'm like the only black person in this class. That is the first thing I think about. . . it makes you self-conscious. It takes away from the ability to do your work and you are like feeling isolated.

It was not clear from these comments if the African American student support system is composed exclusively of other students with similar academic credentials. Referring to his all male support group during his freshman year, one student shared, "It's bad when you've got the highest QCA in the group, and it's still below a 2.0. Something's wrong." In addition, when one group was asked if they considered the people they "hang out" with to be successful, all five students said, no.

An important point about the less successful students was that they did not talk a great deal about academic activities. The only time that academics were discussed was when they talked about experiences with faculty and students in the classroom. Except for the mention of tutoring, there was no discussion of activities such as visiting faculty during office hours, working in the library, forming study groups, studying in a study lounge, or other activities directly related to academic improvement.

Students talked about dating and other social activities as being factors that influenced their performance. This finding is noted because of the salient differences between how women and men approached studies as they related to relationships. Less successful students and the satisfactory students had similar approaches to dating. Dating did not emerge as an issue of importance among the successful students.

Dating relationships are noted because they were important to the female participants. There were clear gender differences in how the two sexes perceived them. The females commented on how dating relationships had interfered with their academics and influenced when and if they studied. On the other hand, males, for the most part, said that they knew they had to set priorities, and they do *other things† they need to do first, and then spend time with females.

Social relationships are worth mentioning. The students expressed that studying was rarely included in their repertoire of social activities. Jonathan explained that during his first year at Virginia Tech, "Time management wasn't an issue . . .because I didn't make it an issue. I had time for . . . relaxation, sleep, TV, and shooting pool. . .τ This notion of socializing and the importance

of *hanging out was also evidenced in Lorenza's description of the similarities between his behaviors in high school and at Virginia Tech.

. . . high school was a social thing. You know, all your friends were there. College is the same way. I came straight out of high school. I really don't want to go to college. Half the people I hang with don't want to go to college. . . We got here, and don't want to go to class. And if you're in a class in which you don't know anyone, then you feel isolated. . . You feel like you're not supposed to be there.

This observation illuminates the importance of goal commitment as it relates to performance (Tinto, 1987). If a student comes to college with no goals, or goals that are unrelated to learning, then failure seems inevitable.

Stemming from the discussion of peer relationships is an observation regarding participation in extra-curricular activities. Two students mentioned affiliation with co-curricular organizations. Several students mentioned participating in The National Society of Black Engineers (NSBE). The only other extra-curricular involvement mentioned by the students in this group membership in the Black Male Coalition. Aside from the discussions of affiliations with black organizations, there was no mention of social or academic involvement with the campus community at large.

The above findings suggest that these students have confined their institutional infrastructure to interactions with other black students at Virginia Tech. There is no indication that they have connected to the larger community. These students seem to have established a social infrastructure that is void of a solid foundation, and exists in exclusion of interaction with the white community.

Interactions With White Students - Less Successful Group. African American students in the less successful group perceived white students to be disinterested in their well-being. Consequently, they reported very little

interaction with them in or outside the classroom. This is important in the context of the larger study because the successful group listed interacting with white students as a major factor that contributed to their academic success.

With regard to interacting with white students, one African American student stated, *White people here, none of them matter. . . for some reason if they are white, it s like sptttt. . .τ (sptttt, is an expression equivalent to *forget it.τ) Another student said, *White people don t care.τ In reference to her academic performance this same student later commented,

I don t think the different things that white people do necessarily affect my academic performance. . . I m not going to say that white people in general are bad. . . I think it s wherever you go that there s a majority, you sorta blame it on them.

Other comments illuminated perceptions of and experiences with white students in and outside of the classroom.

I think there s a bunch of questions in their heads. Oh gosh, a black person. A lot of them have been never around or interacted with black people. And if you are nice, they want to ask you questions.

. . . I missed the first day of one of my classes, and I asked this girl, what did he talk about, and she was like basically nothing. She wouldn t really tell me what was said the first day of class. So, I had to ask a black student and she lent me her notes, and they really talked about a lot but the white student was not willing to tell me or let me use her notes. . . They are not really friendly about helping black students.

. . . the majority of white students here don t want to do anything with you. . . they just don t want to interact with you. . . if you re an athlete or something like that, then yea. . . But if you re just a normal student, and that s black attached to it, naw, we don t want nothing to do with you. They won t say it in your face, they re not gonna call you a Nigger in your face, but they re gonna try to just pass up on you. That s the way it is.

. . . In one of my black studies classes, one of the people made the statement that they don't like to help black students for the simple fact that when we walk across campus, that we say hi to the black students walking beside them, but we don't speak to the white students. . .

. . . when I go into the classroom. . . they are thinking, look at this Nigger. You know that's what they're thinking to themselves. Outside the classroom, me and my roommate are the only blacks in Jackson Hall. They run up and down the hall and beat on the walls. They can't knock and ask you to turn down your music. They go and call the resident advisor . . . They smile in your face. . . but, I'm like this, I'm just here to get mine. . . You're just an obstacle I have to step over.

The above comments shared by these students suggests that there is little genuine interaction with white students. The unfavorable perceptions held by these black students and negative experiences with whites apparently kept them from interacting with whites. One student even wrote during the note card exercise, *whites are bad.τ

Two students in the less successful group expressed that they thought it was important to interact with white students. Although this was neither the predominant theme, nor the apparent behaviors espoused by the students interviewed, Arnold commented, *In the long run, you are going to have to interact with white people somewhere down the line.τ This statement does not support the consensus of the less successful group. Each of the students responding to the issue of interaction with white students, offered comments such as the following.

. . .sometimes I do feel like smiling at them. . . sometimes I am like I really don't see them. You kind of scan the drill field, then you see somebody black, and you know them and speak to them.

The statements made about white students suggest prejudice on the part of black students. Jonathan noted in one of his comments that he had built up prejudices against certain people who were Caucasian. This is apparent in many of the comments made by the less successful students. Racial identity theory adds understanding to this finding.

Cross' theory of Nigrescence helps to explain the identity stage of these students. Most of the students interviewed appeared to be in the immersion/emersion stage of Cross' model. In the immersion/emersion stage, a sense of black pride begins to develop. A pro-black, anti-white position emerges, and an elevated sense of awareness is developed. While the data does not clearly reveal the sense of black awareness, the anti-white position is clear. This is important because if racial identity is, in fact, related to academic success, as some literature suggests, the stage of identity for these students might help to explain their academic performance as it relates to disassociation with the larger community. Consider the following comment..

I wouldn't say so much interacting with the students, but my not wanting to interact with certain students I guess is my own fault because of stereotypes I have built up or prejudices but a lot of times, I don't like dealing with or being around certain students. . . Caucasian students.

Other statements included such things as, *they just take up space.τ *I don't hang around with white people.τ *I have one white who I find tolerable.τ and *It's like a million of them here, and they look alike.τ Another student added,

I think I'm interesting to them because I am different. . . like my speech class, the only ones that I really interacted with were white people. They get along with me fine, but after a while they start asking questions, that have been on their mind perhaps with all black people. . . so when they

feel comfortable enough to talk to you, that is when they start asking questions. . . You know I think I am interesting to them and I think also because I tend to come off nice. . .

The less successful students did not express a desire or need to interact with white students. White students, based on the comments of this group, were virtually invisible in their developmental and educational processes. A description of the interaction between black students in this group, and white students at the university might best be illustrated through the title of Hacker's (1991), Two Nations: Black and White, Separate, Hostile, Unequal.

Parental and Family Influence - Less Successful Group. The discussion regarding family and parental influence was intense, and evoked one of the highest emotional responses of any topic discussed. These emotions appeared to be caused by the content of the discussion, rather than by the mere fact that family discussions can sometimes be emotional. This high level of emotion was particularly salient as the students told their stories about how family issues influenced their grades at Virginia Tech. While the extended family emerged as being important, parental influence seemed stronger. An important observation is that this influence emerged for some students as pressure and stress, and for others as support.

Within the context of the discussion on family, the experiences shared by the female participants were particularly intense and stressful. On at least five occasions, five different females fought back tears. On two occasions, males shared stories which were as intensely emotional as the stories of the females. Note the following comments from three female students, and two male students.

I don't get pressure from my family which in essence is pressure. . . They have a don't care attitude to what I'm doing. My mother is in school and she makes all A's every semester, so. . . My dad is like, well why didn't you do this and why didn't you do that. My whole attitude is they are not paying for it, so it doesn't make a difference what they say.

. . . I understand what she's saying about the parental pressure. It's hurting sometimes. When I started here, my mother was completely against me being here. It was my worst nightmare. She was just like yeah, two strikes against you. You're black, you're a woman. It's not going to work. . . Here I am doing something nobody supports.

. . . Me being a first generation college student. . . like it's all on me and it's me. It's more so my grandmother. She puts me up on this pedestal, so I tell her not to put me that high cause I'll break her heart. . . Just to add another reason last semester my mother was diagnosed with colon cancer. . . She has taken all these jobs so I could be here so the only way to repay her is to graduate and give her things she has given me. So, it's like a positive extra additive.

I hate my dad. . . My mom, she's supporting everything. . . They never had a doubt that I would go to college. They called me little professor when I was young. I never had trouble in high school. . . My dad, he's depressing, because he was a teacher and now he's a Doctor of Theology and he was a Marine. . . He doesn't help out any. He's depressing cause he doesn't want to see me succeed. It's like he doesn't want to see his kids doing better than he did. A lot of depressing stuff. . . The family situation at home is trying because my stepmom is trying to drain my dad. She doesn't want me to be a part of his life. And I'm just not into school at all. I'm more worried about whether my mom can pay the bills. I get paid up here, I send money home instead of paying for my tuition. Because I don't really care about it. That situation is depressing. It just makes you not want to do stuff. Just go to sleep, not eat, don't go to class.

For me it can be both ways. Like if my family calls and says Uncle has been locked up again, it irks me. But then again it makes me want to work so I won't be in that predicament. I learn from other people's mistakes.

The above comments capture the feelings and perspectives of these students and how their families and parents influenced their performance at

Virginia Tech. These factors, both positive and negative, result in a tremendous amount of baggage for the students to handle in addition to their academics.

On the other hand, some comments shared about parental influence were neither as intense, nor as emotionally provoking, as others. Three students were pleased with the response of family and parents to their academic performance.

The literature review suggests that parental influence is very important to the success of African American women, and the above comments shared by students support this contention. An additional observation not noted in the literature review is that for this group, several of the male participants were also faced with family issues that they considered pivotal to both their commitment to their education and to their academic performance.

Relationships With African American Students - Satisfactory Group. One issue that arose in this group that was not discussed in other groups was a concern about *loud blacks.τ On this subject, one student shared that he had very few experiences with minority students at Virginia Tech, and those that he did have were with black students who were *loud and just saying stuff off the top of their head.τ

. . . It just made me feel like not saying anything because I thought people would be thinking I would be the same way. . . When I go to class, see minorities in class, I always feel like I should be more quiet because of the way they appear and act. I was in a group relations class last semester. . . and there was one female. . . whenever she spoke, she always spoke with anger. It kind of scared me and there was one fellow in the class, and he was talking about revolution. He thought we should bring up arms and I was like, what the hell am I supposed to do now. . . And this one guy accused the Corps of being racist, and here I am sitting here with another black cadet. . . I felt really out of place. That made me feel so bad. Because suddenly, I don't feel like I belong. I don't have the same aggression to hold on to.

For Herbert, this was a real issue. He spoke with grave frustration about the discomfort he experienced, and felt that these experiences strongly impacted how he responded and performed in that class.

Several students in the group took issue with his position. Opposing comments included the following.

I think that's why they (meaning whites) shunned me. . . because maybe they thought the way I was coming across was loud and boisterous. . . but I feel like if I have something to say, it shall be heard. . .

I think it's a stereotype and as far as being angry, yeah, if I think about stuff that has been done to us, and that's going on now, of course I'm going to be angry. . . Like the teachers, it goes back to their perceptions. I think some teachers look at me and think that I'm angry because I sit in class and don't smile. . . I think anybody would be angry if they had been done wrong.

This dialogue is indicative of two of the opinions that emerged in this group. Two students interviewed expressed different opinions about their interactions with other black students. However of the 35 students interviewed, it is important that only two had such opinions.

Participants also discussed how the academic failure of their peers and their own failures had a significant impact on how they performed. Earning low grades, being placed on academic probation, and peers having been dismissed from the university all influenced the performance of the participants in this group by increasing their academic focus.

Peer relationships were also approached from the perspective of the absence of a critical mass of black students in the university. Alonzo discussed

how he hesitated to seek assistance from white peers, and suggested that it would be different if he had more black students in his classes.

I believe that what you see plays an important role in how well you function. Like if I'm in a classroom of Europeans, I'd be less tempted to ask someone for notes if I missed a day in class, than if I saw some brothers and sisters. I'd just go to the teacher instead of going to them. . . Only because I feel like it's a strange air here, it's like. . . I know you're not going to ask me type of thing. . .

Discussion on the importance of the lack of African American students was important throughout these discussions. An interesting observation is that interaction with other black students emerged as both a negative and positive aspect of the educational process. It is true that for most students in this group, relationships with African American students were very important. Consider the following comments.

Friends are probably the next biggest influence other than yourself. A lot of times your friends have something to do with the environment, and so if you got good friends that are trying to do their work, then they are going to set up a positive environment for you to do your work. That's just a medium that allows you to channel all your energy to your work and still have fun. . . But if you have friends that drink and play around, then you're gonna be like yeah, I'll put this off. . . the environment they set up is going to be an important factor. I think it is just as important as what you put into it yourself.

. . . finding a positive influence and getting around a positive environment to help you study better will help get us through. That is what is going to stand out in the end. It's just a matter of finding the right person to get that bonding going.

These statements illuminate the importance of peer relationships for African American students in this group. The data reveals that the primary support group for most of the students are other African American students.

However, Louise had a different experience from other group members. She said that during her first year at Virginia Tech, her primary support group was African American students, but after having conflicts with black students, her support group included more white students. Louise made an interesting comment about her friendships.

I tried to hang with black people. . . but they all act so funny. . . so I went and hung around with white people. . . But when you hang out with white people, they (black people) start looking at you like you are crazy. . . I would probably accept their offer if they wanted to go somewhere or do something.

What is interesting about this comment is the implications it has for Louise's sense of fit in the Virginia Tech community. She can obviously negotiate both systems, but it appears that she approaches her relationships with black and white students dichotomously, rather than being comfortable with both sets of her peers. This observation suggests that Louise is experiencing some identity confusion.

Interactions With White Students - Satisfactory Group. Interactions with white peers for this group depended on previous experiences with their black peers. Students who had positive experiences with their African American peers reported they continued to interact primarily with African American students both academically and socially. In contrast, the students who reported negative experiences, for example, *loud and angry blacks,τ reported they began to interact with white students both academically and socially as a result of their previous negative experiences. Referring to a class in which he felt antagonized by black students, Herbert commented, *. . . I felt really out of place. That made me feel so bad, because suddenly, I don't feel like I belong.τ

Regardless of the ethnicity of their academic and/or social group, satisfactory students did not believe that interactions with white students was a significant factor in their academic performance.

Parental and Family Influence - Satisfactory Group. While family support in this group was considered important, it did not emerge as a major factor. In fact, this topic appeared to be of moderate importance to this group. When students in this group talked about support, they talked about it more in the context of majors and decision making. One student talked about how the decision to return to Virginia Tech after having been out on academic probation was strongly influenced by his mother. He reported that she encouraged him not to quit and stressed the importance of completing the task he had started. Another student discussed how her father had put pressure on her because she had changed her major, but that this had not necessarily influenced her performance. Still another student discussed how the fact that her family did not pester her about grades provided a sense of support for her.

Unlike the less successful students, none of the students in this group reported feeling pressure about grades from parents. They seemed to be very comfortable with the kinds of parental interactions they experienced regarding academics. What was most important to them was that they believed they had the support of their parents.

The theme of social infrastructure was important to satisfactory students. Students in this group have integrated into the community to some degree and are pleased with the level of support they have from family. Adjustment for these students has been successful and the data collected suggests that they do not

fully subscribe to the *we-theyr attitude that was so prevalent among the less successful students.

Of interest with this group is that most of their responses were similar to the responses of the successful group. There was also similarity to the less successful group on some variables. This leads to the conclusion that most of the factors resulting in success or failure for the other two groups, also apply to some extent, to the satisfactory group.

Peer Relationships - Successful Group. The on-campus social infrastructure for the successful students involved interaction with both the black and white communities. It is unclear from the data if students have just developed coping mechanisms to get them through, or if they have truly established a sense of belonging within the white community. Based on comments from these students, conclusions cannot be drawn. However, it is evident that these students consider being involved with the larger community and interaction with white students important factors in their success.

For the successful group, peer relationships emerged as an important component of academic performance. However, there were differences in how participants perceived their relationships and interactions with black students and white students. While some participants discussed their relationships with whites as being strictly academic, others described them as both academic and social. However, regardless of the type of relationship, they were considered important to success.

How students handled peer pressure is significant in discussing the findings for the successful group. This is important because the discussions revealed that the same kinds of pressure faced by these students were faced by

other students at the university. The difference is in how they handled the pressure. The successful group talked about all the things they wanted to do with their friends, but did not. Felix shared,

I know what I m here for. I might want to go out and throw snowballs, but I know I can t because I have to get my work. My friends go right on out there, and when the end of the semester comes, they are talking about they did not do well. I know why too.

Students also talked about how friends pressured them to put academics second. Anita s comments best describe how the successful students handled negative peer pressure.

My friends tried to persuade me to do things other than academics. I knew what I had to do. Although they tried to persuade me to do these things, I knew I had to keep focused. . . As far as peers, once I did achieve, they had this level of expectations for me, and that made me feel like I had to achieve to a certain level to maintain this expectation.

Interactions With African American Students - Successful Group. Of the 14 students interviewed, eight identified their peer support systems as other African American students and four identified them as both black and white students. It was difficult to ascertain what the support groups were for the other two students.

An interesting observation is that among those who considered other African American students their primary support network, few studied with them. This, however, as one student noted, might be related to major. A recurring opinion was that friendship relationships among African American students rarely developed within major because it was difficult to find another African American student within the same major. When discussing this, the question arose, "Do you study with other African American students," and one of the

comments made in jest was, "if you can find any." This corresponds to the belief among African American students that there are not enough African American students at Virginia Tech.

Some students discussed how, as a result of interacting with white students, they were sometimes ostracized by other blacks. Despite this possible unwanted outcome, the overall consensus of the students was that interacting with whites was an important part of success at Virginia Tech, as seen below.

Interactions With White Students - Successful Group. The students in the successful group believed that interacting with white students helped them academically. Some students shared stories describing the academic advantages they derived from interacting with white students.

A lot of times, they know about different resources that we might not know about, like koofers for example. . . you know, I m going to white peers, look out for koofers and associate with white people so that everybody will find out. . . It s all about you getting in there and seeing what is available and then passing it on.

As far as dealing with white people, I study with some white people that have 3.7s or 3.6s because I feel like if they are doing that well, then I can use some of the stuff that they have access to, or pick up on some of the things that they are doing.

I have had three classes where they (referring to white students) had the homework solutions to the whole semester. They have had access to solution books that only GTAs, faculty and staff members are supposed to have. . . That is how I found out how to use them to my advantage.

Interactions with white students were also discussed from the social perspective. Two students talked of the importance of knowing how to deal with

all cultures because that would be important in the work force. Tess made the following statement.

A lot of time people use that as a negative. Like, she's white, I can't do anything with her. We just can't do that because that's wrong. . . Here, I think it's easy to get trapped into, I'm just going to associate with black people. And not to say that's bad, but you don't live with just all black people. . . Most of my close friends are black, but I have a lot of close friends that are white.

Tess also discussed her experiences in the residence hall with her white roommate. She has had white roommates during both her freshman and sophomore years. About these experiences she said,

My freshman year, my roommate was white. My roommate this year is white too. . . My experience freshman year I thought was a good one. . . I learned a lot of stuff from her, because she wasn't the typical white girl that I had gone to school with. . . She was more into environmental stuff. . . We did a lot of stuff together. . . I thought it helped me a lot because there wasn't that dividing line in our room. It was like a lot of people say that they can't even go to their rooms. But we dissolved that line right away, so it was our room and we both felt comfortable in it. . . . I see the girls that I lived with on my hall last year. We didn't hang out, but they always speak to me. And they always speak first. And I was like, Wow, that's kinda cool. Because before you always had to make the effort. And maybe I was just fortunate. . . And as far as how it helped me academically, it just helped me feel more comfortable as in realizing that I could go back to my room and relax instead of, I have to go to the library and then go back because it's going to be so hectic.

The above comments from this student were not indicative of the group as a whole. Only three of the successful students interviewed discussed residence halls, and they were all in the same interview group. A factor that probably contributes to the emergence of this theme in this particular group is that two of the participants were resident assistants.

The conclusion from this data is that African American students who have excelled at Virginia Tech interact with both the white and black communities. While many of the students considered other African Americans their primary support group, others believed their support group to be a combination of black and white students at the university. The more successful students were convinced that it was very important to interact with white students on an academic basis. However, there was some variation among respondents regarding the role that white students played in their academic and social lives.

Participation in extra-curricular activities, according to these students, helped with their academic and personal development. The examples they provided were opportunities for involvement in sports, leadership development, and service as role models for other students. Students also talked about how it helped in time management, goal setting and setting priorities. One student shared the following comment.

I think that pretty much everybody here (referring to the students in the interview group) is involved in some kind of extra-curricular activity. And I think that is so important, especially when you attend such a large university. It gives you a way to form an identity. . . I think that helps so much. It is related to time management and all that stuff because when you have other activities, you have to start managing your time. . . I think that's one way to get a well rounded personality and it helps balance out everything.

Other relevant comments include:

Well, I've been involved in a lot of extra-curricular activities and I think that anytime that you're involved. . . in particular if you're in some leadership position. I think that what you do is going to be a reflection on your organization. So that is something that has helped me to try to stay up on things. . . People are going to look up to you as a role model, so I just think about that.

It forces you to do a little time management. I've been working with BSA for the last three years, and at times it got real hectic. . . It also helps your self-identity because it gives you something positive, something other than just school. . . I think school is more than the As and the report card. Again, I think I learned more from interacting with other people in school than I did in books. I think it's an important part of school.

The above comments illuminate the value that these students place on involvement in extra-curricular activities. This theme parallels the theme of interaction with white students, in that it relates to establishing a sense of belonging to the larger community.

It is clear that the students in the successful group have connected to the Virginia Tech community, which according to them, has been very important to their academic success. While there is some question regarding congruence with faculty, it appears from this study that they interact successfully, and have found a way to work within the challenges of the predominantly white academic community.

Parental and Family Support - Successful Group. Parental and family support were important to the students in this group. They perceived their parents to be very supportive and contributing to their success.

Students discussed two attitudes that they considered especially supportive. The first one was described by Harold. He said his parents had always been very supportive of his decisions and choices, only requesting that he do his best. This, according to Harold, did not pressure him, but motivated him to set his own goals and follow through. The other attitude of support that students seemed to find especially helpful was being able to talk to parents about the stresses of being a student at Virginia Tech. Some relevant comments include:

My mom and dad have always supported me in everything I did and have always wanted me to do well. They always praised me when I did well and encouraged me. My mother always told me, as long as I do my best then I don't have anyone else to worry about. When you don't do your best, you are doubting yourself. I think that is one of the biggest reasons I strive to do well.

There are a lot of different things you have to deal with here. . . but if you have that close connection or that network with your family, you feel you can say anything, and they give you encouragement. That's where most of my encouragement comes from. From my family and that is what I depend on.

I was always the good girl, always thinking of school and they expected a certain standard from me. So, I wanted not only to live up to my standards. . . but I also wanted to live up to my parents standards.

I think a lot of people feel a lot of pressure to achieve because of their parents' expectations. My parents have always been supportive of everything that I do. Like a lot of people come here, and their parents want them to be engineers, but maybe that's just something that they don't want to be. So that's a lot of pressure right there. . . . But my parents have been supportive. I changed my major about five times, but each time my mom was like, hey, I'm with you all the way. That was something that was very important and that is something that's needed.

The above comments shared by students reflect the value they place on parental support in their education. With the exception of two students in this group, each one shared details of personal conversations with parents about the importance of education. One student offered no comments about parental involvement in education. The remaining student revealed that his parents did not understand what he was doing, or why he was doing it. Overall, however, these students felt that parental support was a key to their success.

Faculty Issues

Harold, Felix, and Tess are earning very good grades at Virginia Tech. Their friends Frank and Alonzo are not doing as well, but they have

QCAs over 2.0. These students spend a lot of time talking about their experiences. All of them are frustrated with their interactions with white faculty. They say that white faculty members have negative stereotypes of African American students, and that they do not treat them the same as they do white students. They feel that white faculty do not expect them to succeed. Students talk about these problems with friends, and are concerned about Felix because of his intense anger and frustration. Harold, Felix and Tess believe that things such as self-reliance determination, hard work and good study habits were helpful in earning good grades. They also believe that living up to expectations of family and peers is important. For these students, the drive to succeed academically was also derived from the need to *prove them wrong.τ *Themτ are primarily whites at Virginia Tech, but also society as a whole. Harold, Felix and Alonzo were walking across campus one day and ran into Tess, Robin, Artemus, and Hope. Robin and Hope are not doing so well at Virginia Tech. They feel isolated and estranged in their classes and sometimes believe that faculty have problems with them because they are black. Felix was telling the group about a faculty member whom he considered racist. Frank, added, *I take a class with her too, and I am the only black in there. It feels real strange some times.τ Tess spoke up and said, *that s exactly why we need more African Americans here. We need someone who can understand what we are going through, some one we can relate to.τ Everyone in the group nodded in agreement. As Robin and Hope walked off, Robin said, yea, I agree with what they are saying, but I still say my grades are my fault, besides if faculty care about me and can teach, that s what s important.

Faculty issues come alive in the stories of Harold, Felix and Tess. These students have transferred their anger and frustration into a positive force that has resulted in academic success. They are determined to succeed, and are driven to *prove them wrong.τ Racism among white faculty members is something they believe is prevalent on the campus.

Robin, Artemus and Hope agree that they have had some problems with faculty, but they are not particularly bothered about it. They believe that faculty who care about students and who are good teachers are most important. While they would like to see more African American faculty, they are clearly more interested in faculty who care.

All of the students in this story felt a need for more African American faculty on campus, who, they believed would help to make them feel more comfortable at Virginia Tech. However, the less successful students did not feel as strongly about this.

Faculty issues evolved from two perspectives. Some students were concerned about the disproportionate under-representation of African American faculty on campus, and others were concerned about the negative behaviors of white faculty toward black students. However, there was little consistency regarding the attitudes and behaviors of white faculty members.

Interaction With White Faculty - Less Successful Group. About half of the students believed white faculty members were racist, and half did not. Eleven of the less successful students interviewed believed that Virginia Tech should have more black faculty.

Lorenza, a second-year student, gave two examples of behaviors he thought were directed to him because of his race. Consider the accounts of two incidents in his classes.

This one teacher, I could tell she had it out for me. . . the one day I missed class, she would have a quiz, take up all the homework and then give plans for the next week. . . I was the only black person in that class. I would come to class, take notes, do everything, have the homework ready, and she would not take up homework or have a quiz. The one day I missed, we had a quiz, she took up all the homework, and she changed the schedule the same day. I swear to God she had it in for me.

I took this U.S. History class that focused on slavery and so forth. The professor felt like he had to talk to me. . . I was the representative of the black community in that class. . . It makes you self-conscious. It takes away from the ability to do your work and you are, like, feeling isolated.

The latter example from Lorenza appears to be the more objective of the two. However, what is important about both of these incidents is that Lorenza

believes racism has occurred. For him, these are realities that can directly effect his academic performance.

Although Lorenza's responses relating to white faculty had to do with perceived racist behaviors or unkindness, the two issues of most importance to the less successful students were: (a) caring faculty who were effective teachers, and (b) discomfort in the classroom. Consider the following statement from Hillary regarding her experience with an effective teacher who happened to be a white faculty member.

But then at the same time I remember a psychology class, my teacher was white, but I also got a good grade in that class, and it was because of the way he presented the material. He cared and made it fun. . .

Hillary believed that good teaching and a caring faculty member made the difference in how well she performed in this particular class, in which she was comfortable and felt that she belonged. Hillary's story of success, comfort, and belonging, however, is not typical of the experiences of the less successful students in the classroom. Consider the following comment shared by Jerry with concern and frustration.

We are the only blacks in there. In high school, it wasn't all black but it was more than that. You sit down, and it just feels. . . I don't know.

For the less successful group, conversations concerning faculty unfolded into discussions of isolation and estrangement in the classroom. One student expressed his feelings about being the only person of color in one of his classes. He noted,

The first day of class most people are wondering what the professor will be like. My first day, I'm like, *I'm the only black person in this class.* That is the first thing I think about.

This discomfort was sometimes caused by the student's own thoughts and feelings, and at other times, as a result of prior unpleasant experiences with faculty and peers. Consider the following comments from Ann and Ruth.

I had this teacher last semester and I have him again this semester. I feel he s a racist. . . There are two black people in my class, and the other girl, I don t know her. She sits behind me. Yesterday, she was sleeping, and the professor comes over to me and says, *would you wake up your partner behind you.τ And, I m like, *I know he s not talking to me.τ Just because I m black and she s black, do we automatically know each other? And then he calls her my partner!!!

I can t even talk to or relate to them at all. And then the faculty, I have a problem with them. They didn t even seem to care whether we were there or not, except that I was filling a quota.

For these students, how faculty, even black faculty, interacted with them was very significant. One student shared, *I couldn t relate to him at all. He was just an Uncle Tom. And that s the only one I ve had.τ This opinion about a black faculty member was similar to the message about white faculty, namely, that faculty should care about students, and be able to relate to them, regardless of race. The following comment supports this opinion.

I was used to having white teachers, so it s not a big step for me from high school to college. It s not the teachers. I mean as long as they can teach the material.

The students in the less successful group did not believe that their interactions with white faculty affected their academic performance. They considered isolation and discomfort in the classroom to be much more important to their performance than interactions with faculty. They also believed that a faculty member's caring attitude was more important than his or her ethnicity.

Interaction With African American Faculty - Less Successful Group. The less successful students felt that more African American faculty members were needed at Virginia Tech. A recurring theme had to do with having someone to relate to that might have had some of the same experiences as the respondents. A subject discussed in each group had to do with the positive influences that the Black Studies classes had on the students.

. . . black teachers influenced me and helped me to do better, because I did well in Black Studies and I felt a little more comfortable being around other black students.

Although students felt that more African American faculty were important at Virginia Tech, this was not as important to them as it was to the students in the satisfactory and successful groups. The more important thing to those students was having faculty members who cared about them.

Interaction With White Faculty - Satisfactory Group. The two issues of concern for the satisfactory students were (a) racist attitudes and behaviors of white faculty, and (b) the importance of African American faculty to their success at Virginia Tech. This group believed that, in some cases, white faculty and advisors were unnecessarily indifferent and inconsiderate. There was only one story of a supportive white faculty member in this group. Several students shared stories of perceived racist incidents that had occurred early in their Virginia Tech careers, and were still bothered and unhappy about these experiences. One student talked about how an early occurrence still influenced how she responds in classes.

When I switched my major to ZZZZ, I used to always ask a lot of questions. . . every time I asked a question or either responded to a question, the professor would be like No! You re Wrong!!. . . Like shut

up!!! Sit down!!! . . . This year I don't say anything. . . I've been beat down so much. . . I had enthusiasm for my work. . . Now it's like I've lost all my fire, all my spunk. . .

Later, in a discussion regarding classroom issues, the same student reiterated her experiences and added,

I'm the only African American female in my class and when a white male or female says something that is kind of right, professors are kinda like oh, that could be what I'm looking for. It's like a whole different kind of tone and attitude. But with me, it's like, You're wrong!! Or I get a big X over my paper where other students will get an explanation about where they went wrong. . . I'm just like one black dot sitting there, and it seemed like everything I said was wrong. And they didn't really listen to what I was saying, they couldn't get past it was me saying it.

Another student shared an experience she had with a professor in a review session. The student recognized that some of the answers on the review sheet were incorrect, so she called it to the professor's attention. She explained that when this event occurred, there were other students who corroborated that the answers were wrong. However, the professor maintained that the answers were right. After some discussion, the student reported that the professor acknowledged that she was correct about the discrepancies in the answers. She said in reference to this encounter,

. . . as far as race was concerned, I was the only minority and felt like he downed me more than he down-talked any other person in the review session, and I felt kind of upset about it. . .

Students in this group had numerous stories to tell about unpleasant experiences with white faculty that they considered to be related to race. The students' stories included incidents not only with faculty, but also with academic advisors. Consider the following comments.

When I first got here, I was an engineering student, and that did not go very well. I attempted to change my major, and I went over to my advisor's office with another fellow, who was white, and it seemed to me like the teacher just tried to talk down to me. She asked, "Are you sure you wanna do this?" I said "I'm positive". . . "Are you sure? Have you told your parents," and stuff like that. And finally she signed it. And with the other guy, she just signed it and gave it to him.

. . . the summer of freshman year, I wanted to take this philosophy class and the woman said, "Are you sure? It is a very difficult class, and I am looking at your high school records. . . it seems like you might have some trouble in this area. . . I don't think you should go down this avenue at all." She didn't ask me how I felt, or about my interests. . . It is the mentality. They put you in a category. . . that you are expected to turn out this way. . . it's just unfortunate to see people in these institutions with these positions, and they don't know the whole situation. You try to tell them, and they'll make up some excuse to cover their butts. Basically, I was very angry.

The students believed that these accounts of negative interactions with white faculty and advisors were race-related. While there could be other explanations, it is the students' perception that these events were precipitated by ethnic prejudice. The impression of racist attitudes and behaviors are real to the students and are, therefore, legitimate issues to be considered in this research project.

One student in the group had a different story to tell about his interactions with white faculty. Albert shared,

Basically, I don't know what their perceptions are of me. Sometimes in the semester they figure out that I'm an athlete. I go to every class. I rarely ask questions. I just go and take my notes. . . I did have a couple of professors who just took a liking to me because they see me in every class and I do my work.

Albert's story about faculty added a positive perspective to the story of faculty. This story reinforces the contentions of the less successful students that

the issue is not white faculty, but rather faculty who are good teachers, and who understand and care about student success.

Accounts of experiences with faculty eventually unfolded into discussions of classroom experiences, which were described as cold and unfriendly. Frank shared his feelings about being the only *person of color in his classes.

When I go into class and sit down, and find that I m the only person of color, I don t feel comfortable because for whatever reason, I feel like it just pushes me up against the wall. I don t know, it might be a personal experience or something in my unconscious. I just feel uncomfortable. I wish I would see more people of color in my classes, especially my major.

Myrlin shared, *In my public speaking class. . . I m the only African American in there, and I guess I feel kind of shaky at times about what I say. . . Louise added an interesting perspective on white students and faculty. *They try to make me feel like I fit in. . . but it s like they accept me socially, but they don t accept me intellectually.

These students report feeling uncomfortable in the classroom as a result of previous negative personal experiences with peers and faculty. Students told stories of unpleasant experiences with white faculty. It is striking that the students tell these stories so vividly, and with such emotional frustration, two or three years later. For them, these experiences are a direct link to racism and, at the very least, prejudice.

An important observation related to this phenomenon is the differences and similarities in the groups' discussion of faculty. The comments of the satisfactory and successful students were expressed with extreme emotional frustration. Statements such as *it s just not fair,τ *I don t understand,τ and *they

make you feel as if you can't do it and are surprised that you do, commonly occurred in the group. These statements suggest a need to belong and to be accepted on one's merits.

These sentiments were not expressed by the less successful students. Their comments were less reflective and emotional. Discussion of white faculty was minimal and there were few occasions when students talked about things faculty had done that either caused them to falter, or drove them to achieve. When the less successful group discussed faculty relationships, they did not express the same sense of wanting to belong because they deserved it.

Interaction With African American Faculty - Satisfactory Group. The lack of black faculty emerged as an important issue for all of these students. One student expressed his feeling that African American faculty added familiarity in class. He spoke of the bond that he had been able to establish with one of his black teachers, and how important that was to his learning experience. Other relevant comments include:

. . . it's more of a role model situation. . . when I see people from my race, and other races it really makes me feel better.

I feel that there can be a positive influence if you have an African American teacher. You can relate to them. They make you want to learn. Like my first two years, when I was in University Studies, having an African American advisor was good for me because not only was she my advisor, but when I saw her out we would speak, and it just wasn't the student advisor relationship.

My mentor is an African American, and also my VTASP advisor. . . My VTASP advisor in a way is a mother figure. Not that I need my mother here, but, it's just the fact like, I will have to hear her mouth. . . that is why I try to do good, so she has really helped.

Last semester I had the opportunity to have an African American woman as a professor. It made it a lot easier for me because seeing her as the

*keeper of the knowledge. . . and she is an African American woman, a professor, and it's like they respected me more because. . . I could be her one day. . . If it was another setup, I probably would have gotten my usual hard time in the class.

I've had different experiences, but I can generally say that the experiences I have had with the African American teachers have been real positive. Several of my teachers have brought. . . a new energy that I didn't know was in me. . . just being in class with them. They seemed to ask the right questions. The questions seemed to hit home.

It seemed like everything was more laid back. She taught us, and we related because she could relate to some of the modern things that we were going through, so it just made the class more fun.

I am taking this class now with an African American woman, and in some ways she is one of the most difficult professors I've had since I've been here. I think it's because she wants to challenge us. Maybe it's because she knows the whole situation.

The importance of African American faculty was often expressed passionately. Students felt a great need for the presence of role models who looked like them, and could understand some of the struggles faced by black students at a predominantly white university. Another interesting point made was that African American faculty were not just important for students of color, but for all students. Familiarity, comfort, and sensitivity are all concerns that emerged through the students' comments on the importance of African American faculty. Students were clearly displeased about the disproportionate under-representation of African American faculty at Virginia Tech.

Interaction With White Faculty - Successful Group. Interactions with white faculty and advisors emerged as an important theme for the successful students. Issues emerged from three perspectives. First, students were concerned about negative stereotypes and expectations held by white faculty

and advisors. They believed that white faculty and advisors did not believe in or care about the academic competence of African American students. Second, they were concerned about differential treatment by white faculty and advisors. Students spoke at great length about the *surprise with which white faculty responded to their success. And finally, students were extremely concerned about the low number of African American faculty and staff at the university.

Participants believed that white faculty had preconceived notions of their academic ability. Tess, for example, did not attend summer orientation and related her experience with an advisor upon arrival on campus for the fall semester. She noted that when she went to register that she was told,

Well, of course you're going to have to take the math test. . . and they said that before they even looked at my SAT scores and put it into their formula. . . I was like, you were expecting me to have to take the pre-calculus? And every day after that it was like, so how are you doing in that class? I was like, why out of the 50 people in the room, was I the only person that you remembered.

The students believed that white faculty did not expect them to do well, and, in fact, were surprised when they excelled. They believed that faculty and advisors treated them differently than they did white students who excelled. Jennifer noted, *Sometimes you really like that personal attention, but that's personal attention like, *you're a good student and that's really great.τ Not, I'm so [emphasis added] surprised.τ Tess commented on interactions in the classroom.

Sometimes you'll answer a question and they'll be like so shocked that you got the right answer. . . It's like, he just gave you the right answer five minutes ago and you didn't give him the same response. . . And it's nothing like you could tape record it. It's like a feeling, and a kinda look -- kinda thing.

Students believed that white faculty were not interested or concerned about their academic and personal development. Feelings of hurt and disappointment were expressed throughout the conversations. Several students gave accounts of how white faculty behaviors and attitudes made them feel uncomfortable and insignificant. Felix shared,

That is the other thing that bothers me. . . you are doing well but they don't expect you to. That bothers me. I don't like that. I came here, I work hard. Yeah I'm doing well. They are surprised. . .

The following accounts by two male students were expressed with solemn seriousness and deep emotion. Harold recalls that a professor said to him, *You're always thinking about something. You're planning something.* This student commented in the interview,

It seems to me like I threatened him, just by the fact that I not only did well, but that I wasn't a stereotypical sort of person. . . I don't know if it was race or the fact that I was able to do well in his class or what. That's just one of the things you deal with. . . You don't know what it is. . . I mean because to me when blacks say that it's a race thing they go through a lot more now to determine that than they would have. . . in the 60s.

Carl, a fourth-year student spoke passionately, angrily and intensely about an encounter with a professor with whom he had done an independent study.

This one faculty. . . I worked with him all last semester and I'm working with him this semester on an independent study. Now, I see this man at least once or twice a week. I was in the mall and looked the man dead in the face, and he didn't say anything until I called his name. He was just like, Oh, Harold! How are you doing. And see that's the sort of things. . . that kind of pressure and those types of stereotypes you have to overcome. I think more than anything else, it drives me to do well.

Despite the unfavorable observations noted above, several students expressed great appreciation for faculty who genuinely cared, regardless of race. Angela, for example, reported very positive accounts of her interactions with some white faculty, and believed that it was characteristic of her academic department. She noted how important it had been to her to have faculty members who were genuinely interested in her and her career. Angela said that many of her faculty members actually interacted with her outside the classroom, and took an interest in her academic success.

Another student who participated in the mentoring program spoke positively of her experience with her white faculty mentor. She described their relationship as one that went beyond a student/faculty association to one that was based on greater equality. She noted that mentoring required both the mentor and the mentee to make sacrifices, and that the sacrifices she had made paid off in her having the opportunity to get to know a faculty member on a different level.

Interaction With African American Faculty - Successful Group. Students were extremely concerned about the disproportionate under-representation of African American faculty and staff at Virginia Tech. They felt that this was a critical area, and that black faculty were pivotal to African American student success at the institution.

. . . one thing that frustrate me is universities. This is not just Virginia Tech. They just don t want to hire black faculty until. . . okay, now we have 100 black students. . . so we need to get two more black professors. . . I don t see why white students can t learn from black professors. . . It doesn t seem like they care until there s a whole bunch of people. . .

This theme was salient throughout the discussion and extended to concerns about teaching faculty, administrators, advisors and role models.

Students gave specific examples of why more black faculty were needed. Carl made an interesting point regarding his experiences, when he described the responses of white students to black professors.

. . . Like maybe if we had a Maya Angelou here or something like that. . . You always have to have someone of that stature here before white students will recognize that they're a good professor. Because I've had one black professor in my major. And the way the people approach him. Not so much that they disrespect his ability. It's just the way they approach him. . . It's just a rudeness people tend to have when it's a black professor. . .

One student said in reference to his high school experience,

If it wasn't for black teachers, I don't know where I would be today. He added, *And that's why I feel right now that it's very important that we have more black faculty. . . I can't reiterate enough that we need more black professors.

Of equal importance to teaching faculty was the need for role models. Students felt that it was important to have people to talk to who might have experienced some of the same things they had. They also considered it important that they be exposed to African American faculty, staff and administrators at the university that they can "look up to."

Results from these data suggest that faculty who understand and appreciate African American students are important. The African American faculty presence on campus is equally important. Based on the responses of the participants in the successful group, both of these factors are critical to success for African American students at Virginia Tech.

CHAPTER VI

DISCUSSION, IMPLICATIONS, AND CONCLUSION

This study discovered and explored conditions related to the academic performance of African American students at Virginia Tech. Participants were full-time African American undergraduate students who matriculated between second summer session 1989 and Spring 1994.

The phenomenon of interest evolved as a result of data showing that in Spring 1995, a disproportionate number of African American students at Virginia Tech had QCAs less than 2.0. At this time, 23% of the African American students had QCAs less than 2.0. This was in comparison to only 11% with QCAs greater than 3.0. As a result of these findings, the study was developed to investigate the following research questions:

1. What conditions enhance the academic performance of African American students at Virginia Tech?
2. What conditions impeded the academic performance of African American students at Virginia Tech?

Data were collected through seven focus group interviews. The interviews were conducted during the months of January and February. An average of five students participated in each interview. The total number of students interviewed was 35 -- 15 students with QCAs less than 2.0 (less successful students), six students with QCAs between 2.0 and 3.0 (satisfactory students), and 14 students with QCAs greater than 3.0 (successful).

Data were collected, coded, and analyzed using the constant comparative analysis method. As the data were collected, they were

simultaneously coded and analyzed. The steps involved: (a) collection of data through a combination of the Affinity Diagram method, focus group interviews, and a follow-questionnaire, (b) students clustering note cards (factors), (c) discussion of factors, (d) interviewer and co-facilitator debriefing at the end of each interview to discuss group dynamics, review of clusters and questionnaires, and naming themes, (e) comparison of factors between and within groups, (f) identifying preliminary themes, (g) listening and re-listening to audio tapes, (h) identifying similarities, differences, and overlaps, and (i) broadening clusters, which were later named themes. Themes describe the interrelatedness and connectedness of factors.

Discussion Of Findings

Academic performance of African American students at Virginia Tech is related to conditions in the academic and social environments. Three relevant themes emerged that help explain these conditions: (a) the personal attributes and commitments students bring to the institution, and are willing to invest helps to navigate their academic success or failure (achievement motivation), (b) the relationship and interaction patterns between peers and family have an important influence on academic experiences (social infrastructure), and (c) the experiences and interactions between African American students and faculty are pivotal to students academic behavior patterns (faculty issues). These themes help to explain the conditions that impede or enhance the academic performance of African American students at Virginia Tech, and illuminate differences in the lives of successful and less successful students.

Achievement motivation describes the stimuli which propel students to accomplish goals, and includes the personal attributes and commitment a

student brings to, and invests in the educational process. Social infrastructure describes the personal relationships involved in students lives. Faculty issues are the interactions and relationships that occur between black students and faculty.

Achievement Motivation. All of the students interviewed believed that their academic performance was related to the theme of achievement motivation. The level of adjustment, study skills and habits, clarity of goals, and choice of major were all found to be important. The primary factor contributing to success or failure was the difference in how students managed these factors.

Less successful students reported that they had not adjusted well, rarely participated in student or academic activities, had unclear goals, and were uncertain about, and/or displeased with their majors. The experiences of satisfactory and successful students were exactly the opposite. These students were well adjusted, had good study skills and habits, were clear about their goals, and were pleased with their majors. Although some of the satisfactory and successful students had changed majors, most of them had changed early enough in their academic careers to prevent poor performance. This finding might suggest that these students have stronger decision making and critical thinking skills than the less successful group. Another feasible postulation is that the less successful students have difficulty recognizing when they are in trouble, and are, therefore, unable to take the necessary steps to seek assistance.

An unexpected finding in the data was the passionate expressions of less successful students regarding their sense of responsibility, self-blame, and guilt for their grades. These students took complete responsibility for their poor

grades, and believed that they could fix them if they changed their behaviors. However, there was no evidence in the data that suggested that behaviors had changed. This finding adds a new dimension to the literature on locus of control for African American students. These students do not blame their failures on external influences as is suggested in the literature of the sixties through the late eighties.

Attribution theory (Weiner, 1965; 1985) adds understanding to this phenomenon. Its dimensions of locus of control, stability, and responsibility are apparent in the behaviors of the less successful students. The responses of students clearly illustrate lack of self-esteem, relationships of failure to past experiences, and shame and guilt, which are related to the dimensions of locus of control, stability and responsibility.

A major finding, although expected, is how students handled the achievement motivation factors. The less successful students talked about most of these variables in the context of what they had, or had not done. They reported making bad decisions, not setting priorities aligned with academic success, and, withdrawing from the challenges of their academic responsibilities. While these things are important to the less successful group, they do not explain how or why students made decisions about their investments in the educational process. The answers to these questions are most important in understanding the performances of these students. This topic warrants further investigation and is pivotal to an informed discussion of the phenomenon. The answers might be found in further examination of the interaction between the African American student at Virginia Tech, and the academic and social environments.

The satisfactory and successful groups discussed achievement motivation factors from a positive perspective and emphasized how these factors had worked to help them excel. The answers to the questions of how and why for these students were related to their desire to *prove them wrong.τ (*Them,τ in this case referred to white faculty.τ) This is an important finding to this study, and provides a new perspective on how students deal with racism.

The literature supports the findings that achievement motivation factors relate to academic performance. What is of interest in these findings that is not discussed extensively in the literature on African American students is the phenomenon of responsibility, self-blame, and guilt. This is of interest because of the intensity with which students discussed it, and the researcher's speculation that there may be other factors connected to the phenomenon.

It is intriguing that the satisfactory and successful students have managed to learn how to *play the game,τ yet the less successful students have not. Such questions arise as, *When and where did the satisfactory and successful students learn to negotiate the system so well?τ *Did they learn these skills after arriving at Virginia Tech, or did they acquire them over a lifetime?τ *What have students been taught about their role in a predominantly white institutions?τ *What are students' expectations when they choose to attend a PWI?τ

Social Infrastructure. One of the students in the successful group used the term *social infrastructureτ as an analogy to describe personal relationships. As a theme, social infrastructure was very important, with peer influences and parental and family relationships being considered very important to the academic performance of students.

For all groups interviewed, other African American students were the primary support system. This finding, in the context of other findings regarding peer relationships is one of the most interesting and important findings of this study because of the findings from the successful group regarding the importance of interacting with white students.

Students in the successful and satisfactory groups *utilize white students for academic success. This concept was introduced by a student in the successful group. Although the other students did not use this particular phrase, the message for most of these participants was that their friends were black, and whites were significant primarily for academic endeavors.

The findings regarding the interaction between successful African American students and the university community are inconclusive. This is because although these students have excelled, and have apparently learned how to successfully negotiate the Virginia Tech system, they maintain some degree of separation from the larger university community. An interesting observation related to this is that these students, based on their comments and expressions of frustration, have not had a good experience at Virginia Tech.

Many of these students were in a personal dilemma. An accurate portrayal of their feelings is that they once had a desire to belong, but there now seems to be a conscious resolve that their purpose here now is strictly to become credentialed. This feeling of hopelessness was prevalent with most of the students interviewed. These findings support those of Fleming (1984) regarding low levels of psycho-social development for black students at predominantly white institutions.

The importance of peer pressure is supported in the literature. However, the interaction patterns of these students extend beyond peer pressure, and approach issues of integration and institutional culture. For all of the groups interviewed, there is some level of social or academic isolation from the larger university community. Based on the data, it is apparent that students have purposefully made race a variable in making decisions about peer interactions.

One explanation that might add understanding to this finding is that the black students in this study believe that whites are uninterested in their well-being and oblivious to their needs. This contention is supported in the literature (Allen, 1988) and adds clarity to their choice to disassociate from whites. According to the literature, a coping mechanism often used by African American students is development of alliances with other blacks students. This has occurred with the less successful students, but to their detriment because in developing this alliance, they have also discounted the importance of white students in their educational and psycho-social development.

Regarding peer interactions, important questions include, *When do students recognize the importance of interacting with white students?τ *How do they make decisions regarding the intimacy or lack of intimacy with white students?τ For the less successful students in particular, *What kinds of experiences have driven their negative attitudes about whites?τ *Did they bring these attitudes with them to Virginia Tech, or are they the result of experiences after arriving at the university?τ

Parental Influence. Parental and family influence emerged as *stressfulτ and *pressureτ for the less successful students. Most of the students in this

group believed that there was little parental support. They were extremely emotional about what they perceived as lack of support from parents.

For the successful students, the opposite was reported. These students considered family to be extremely supportive and encouraging in their academic endeavors. Students believed that parents gave them guidance and did not pressure them. They believed that their parental expectations, support, and supportive autonomy in decision making was beneficial to them. The satisfactory students considered their parents supportive but this topic did not receive a great deal of discussion among this group.

The significance of parental influence in this study for all students is related to the strong impact parents have on students. The topic was not attended to in the literature review, but is an intriguing finding because of the importance attached to it by the students interviewed. The students who had excelled, perceived parents as supportive and encouraging and the less successful students considered parents as causing pressure and stress. For each group interviewed, parental influence, whether perceived as positive or negative, was a strong force in the lives of these students. A question unanswered by this research is, whether parental *pressureτ or *supportτ is the cause of, or the result of high or low academic performance.

In relation to parental influence, race, and academic performance, it is important to understand the messages parents communicate to students. Specifically, how parents perceive race and its affect on academic performance. Questions that emerge include, *What do parents tell their children about what it takes to succeed in a predominantly white environment?" *What do parents believe are their chances for success in a predominantly

white environment?" *How did the family unit respond to possible racial challenges prior to college attendance?" Answers to these questions, may help in explaining how students negotiate a predominantly white college environment.

Faculty Issues. Interactions and relationships with faculty were important to all students interviewed. The primary concern for less successful students were faculty that did not care and who had poor teaching skills. They also were concerned about the paucity of African American faculty, and to a small extent about racism. However, this group did not believe that these factors affected their academic performance.

The satisfactory and successful students had serious concerns about negative stereotypes held by white faculty. This is one of the most important and informative findings of this study. They felt that racism was prevalent among faculty and expressed these concerns with a great deal of anger and frustration. These students were equally as passionate about their belief that there needed to be more African American faculty at Virginia Tech. For these two groups, negative experiences with faculty actually motivated them to excel. Students were extremely appreciative of the few positive experiences they had with faculty. However, most of their responses were criticisms and complaints about their interactions with faculty.

An interesting finding from this study is the ability of the successful students to reverse their anger and frustration with faculty to academic success. One cannot help but ponder, whether this is a skill that was developed as a coping mechanism at Virginia Tech, or if students have used such skills throughout their lives. Numerous questions come to mind in contemplation of

an explanation. *How successful would students be if they were not angry and frustrated?" *What attitudes are faculty bringing to the classroom regarding race?" "How are these attitudes reflected in what goes on in the classroom?τ

Revisiting The Purposes

This study explored conditions related to the academic performance of African American students at Virginia Tech. The following section will discuss findings of the study in the context of the purposes set forth in chapter one.

Those purposes were:

To discover and explore conditions related to the academic performance of African American students.

To identify topics for design of a quantitative survey instrument.

To describe the environmental and personal factors related to academic performance.

To provide a basis for the institution to assess the state of African American students at Virginia Tech through anecdotal evidence and perceptions of and by those students.

This study was successful in the purpose of discovering and exploring factors related to the performance of African American students. From the findings of this study, 11 thematic factors emerged as important to the performance of African American students: (a) adjustment, (b) responsibility, self-blame, and guilt, (c) study habits and skills, (d) goal commitment, (e) major, (f) *learning the game,τ (g) effort and involvement, (h) peer interactions, (i) parental influence, (j) faculty issues, and (k) African American presence on campus. By the end of the third group, no new themes emerged, and all subsequent data fit into one of the existing themes. These factors were

collapsed into three broader themes of achievement motivation, social infrastructure, and faculty issues.

The study was successful in discovering topics for further quantitative research. Among the most important areas are questions relating to goals and choice of major, effort and involvement, peer influence, parental influence, interactions with white faculty and the importance of a critical mass of African American students. In addition to identifying topics for quantitative research, the findings of this study also reveals the need for additional qualitative and quantitative exploration of the 11 thematic factors and the themes.

A clear explanation of personal factors related to performance was derived from this study. Students believed that the achievement motivation factors of personal attributes (motivation, *learning the game and depression), and personal commitments (effective study habits/skills, clear goals, appropriate major and effort and hard work) were related to academic performance. These attributes were important for all students interviewed. The differences were found in how these attributes and commitments were approached.

The information on environmental influences was not quite so clear. While students talked at length about their personal experiences, they were not so clear about their experiences with the environment. The implications that could be considered from an environmental perspective are those related to faculty/student interactions, experiences of isolation in the classroom and peer relationships. These factors are all related to the institutional culture, and, according to the literature, success for African American students is directly related to the culture of the institution.

Given the perspectives of African American students in this study, they assessed Virginia Tech as not providing them with a holistic developmental and academic experience. In their own words, African American students at Virginia Tech expressed feelings of frustration and discontent. It can be concluded that the level of psycho-social development is thwarted and that they have not experienced satisfaction with their academic and social experiences at the University. This finding supports the need for change in the academic and social cultures at Virginia Tech.

Pivotal to the discussion of experiences for these students was the presence of racism among faculty at Virginia Tech. However, there were some differences in how these students perceived its influence on their academic performance. Although the less successful students encountered racism at Virginia Tech, they did not perceive racial conflicts to be a factor in their academic performance. However, the successful students believed that racism existed, but reversed its negative influences into positive motivation.

The findings regarding the unsuccessful students is less clear cut. These findings reveal that unsuccessful students do perceive some racism at Virginia Tech, but do not believe this racism is related to their academic performance. Questions arise regarding the accuracy of their perceptions about their experiences with racism. The conclusions in this study suggest that there is a discrepancy between how the students perceive racism as it related to their academic performance.

Based on these findings, several implications arise for practice and policy at Virginia Tech.

Implications

1. Institutional climate is an issue of concern in the context of relationships with students and faculty. It is urgent and critical that the institution implement intervention programs to improve campus climate both from the faculty level and in peer relationships.
2. Wrong choice of major is an issue for a substantial number of students with QCAs less than 2.0. Efforts should be expanded to encourage participation and assist students in exploring alternative majors.
3. Collaboration between faculty and student affairs professionals would be helpful in designing initiatives to facilitate understanding of, and comfort for African American students.
4. Programming should occur to create a community inclusive of diversity in residence halls, clubs, organizations, committees and commissions.
5. Opportunities for promotion of intentional interaction between white and black students, and black students, faculty, and staff should be facilitated in the classroom and in non-academic settings.
6. Parental involvement should become an integral part of academic support initiatives. In light of the strength of parental and family influences, efforts should be made to extend relationships with family support units of African American students.
7. An assessment should be made of African American student attitudes about (a) their fit at Virginia Tech, (b) their expectations, (c) their attitudes about whites, (d) and their interactions with the white community. The findings of this instrument should result in a survival kit identifying risk factors that lead to academic failure.

8. Efforts should be made to enlist black student organizations in academic support initiatives.
9. The institution should develop opportunities to recognize diversity in the classroom.
10. Opportunities for informal interactions with African American students, faculty, and staff should be facilitated through academic departments.
11. More African American faculty, staff, administrators, and students should be recruited and retained at Virginia Tech.
12. The 11 factors, and the three themes found in this study provide a structure that should be used to examine events that help to explain student outcomes.
13. The institution should implement a one day self-assessment seminar for faculty, students, and staff. Strategies for improving the institutional climate for African American students should be the focus of this seminar.

Recommendations For Future Research

There is much room for continued research on factors related to the academic performance of African American students. The areas for potential research are extensive and span from institutional culture to student behaviors. Based on the findings of this study and gaps in the literature, the following recommendations are made.

1. Additional research on attribution theory as it relates to African American students would be useful in gaining an understanding of students sense of responsibility, self-blame, and guilt regarding their academic performance.

2. Investigations to gain a better understanding of attitudes and coping mechanisms that affect performance would be helpful in designing program interventions.
3. Additional research is needed to gain more insight into relationships and interactions between white faculty and black students. Specifically, questions need to be answered on the finding regarding successful students reversing negative experiences with faculty into determination to *prove them wrong.τ It is important to discover how this might be captured to help less successful students improve their performance.
4. The students in this study, for the most part did not develop friendship relationships with white students. A study to clarify the quality and context of relationships between black and white students would add to the literature on psychosocial development of African American students in white institutions. It would also assist in understanding interactions between black and white students.
5. Investigations should be pursued to examine the strong influence of parental relationships.
6. A quantitative follow-up to determine if the findings from this study are indicative of the larger African American student population.
7. A study to further examine the relationships of African American students and white faculty should be conducted.
8. Investigations of the 11 thematic factors should be conducted to determine how they work collectively and individually to influence performance.

9. A study comparing faculty attitudes about African American students would be helpful in gaining a better perspective of how these two groups interact.
10. This study should be replicated to further examine the phenomenon of student performance with white students at Virginia Tech, and with black and white students at historically black institutions.

Conclusion

Academic performance of African American students at Virginia Tech is related to the interactions between the student and the social and academic environments. These interactions include achievement motivation, social infrastructure, and faculty issues.

The findings illuminate the importance of the student/environment interactions at Virginia Tech. Of particular importance are negative racial stereotypes and attitudes exhibited by white faculty members, feelings of anger, discomfort, and frustration among African American students, an absence of a sense of belonging within the larger university community, appropriate coping skills, and a paucity of African American students and faculty.

African American students at Virginia Tech survive by building support groups with other black students. Interaction with white students is fragmented, and occurs most often for the purpose of academics. African American students do not believe that white students are interested in or aware of the struggles they face at Virginia Tech.

The students in this study exhibited opposing motivational attributes. Satisfactory and successful students exhibited an external locus of control and less successful students exhibited an internal locus of control. These findings

contradict the literature regarding success and locus of control. Further study is warranted to gain a better understanding of this phenomenon.

Parental influence is important to the academic performance of African American students. The findings from this study suggest that the influence can be negative or positive, and based on this study, the direction of this influence is related to academic performance.

A critical mass of African Americans is important to students success. This is reflected in the kinds of friendship patterns that students developed, and in the positive affect that African American faculty had on students.

Each student in this study believed that hard work and effort were important to academic performance. This is important. Of equal importance, however, is how students made decisions about their investment of time and effort. For the less successful students, findings were inconclusive regarding how these decisions were made. For the successful and satisfactory students, the desire to *prove them wrongτ was the driving force.

In conclusion, the interaction between African American students and the environment both enhance and impede the academic performance of African Americans students. These findings suggest a need for interventions throughout the institution to improve conditions, and enhance students academic and social experiences.

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Appendices

Appendix A

Sample Letter to Focus Group Participants

Thank you for agreeing to participate in the focus group discussion scheduled for Monday, February 20, 1995. The discussion will be held in room 300 Squires Student Center at 3:15 p.m. If this time is inconvenient for you, please contact me immediately so that we can arrange a different time.

As per our telephone conversation, this doctoral research project is designed to explore conditions that have related to your academic performance at Virginia Tech. The information gathered from these interviews will help to improve student retention programs at the University. Your frank and honest opinions during the discussion will help me to gain a better understanding of your experiences.

The interview should last no more than two hours. Please plan to arrive 15 minutes early so that you can decide what you wish to order for dinner. Dinner will be ordered from Hardee's and delivered at the end of the interview.

As discussed, you will receive an incentive in the amount of \$10.00 for participating in this project. You will be paid cash immediately following the interview.

Again, I thank you for agreeing to participate in this project. I am sure you will find it a rewarding experience. For your information, I have attached a general information sheet. If you have questions or concerns prior to the interview, please feel free to contact me at 703-231-4133. Meanwhile, I look forward to seeing you next Monday.

Appendix B

Factors Related To The Academic Performance Of African American Students At Virginia Tech

General Information For Participants

1. The group discussions are designed to explore and discover conditions that are related to academic performance of African American students at Virginia Tech.
2. Participants are encouraged to dress comfortably for the discussion. Jeans and other casual wear are perfectly appropriate.
3. The atmosphere for this interview will be relaxed and supportive.
4. The group will be comprised exclusively of African American students.
5. The information discussed in the discussion is strictly confidential. It is incumbent among each participant to maintain this confidentiality.
6. If you have questions, or if for some reason, you cannot attend the interview session, **PLEASE** contact Delores Scott at 231-4133 or 231-4143.

Your participation in this research project is greatly appreciated.

Appendix C

Interview Guide

Good Afternoon. Thank you for agreeing to participate in this discussion. As you know, the focus of this discussion is the academic performance of African American students at Virginia Tech. The questions that will be asked of you are related to your personal experiences. The information you share is very important and will be used to improve support programs for African American students. As a student at the University, you are in the best position to tell us about the factors that relate to your academic performance at Virginia Tech.

During this discussion, I need you to help me gain an understanding of the conditions that contribute to your level of academic performance at Virginia Tech. Your frank and honest opinions about the issues to be discussed are very important and I encourage you to share all of your thoughts and feelings openly. In this type of research there is no right or wrong, rather a rich account of your experiences and opinions that will improve the understanding of your experiences at Virginia Tech.

It is important that we engage in reflective discussion. Feel free to ask for clarification when necessary and do not hesitate to questions or agree with other group members. To ensure that everyone has the opportunity to be heard and express their opinions, I ask that you not engage in side conversation and that only one person speak at a time.

Confidentiality is very important. The information collected here should in no way be shared outside this group in an identifiable format. Any information

reported will be under alias names and descriptions. This session will be tape recorded to ensure accuracy of your responses. After data analysis, recordings will be discarded.

It is incumbent upon group members to be open in all responses. Let me pause a moment to ask if there are any questions or comments or concerns about the interview format and its intent. So that we will all feel comfortable, I would like each person to introduce himself/herself.

Our purpose here is to find out from you what some of the factors are that you relate to your academic performance. To get an idea of what your feelings are on these issues, could you take the notecards in front of you and write one issue on each card that stand out for you because it has affected your academic performance.

Appendix D

Interview Protocol

1. What experiences at Virginia Tech stand out for you because they have affected your academic performance?

Probe Questions

Describe some examples of that?

Discuss instances that illustrate how often this occurs and in what context?

What about this issue is especially outstanding for you?

Discuss if you consider this a negative or positive experience.

Considering your response, what options do you think could have enhanced your experiences?

2. Why do you believe that the experiences that affected your performance made a difference?

As the information becomes redundant, the interviewer will bring closure to the discussion. It is anticipated that each session will last no more than 2 hours.

3. At the conclusion of the discussion, students will be asked to complete a brief questionnaire (Attachment A).
4. After completing the questionnaire, the students will collect the incentive for participating in the project. Incentives will be paid in cash. Participants will be asked to sign for incentives. This will conclude the interview.

Appendix E

Follow Up Questionnaire

To supplement the information obtained in the discussion, please take a few moments to complete the following questionnaire. The questionnaire has two parts. **Part I** is designed to provide personal information about you and your academic expectations prior to enrollment at Virginia Tech. **Part II** of the questionnaire provides an opportunity for you to list three issues that you feel are especially important that may or may not have been discussed during the interview. You are also asked to list two potential solutions that Virginia Tech might implement to address these issues, and make your experiences more positive.

Part I

Name _____

Major _____

Social Security Number _____

Year of Enrollment (Circle One) 1989 1990 1991 1992 1993

Term of Enrollment (Circle One) Fall Spring First Summer Second Summer

Anticipated Date of Graduation Term _____ Year _____

Have you attended summer school since enrolling at Virginia Tech? ___Yes ___No

If yes, when did you attend? _____

If yes, where did you attend? _____

How many hours did you complete during summer school? _____

When you enrolled at Virginia Tech, what did you expect your average overall QCA to be? _____

When you enrolled at Virginia Tech, how many semesters did you anticipate it would take you to graduate? _____

Have you ever been on academic probation? ___Yes ___No If yes, how many times? _____

Have you ever been on academic suspension? ___Yes ___No If yes, how many times? _____

According to your definition of success, have you been academically successful at Virginia Tech? ___Yes ___No

What is your definition of academic success? _____

Follow-Up Questionnaire

Part II

DIRECTIONS: Please list 3 issues or concern related to your academic experiences at Virginia Tech. Use brief phrases or one word explanations that describe your concerns. Then, please list one possible solution that you believe could address this issues.

ISSUE _____

SOLUTION _____

ISSUE _____

SOLUTION _____

ISSUE _____

SOLUTION _____

Appendix F

Request To Institutional Review Board To Conduct Research Involving Human Subjects

JUSTIFICATION OF PROJECT

The purpose of the study is to discover and explain factors that are related to academic performance of African American students at Virginia Tech. The qualitative study will use focus groups to explore this phenomenon. This study is justified in that the information gained will be useful in improving student retention programs, and in understanding academic experiences of African American students at Virginia Tech.

PROCEDURES

The human subjects will be full-time African American undergraduate students who matriculated as first time freshmen at Virginia Tech between second summer 1989 and spring 1993. The list of potential participants will be obtained from the Office of Academic Enrichment Programs.

Interviews will be conducted by the principal investigator and Jennifer Stringer, the Assistant Coordinator of the Office of Academic Enrichment Programs (OAEP). In the OAEP, Jennifer is responsible for providing support for African American students who have excelled academically, and for students with QCAs under 2.0. Reuben Charles, the Coordinator of Tutoring for the OAEP will assist in analyzing the data. The purpose of Reuben's participation is to add objectivity to data analysis.

The first group of students interviewed will be students with QCAs under 2.0. The second group to be interviewed will be students with QCAs of greater than 3.0. The third group to be interviewed will be students with QCAs between 2.0 and 2.999. The order and composition of subsequent groups will be determined by data collected in the first three groups.

Each group will be composed of students from a range of QCAs and academic levels. It is anticipated that the study will require 42 students to conduct a minimum of 7 groups. Additional groups may be conducted depending on the findings.

Prior to the actual interview, students will be contacted by phone to request that they participate in the study. Students will be sent a follow-up letter and general information regarding the study.

The first three groups will be conducted using the same general guidelines unless based on subsequent groups, it is deemed an inappropriate method to gather the desired data. The steps involved are listed below:

1. The interviewer will state the problem to participants, and ask them to brainstorm about factors that relate to their academic performance at Virginia Tech. The question will be framed in the following form: Please take a few moments to reflect on the factors that you feel are related to your academic performance at Virginia Tech. After reflection, please write one factor on each note card. You have five cards. Your factors should be concise and to the point. Please limit your responses to no more than seven words, and include a noun and verb for clarity. After listing factors pass the cards to the interviewer. (The interviewer collects all cards and lays them on a table.) Now, I need you to arrange the cards into related groupings without conversation. Disagreements over handling the cards should be handled simply by moving a card if you don't like where it is. Move the cards until you are satisfied with the groupings. You have about 15 minutes to complete this task. After all cards have been grouped the interviewer will write responses on a flip chart.
2. The interviewer will then engage the group members in discussion based on the groupings listed on the flip chart. Questions for probing are listed below.

RISKS AND BENEFITS

No risks are associated with this study. Benefits for participants will be the intrinsic benefit earned from the opportunity to provide insight that might help to improve student support programs for African American students. Benefits are not guaranteed.

EXTENT OF CONFIDENTIALITY AND ANONYMITY

The researcher will at no time release names or any other identifiable information regarding the participants. All audio tapes will be erased, and transcripts will be shredded one year from completion of the research project. Participants in the study will be advised of the requirement to maintain confidentiality.

CONSENT

The Consent Form is attached.

Appendix G

Virginia Polytechnic Institute And State University Informed Consent for Participants of Research Projects

Title of Project: Factors That Relate To The Academic Performance of African American Students at Virginia Polytechnic Institute and State University (Virginia Tech)

Principal Investigator: Delores W. Scott

PURPOSE OF RESEARCH

You are invited to participate in this doctoral research project that explores factors relating to academic performance of African American students at Virginia Tech. The study involves participation in a focus group interview, and completion of a follow-up questionnaire.

PROCEDURES

You will be interviewed by the principal investigator and an assistant, Jennifer Stringer, Assistant Coordinator of the Office of Academic Enrichment Programs. The interview will be a discussion focusing on your perceptions of your academic experiences at Virginia Tech. The topics of discussion might be sensitive and could possibly cause some discomfort, depending on your level of comfort with your current QCA. Three different types of groups will be conducted. The three types of groups are (a) students with less than a 2.0, (b) students with greater than 3.0, (c) and students with QCAs between 2.0 and 2.999. Your letter of confirmation designated the group in which you are a participant.

RISKS AND BENEFITS OF PARTICIPATION IN THIS PROJECT

It is anticipated that your participation in this project will be helpful in determining the conditions that relate to the academic performance of African Americans students at Virginia Tech. The personal benefit for you will be the satisfaction derived from participation in this project. There is no guarantee that this benefit will occur. No known risks are associated with this study.

COMPENSATION

For participating in the entire project you will receive \$10.00. If you choose to withdraw before completion of the interview session, you will receive compensation pro-rated based on the time of your withdrawal.

EXTENT OF ANONYMITY AND CONFIDENTIALITY

The researcher will at no time release names or any other identifiable information regarding the participants. Any information released will be through pseudo names. All audio tapes will be erased, and transcripts will be shredded one year after completion of the study. Participants are expected to

maintain confidentiality regarding discussion that occurs during the focus group interview.

FREEDOM TO WITHDRAW

You are free to withdraw from the research at any time during the process. If you choose to withdraw, your compensation will be pro-rated.

APPROVAL OF RESEARCH

The Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University, and the Division of Administrative and Educational Services in the College of Education have approved this study.

SUBJECT S RESPONSIBILITIES

I agree to participate in this study. I understand that complete confidentiality is necessary in order to maintain the integrity of the group, and the respect for other participants.

Signature

SUBJECT S PERMISSION

I have reviewed and understand the informed consent. I understand my responsibility in the focus groups, and my questions and concerns have been answered and addressed. I voluntarily agree to participate in this project.

I understand that I can withdraw anytime without penalty. If I choose to withdraw, compensation will be pro-rated based on when I withdraw from the study. I agree to abide by the rules of the project.

Questions and concerns about this research or its conduct should be addressed to:

Delores Scott, Investigator 231-4133

Don Creamer, Faculty Advisor 231-9705

Ernie Stout, Chair, Research Division 231-6077

Vitae

Delores W. Scott

750 Tall Oaks Dr., 2900F, Blacksburg, VA 24060

Home Phone 703-552-6943

Office Phone 703-231-4143

Education

Doctorate of Education: College Student Personnel Services, April 1995, Virginia Polytechnic Institute & State University, Blacksburg, VA

Dissertation: Factors Related To The Academic Performance of African American Students at Virginia Polytechnic Institute and State University

Master of Education: Counseling, May 1982, Virginia State University, Petersburg, VA

Bachelor of Arts: Social Work, May 1975, Virginia Union University, Richmond, VA

Research Interests

Academic success of African American students in predominantly white colleges and universities

Environmental and non-cognitive factors that influence student success in higher education

Teaching Interests

Doctoral or masters level students in College Student Personnel Program

Experience

Administrative

Coordinator, Office of Academic Enrichment Programs, Virginia Polytechnic Institute and State University, Blacksburg, VA, February 1991 - present.

Chief administrator for university retention programs. Responsible for management of all administrative functions, budget, collaboration with colleges, and overseeing university wide academic support initiatives. Coordinated all academic support initiatives for students characterized as high-risk and students with cumulative QCAs less than 2.0. Provided supervision for academic support services for African American scholars including an on campus internship program. Managed professional and para-professional staff of up to 30 individuals.

Administrative Assistant, Virginia Polytechnic Institute and State University, Blacksburg, VA, August 1989 - May 1990, and August 1990 - February 1991.

Coordinated university retention program for first and second year students, and assisted with summer school and special research projects related to African-American faculty and administrators in higher education.

Program Coordinator, Student Transition Program, Virginia Polytechnic Institute and State University, Blacksburg, VA, June 1988 - July 1988.

Planned and implemented a summer bridge program for approximately 75 African American entering freshmen.

Administrative Assistant, Office of the President, Virginia Polytechnic Institute and State University, Blacksburg, VA, August, 1987 - May 1988

Coordinated special programs for African American faculty, students and alumni. Planned and administered academic support programs for middle and high school students.

Advising, Teaching, and Counseling

Instructor, Virginia Polytechnic Institute and State University, Blacksburg, VA, June 1990 to Present.

Taught study skills course for African American students in summer bridge program, and for the general student population in the fall semester.

Academic Advisor, General Arts and Sciences Advising Center, Virginia Polytechnic Institute and State University, Blacksburg, VA, August 1988 - May 1989.

Provided academic and personal advisement for approximately 500 undergraduate students.

Counselor, Youth Work Experience Program, Virginia State University, Petersburg, VA, 1976 - 1982.

Coordinated job training program for approximately 200 high school students, college students, and senior citizens. Developed 20 work sites, screened applicants and monitored performance. Provided training and personal assistance to program participants.

Recruitment

Assistant Director of Admissions, Longwood College, Farmville, VA, April 1982 - August 1987.

Coordinated recruitment efforts for African American students. Efforts resulted in enrollment increases of over 100% in a five year period.

University Committees

University Retention Committee, 1990- 91

University Advising Network, 1992- present

Advisory Committee for the Center for Excellence in Undergraduate Teaching, 1994 - present

Advisory Committee for the Virginia Tech Service Learning Program, 1994 - present

Presentations

Brown vs. Board of Education Alumni Reunion, May 1994

National Association for Developmental Education, *An Analysis of a Retention Program for Freshmen and Sophomore Students*, March 1991

Virginia Student Retention Conference, *How to Successfully Recruit African American Students*, January 1984

Presentations on *Preparing For College For Minority Youths*, 1983 to present

Motivational Workshops for Minority Middle and High School Students, 1983 to present

Funded Grants And Proposals

Student Transition Program Proposal, Virginia Tech, 1991-92, 1992-93, 1993 94, 1994-95

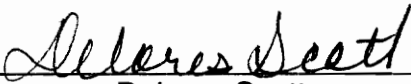
Better Information Project for Middle School Students, Virginia Tech, 1991
Graduate Program for Minority Virginians, Virginia Tech, 1991-92, 1993-95
Co-Authored Student Transition Proposal , Longwood College, 1983-86
Co-Authored Grant Proposals for Work Experience Programs for Youth and Senior Citizens, Virginia State University, 1977 - 1981

Professional Affiliations

National Association of Academic Advisors
Virginia Association of Black Faculty and Administrators

Conferences

Black Student Retention Conference - 1991
CACUBO Management Institute - Summer 1994
Conference on Racial and Ethnic Issues - 1991, 1992, 1993, 1994
National Student Retention Conference - 1993, 1994
National Association for Developmental Education -1991
National Association for Academic Advising - 1991, 1993
Virginia Association of Black Faculty and Administrators -1991, 1992, 1994



Delores Scott