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## **Social Support, Prior Interracial Experiences, and Network Orientation: Factors related to Later Adjustment Among Black Freshmen at a Predominantly White University**

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Social Support, Prior Interracial Experiences, and  
Network Orientation: Factors Related to Later Adjustment  
Among Black Freshmen at a Predominantly White University

by

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VIRGINIA CONSORTIUM FOR PROFESSIONAL PSYCHOLOGY

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## ABSTRACT

SOCIAL SUPPORT, PRIOR INTERRACIAL EXPERIENCES, AND  
NETWORK ORIENTATION: FACTORS RELATED TO LATER ADJUSTMENT  
AMONG BLACK FRESHMAN AT A PREDOMINANTLY WHITE UNIVERSITY

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Chair: Dr. Barbara Winstead, Old Dominion University

African-American students (mostly Freshmen) enrolled for the first year at a four-year university completed information about the racial composition of their high school, family income, living arrangements, and stressor prior to entering school. At two times during the first semester they completed measures of social support, network orientation and adaptation to college. Information about Grade Point Average (GPA) for the following term and attendance at the University one year later were also obtained. Racial composition of high school had some affect on social support at the university: Students from integrated and mainly Black high schools reported more social support satisfaction than students from mainly White high schools, but students from mainly Black high schools reported higher level of Mistrust of social support. Adaptation to college was not affected by racial composition of high school. Multiple regression analyses predicting adaptation to college, GPA, and attendance one year later

revealed that adaptation to college was predicted by satisfaction with social support, a less negative network orientation, and less stress prior to entering the university. GPA was predicted by less stress and living at home. Attendance at the university one year later (retention) was predicted by GPA, adaptation to college, smaller network size, higher family income, and living on campus. Sex of participants influenced only the reporting of stress; females reported more stressful experiences prior to their first semester. The implications of these results on adaptation to college, academic success, and retention of African-American university students are discussed.

### Dedication

I dedicate this dissertation to my wife Etta and my children Jeannetta, Julian and Justin. Their continued love and support made all the difference in the world. My parents have been immensely supportive. Thank God they are still around to enjoy and to benefit from this achievement.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	v
LIST OF FIGURES . . . . .	vii
Chapter	
1. INTRODUCTION . . . . .	1
SOCIAL SUPPORT. . . . .	2
SOCIAL SUPPORT AND RACE/ETHNICITY . . . . .	7
GENDER . . . . .	14
SOCIAL SUPPORT AND ADJUSTMENT TO COLLEGE . . . . .	15
SOCIAL SUPPORT UTILIZATION OR NETWORK ORIENTATION . . . . .	18
SOCIAL SUPPORT AND PERSISTENCE. . . . .	21
SUMMARY OF RESEARCH ON BLACK STUDENTS AT MAINLY WHITE COLLEGES . . . . .	28
PURPOSE OF STUDY . . . . .	33
RACE OF HIGH SCHOOL HYPOTHESIS . . . . .	35
GENDER HYPOTHESIS . . . . .	35
2. METHOD . . . . .	36
PARTICIPANTS. . . . .	36
MEASURES . . . . .	38
PROCEDURES . . . . .	44
3. RESULTS . . . . .	46
GENDER AND RACE OF HIGH SCHOOL EFFECTS. . . . .	46

RACIAL COMPOSITION OF SOCIAL SUPPORT NETWORK ON CAMPUS . . . . .	47
FRESHMEN STRESS EXPERIENCES . . . . .	49
TIME ONE CORRELATIONS BETWEEN: TOTAL ADJUSTMENT, SOCIAL SUPPORT AND NETWORK ORIENTATION . . . . .	50
TIME TWO CORRELATIONS BETWEEN: TOTAL ADJUSTMENT, SOCIAL SUPPORT AND NETWORK ORIENTATION . . . . .	51
CORRELATIONS BETWEEN TIME ONE AND TIME TWO DEPENDENT VARIABLES . . . . .	51
MULTIPLE REGRESSION RESULTS: ADAPTATION TO COLLEGE, GRADE POINT AVERAGE AND STAYING IN SCHOOL . . . . .	52
4. DISCUSSION . . . . .	54
CONCLUSIONS . . . . .	66
REFERENCES . . . . .	68
TABLES . . . . .	79
FIGURES . . . . .	93
APPENDIX A. INSTRUCTIONS TO SUBJECTS . . . . .	94
APPENDIX B. CONSENT FORM . . . . .	96
APPENDIX C. GENERAL QUESTIONNAIRE INSTRUCTIONS . . . . .	98
APPENDIX D. BACKGROUND QUESTIONNAIRE . . . . .	100
APPENDIX E. SOCIAL SUPPORT QUESTIONNAIRE. . . . .	103
APPENDIX F. NETWORK ORIENTATION SCALE . . . . .	108
APPENDIX G. NETWORK ORIENTATION SUBSCALES . . . . .	111
APPENDIX H. STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE . . . . .	114
APPENDIX I. STUDENT ADAPTATION TO COLLEGE SUBSCALES. . . . .	120
APPENDIX J. STRESS QUESTIONNAIRE . . . . .	125



APPENDIX	K.	PRIOR INTERRACIAL EXPERIENCE QUESTIONNAIRE . . . . .	127
APPENDIX	L.	STRESS QUESTIONNAIRE RESPONSES . . . . .	131
VITA		. . . . .	138

## LIST OF TABLES

## Table

1. Reliabilities: Student Adaptation to College Social Support and Network Orientation . . . . .	79
2. Mean Scores by Race of High School for Social Support and Network Orientation . . . . .	80
3. Mean Scores by Race of High School and Sex for Social Support and Network Orientation . . . . .	81
4. Time Two: Multivariate Analysis of Variance: Network Hypothesis . . . . .	82
5. Time One: Racial Composition of Social Support Network on Campus by Race of High School . . . . .	83
6. Time Two: Racial Composition of Social Support Network on Campus by Race of High School . . . . .	84
7. Time One vs. Time Two: Multivariate Analysis of Variance, Repeated Measures: Univariate Effects . . . . .	85
8. Mean Scores by Race of High School for Adjustment . . . . .	86
9. Mean Scores by Race of High School and Sex for Adjustment . . . . .	87
10. Correlations Between Adjustment, Social Support and Network Measures with Stress at Time One and Time Two . . . . .	88
11. Time One: Correlations Between Total Adjustment, Social Support and Network Measures . . . . .	89
12. Time Two: Correlation Between Total Adjustment, Social Support and Network Measures . . . . .	90
13. Correlations between Time One and Time Two Dependent Variables . . . . .	91
14. Multiple Regression Results on Adaptation to College, Grade Point Average, and Staying in School . . . . .	92

## LIST OF FIGURES

FIGURE	PAGE
1. Predictors of Adaptation to College, GPA and Persistence. . . . .	93

## Chapter 1

### Introduction

Considerable research suggests that the social environment of Black students at mainly White colleges is less than ideal. Black students report social isolation, alienation, prejudice, loneliness, financial and academic problems, and lack of social integration. These experiences contribute to a much higher attrition rate for Black than for White students (Allen, 1988, 1992; Dalton, 1991; Henderson, 1988; Jay and D'Augelli, 1991; Loo & Rolison, 1986; McCauley, 1988; Suen, 1983).

Important factors in Black student adjustment and persistence are social support from family, friends, and faculty and staff at the university. Tinto (1975, 1988) theorized that completing college is like a rite of passage. Students go through various stages of increasingly stressful and complex social interactions involving separating physically and psychologically from membership in past communities, learning the norms and patterns of behavior appropriate to integration in the new college environment and establishing membership in the social and intellectual communities of college life. Students who fail to make those connections may not become integrated into the social and academic life of school. They may feel a sense of isolation and leave.

This research focuses on social support, adaptation to

college and persistence of Black freshmen and community college transfer students at a predominantly White, urban, commuter college campus. Within-race comparisons, as compared to between race comparison, offer the possibility of examining differences in social support and adaptation among Black students. This study seeks to determine if (1) social support of Black participants is moderated by prior interracial experiences in high school, (2) whether prior inter-racial experience moderates student's beliefs about using social support on campus, and (3) whether social support, prior interracial experience and beliefs about using social support are correlated with adaptation to college and persistence.

#### Social Support

Social support has been found to exert a positive effect on health and well-being by buffering the impact of negative stressful life events (Cohen & Hoberman, 1983; Cohen & Wills, 1985). The more social support an individual receives in the form of close relationships with family members, kin, friends, acquaintances, co-workers and the larger community, the better his or her health, well-being and longevity (Cassel, 1976; Cobb, 1976, Unden, Kristina, Gomer & Elofsson, 1991).

Unfortunately, there is a lack of conceptual agreement on what social support is and how it functions to promote health or to buffer the effects of stress. Norbeck, Lindsey and Carrieri (1981) reported that "at one extreme, simple contact or presence of another during a stressful experience is

described as social support, at the other extreme elaborate formulations about social networks are suggested as essential properties" (p. 264)

Thoits (1982) discussed many of the conceptual and methodological problems related to social support definitions. These include lack of theoretically useful definitions, inadequate operational definitions of social support and failure to distinguish among dimensions of social support. For example, some researchers assess social support by its structural dimensions such as size, density, and number of family members (Cassel, 1976; Stokes, 1984). Other researchers have focused on the support system's function (Cohen & McKay, 1984; Cutrona & Russell, 1987). Tangible assistance, cognitive guidance, self-esteem support, and emotional support are just some of the examples of a support system's functions.

There are many definitions of social support. Cobb (1976) defined social support as the subject's belief that he or she (1) is cared for and loved; (2) is esteemed and valued, and (3) belongs to a network of communication and mutual obligation. Kaplan (1977) defined social support as the degree to which an individual's need for affection, approval, belonging and security are met by significant others. House (1981) defined social support as an interpersonal transaction involving one or more of the following: (1) emotional concern (liking, love, empathy); (2) instrumental aid (goods and services); (3) information about the environment; or (4)

appraisal information relevant for self evaluation.

Lin, Dean, and Ensel (1981) suggest that social support is accessible to an individual through social ties to other individuals, groups, and the larger community and identified through the resources available to the individual in a crisis.

Vaux (1988) provided an example of social support as a multi-dimensional concept. He defined social support as having at least three different components: resources, behaviors and subjective appraisals. Support resources were defined as relationships and involvements that were potential sources of supportive behaviors and of feelings that one was supported. Supportive behaviors involve specific acts such as listening, comforting, loaning money, making suggestions and helping with chores. Subjective appraisals of support involve the individual's perception of the amount and quality of support either within specific interactions or within certain relationships.

Sarason, Levine, Basham, and Sarason (1983) defined social support as having two basic elements: (1) the number of available others to whom one can turn in times of need and; (2) the degree of satisfaction with the available support. Perceived social support refers to a person's internal cognitive representation of social support. Support availability refers to the perception that support would be available if a person wanted to use it, and support satisfaction refers to the satisfaction with perceived

available social support.

Although the mechanisms of social support have been postulated to involve many variables, there are at least two general interpretations of how social support operates (Griffith, 1985). Social support can be viewed as a buffer for persons who experience high stress or it could be viewed as making a direct contribution to one's positive mental well-being, regardless of the number of stressors that an individual experiences.

Social support research first began to appear in epidemiological research (House, Landis & Umberson, 1988). Age adjusted mortality rates from all causes consistently showed mortality rates to be higher among unmarried men than among married men. Further, unmarried men were found to have higher tuberculosis rates, accidents, and psychiatric disorders such as schizophrenia. Cassel (1976) and Cobb (1976) emphasized the role of social relationships in moderating potentially deleterious health effects of psychosocial stress or other health hazards.

House et al. (1988) reviewed several longitudinal studies that established strong empirical evidence for a causal impact of social relationships on health. For example, Berkman and Syme (1979) initiated a longitudinal study of 4775 adults between the ages of 30 and 69 who lived in Alameda County, California. They developed a social network index that assessed the presence and extent of four types of social ties



(marriage, contacts with extended family friends, church membership, and other formal and informal group affiliations). Berkman and Syme (1979) found that each type of social relationship predicted mortality through the succeeding nine years. People low on the index were twice as likely to die as people high on the index. House (1981) replicated Berkman and Syme's 1979 study using a 10 year follow-up period and found similar results. Schonenbach (1986) studying 2059 adults in Evans County, Georgia, also found that a social network predicted mortality in an 11 to 13 year follow-up.

House et al. (1988) concluded that these longitudinal studies show a pattern of association between social integration (e.g., the number and frequency of social relationships and contacts) and mortality. People with adequate levels of social support seemed to live longer.

The buffering hypothesis views social support as assisting people confronted with stressful situations by protecting them from the effects of the stressful situation (Cutrona, 1986). Cohen and Wills (1985) present a model to explain how the buffering hypothesis works. According to this model, social support may prevent the individual from perceiving an event as stressful or may help reduce feelings of stress after a disturbing event occurs. Cohen and Wills write:

The perception that others can and will provide necessary resources may redefine the potential harm posed by a

situation and/or bolster one's perceived ability to cope with important demands, and hence prevent a particular situation from being appraised as highly stressful.

Support may alleviate the impact of stress appraisal by providing a solution to the problem, by reducing the perceived importance of the problem, by tranquillizing the neuroendocrine system so that people are less reactive to perceived stress, or by facilitating healthful behaviors. (p. 312)

According to Thoits (1982, 1986), individuals with a strong social support system should be better able to cope with major life changes. Those with little or no social support may be vulnerable to life changes, particularly undesirable ones. The combination of low support and one or more stressful life events significantly increases symptoms of physical or psychological distress. In this view, social support interacts significantly with life events to reduce the negative impact upon physical or psychological well-being. The detrimental impact of a stressful situation may be mediated by the appraisal and meaning of the stressor, by the effectiveness of coping efforts made, or by the availability and usefulness of social supports (Myers, Bastient & Miles, 1992).

#### Social Support and Race/Ethnicity

Dunkel-Schetter, Folkman, and Lazarus (1987) also maintain that the characteristics of the recipients and providers of social support, and the characteristics of the

environment, can influence the perception of social support and its potential buffering effect. There is evidence that suggests that social supports vary according to one's ethnic/racial background and gender.

In the black community many of the functions of primary social groups are carried out in a social network that extends across a wide range of kinship relationships that are not recognized in the White community (Brown & Gary, 1987; Dressler, 1985; Dressler, 1991; Dressler, Santos & Viteri, 1986). According to Wilson (1986), the extended family is a major source of social support for Black Americans.

Vaux (1985b) reviewed literature which showed that African Americans and Hispanics attributed significantly more importance to family relationships than did Whites. African Americans attributed significantly more importance to family social relationships than did Whites or Hispanics. The ethnic groups did not differ on satisfaction with family or other social relationships.

Griffith (1985) reviewed one study, Rhoads and Raymond, 1980, and found that Blacks and Mexican Americans, more so than Whites, place importance on family in sharing experiences, and in giving and receiving help. In another study (Mindel, 1980) Mexican Americans, and to a lesser extent Blacks, had more households of kin in the community, and more contact with nuclear family members than whites. Griffith (1985) looked at social support providers among Blacks,

Whites, Asians and Hispanics in three cities in California. No significant racial or gender differences were found for network size, dependence on family members for social support or psychological distress symptoms. He found, however, that two thirds of support providers were friends of the same sex and same racial/ethnic background as the respondent. This was followed by social support from the immediate family.

Stewart and Vaux (1986) found that Black college students reported greater average closeness to network members, yet labeled fewer of them friends than did White students. They reported more support from family than from friends. These students were able to develop and maintain ethnically congruous support systems on campus that were equivalent to those of White students. Black students' interaction with other Blacks on campus, however, has been found not to correlate significantly with alienation from campus (Steward, Jackson & Jackson, 1990). The Black student may feel alienated from the larger campus community but feel well integrated into his or her own ethnic subculture (Loo & Rolison, 1986).

#### Racial Composition of Environment and Adjustment

The majority of Blacks with baccalaureate degrees received them from mainly Black colleges before the Brown vs. Board of Education decision in 1954. During the 1960's civil rights movement, Black student enrollment in mainly White colleges drastically increased as a response to civil rights legislation. Currently, three-fourths of all Black college

students attend mainly White institutions. It is estimated that 60% of baccalaureate degrees awarded to Black students during 1988 were granted by mainly White schools (Allen, 1992).

Allen (1992) compared the experiences of Black students at White colleges with the experiences of Black students at mainly Black colleges. In the mainly Black college environment, an important ingredient for success included networks of friends, many social outlets and supportive relationships. He found that Black students on mainly Black colleges emphasized feelings of engagement, connection acceptance, support and encouragement. At mainly White colleges, however, Black students emphasized feelings of alienation, sensed hostility, racial discrimination, and lack of integration.

Davis (1991) looked at social support networks and academic success among African-American students attending mainly White colleges and African-American students attending mainly Black colleges. Davis hypothesized that student participation would increase the availability of social support and that positive relations with others on campus would serve to bolster or maintain Black student self-esteem. These would be related to higher GPA and "never seriously considering dropping out." Results indicated that, regardless of school, participation in clubs and organizations was the strongest predictor for Black students feeling a part of the

university and not thinking seriously about dropping out. There were no significant differences between the two groups in earned GPA. Data did suggest, however, that students on mainly African-American campuses participated more and felt more a part of the campus life than did African-American students on mainly White campuses.

#### Race of High School Effects

According to Dalton (1991) college may be the first time Black students will have lived or learned in an integrated environment. Many arrive with set experiences that lead to mistrust about Whites. One of the challenges these students face is learning to trust white peers, faculty and staff. Kraft (1991) found that prior interracial experience with White students in high school gave Black students on mainly White colleges an advantage in terms of its buffering effect such that these students developed "thick skins" when dealing with other White students. Black students who had attended mainly white high schools also reported that their experience with white students in high school had been friendlier than what they experienced at the mainly white university. Those Black students who had no prior interracial experience were often disappointed or puzzled when dealing with White students. Kraft found that Black students developed a supportive community among themselves and were immediately brought into this community when they arrived on campus. This, however, created some problems between Black students who

sought to isolate themselves from White students and those students who sought friendships with White students. Black students who sought friendships with White students were frowned upon and were not supported.

Graham, Wapner and Baker (1985) investigated the relationship between prior interracial experiences and Black student adjustment to two mainly White colleges. Results indicated significant differences in social adjustment among students who had varying ethnic compositions of high school friends. Students who had mainly Black friends in high school, as compared to those who had Black and White friends, had the lowest social adjustment scores during the first testing. However, they showed a significant improvement by the time of the third testing, such that their adjustment was then at the same level as the students who had both Black and White friends but not as high as those who had mainly White friends. No gender differences were reported. Attrition patterns revealed that 83% of the students who had attended mainly Black high schools had discontinued enrollment by the beginning of the junior year, as compared with 27% from integrated schools and 43% from mainly White schools.

Adan and Felner (1995) replicated and expanded upon Graham, et al's study. They examined the relationship among personal and family background characteristics and adjustment among students from mainly White, integrated and mainly Black high schools following their transition to either a mainly

White or mainly Black college environment. They were particularly interested in how prior interracial experiences related to adaptive outcomes. Adan and Felner found that Black students attending a mainly Black college and White students attending the mainly White college tended to have the better adjustment outcomes than Black students attending the mainly White college. Students from the mainly Black college reported significantly better social and academic adjustment than Black and White students at the mainly White college whereas Black students attending the mainly White college reported significantly less social adjustment.

Adan and Felner (1995) found that prior interracial experiences affected the adjustment of Black students in the two college settings. Greater interracial experience was associated with the most favorable outcomes for Black students at the mainly White college and the least favorable outcome for students at the mainly Black school on measures of adaption to college, depression, self-concept and anxiety. Moreover, Black students at the mainly White college who had the most experience with interracial friends in high school reported the highest levels of adjustment. Black students at the mainly Black college who reported the fewest number of interracial friends in high school reported the highest levels of adjustment. The authors found no consistent pattern of association between family socioeconomic factors, prior interracial experience and adjustment. Adan and Felner (1995)



argue that the "goodness of fit" between students' prior interracial and social experiences and those they confront in the new setting is critical in determining how well they adapt to their new environment.

### Gender

Research indicates that women have larger networks of friends, have more intimate and confiding relationship, have more frequent contacts, and receive more support from multiple sources (Vaux, 1985b). Women engage in more self-disclosure, are the recipients of self-disclosers, and express more and receive more emotional support than men (Blier, Blier-Wilson, 1989; Snell, Miller, Belk, Garcia-Falkoni, & Hernandez-Sanchez, 1989). Also women have been found to affiliate more than men when undergoing a stressful situation (Schmidt, Conn, Greene, & Mesirow, 1982).

Hirsh (1979) found that female college students spent more time interacting with others in their social networks and more time sharing feelings and personal concerns than did males during an exam period. Burda, Vaux, and Schill (1984) looking at gender differences in social support resources, found that females have larger social networks and perceived themselves as receiving more emotional support than males.

Wohlgemuth and Betz (1991) looked at gender as a moderator of stress and social support for college students. She compared college men and college women on various measures and found that women reported significantly more negative

stressful events in their lives and more physical symptomatology. Women reported more socially supportive behaviors on their behalf and received more social support from their friends than did the men in her study. Women also reported significantly larger social support networks. No gender differs were found for satisfaction with social support from family.

#### Social Support and Adjustment to College

According to Flemming (cited in Davis, 1991) a supportive college community offers students opportunities for a variety of friendships to prevent vulnerability to stress, and to offer opportunities for participation. Social participation, both in organizations and in one's general social network, may provide opportunities to accumulate support resources and buffer stress. The absence of social support may add to feelings of loneliness and alienation.

Jay and D'Augelli (1991) compared Black and White freshmen at a predominantly White, rural university on social support and adjustment measures. Results indicated that Black students perceived significantly less available social support than White students, with White students reporting more support. However, this finding was strongly affected by family income level. White students were more than twice as likely to report a family income of \$30,000 or more compared to Black students. When family income was statistically controlled, no racial differences were found on measures of adequacy of

social support, network size, and average frequency of interaction with network members. The authors suggest that difference related to family income may reflect differences in background, interests, attitudes and values or simply differential economic support from families. Women, however, reported more available support than men but did not differ with men in perceived adequacy of social support. No gender differences in adjustment were found. There were no significant differences between Black and White students on adjustment measures of psychological well being (e.g., energy level, satisfaction, mood, anxiety, and control) or physical well-being (e.g., health worry).

Maton and Weisman (1989) looked at how life stress and social support interacted with race to predict adjustment and other variables among college students in a mainly White college environment. High life stress was significantly related to poorer adjustment and higher social support was significantly related to better adjustment. Blacks with high social support reported much higher levels of adjustment than Blacks with low social support. Black students with low levels of social support from friends during the first semester of college were especially likely to report low levels of college adjustment. A significant race by social support interaction revealed that Black students low on social support reported a much higher level of depression than Blacks with high social support. The difference in adjustment between high support and

low support Whites was much smaller. This suggested a special importance of friendship support for Black students.

Maton and Weisman (1989) also found that females were significantly more depressed than males. Black females high on precollege vocational identity reported lower levels of depression than black females low on precollege vocational identity. Black Females reporting high pre-college stress achieved lower GPA's than black females reporting low pre-college stress.

D'Augelli and Hershberger (1993) looked at social networks, among Black and White undergraduates on a predominantly White rural campus. Modest differences were reported in terms of family support for being at the university. Black students perceived their mothers to be more supportive than White students perceived their mothers, but no difference existed in perceived fathers' support or perceived support from other family members. Black students' social network had significantly fewer people who were college or university graduates. They knew significantly fewer people on campus when they arrived. Black and White students did not differ in their involvement in campus organizations, nor in their participation in campus groups. However, their social networks on campus were significantly different. Black students more often shared housing with other Black students.

Stewart and Vaux (1986) looked at social support resources, behaviors and perceptions among Black and White

students from a large mainly White University. Results indicated no significant differences between Black and White students regarding social support network size, or network characteristics. Black students, however, reported significantly more advice or guidance from family members than did White students. Black female respondents reported significantly more social support from family than did White women, while Black male respondents reported greater average closeness to members in their network than did White male respondents.

Jung and Khalsa (1989) examined the relationship between daily hassles, stress, social support, coping strategies and depression among Black and White students. Black students reported significantly greater severity and higher frequency of hassles than White students. White students, however, perceived more support from friends. Black students perceived more support from family than from friends. Perceived support from friends was significantly correlated with lower depression among White students while perceived support from family was significantly correlated with lower depression among Black students. There were no significant gender differences.

#### Social Support Utilization or Network Orientation

Because of a history of racial discrimination in this country, and stress associated with minority status (Mortisugu & Sue, 1983) some Blacks have adopted a general attitude of

mistrust toward Whites which has variously been labeled cultural mistrust, healthy cultural paranoia, paranoia and racism reaction (Thompson, Neville, Weathers, Poston & Atkinson, 1990). Perhaps because of a general lack of trust in the system and racial discrimination, Black families developed extensive mutual support services that provided material aid, advice and counseling, and emotional assistance to family members in response to socioeconomic conditions of poverty and unemployment (Taylor, 1986; Wilson, 1986).

Social support resources are perhaps useless, if the person is reluctant to utilize them. According to Wallace and Vaux (1993), Tolsdorf was one of the first to address individual differences in using social support. Tolsdorf (1976) compared the social networks, social support and coping of normal and schizophrenic males. He defined network orientation as a set of beliefs, attitudes and expectations about the potential usefulness of social networks in providing help with life problems.

Tolsdorf found that most schizophrenic patients demonstrated a negative network orientation. Their reluctance to utilize social support included beliefs that the network did not have expertise to help; that the network would give pity; that network support would hurt their pride; and that it was too embarrassing to admit problems. In the nonpsychiatric group, participants sought out help when needed and they divulged enough about themselves to allow others to help them.

In another study of multiproblem families, Tolsdorf (cited in Vaux, Budda & Stewart, 1986) found that all of the males and half of the females in the small sample of multiproblem families exhibited a negative network orientation.

Vaux, Budda and Stewart (1986) extended Tolsdorf's formulation of network orientation. They theorized that a negative network orientation could develop from experiences with social support networks that are overloaded (e.g., the members do not have the resources to help), ineffective, and/or punishing. A negative orientation may reflect an assessment of one's current network or could result from previous experiences. Finally, a negative network orientation could be associated with personal characteristics such as low trust, independence, low social ability and an unwillingness to disclose one's problems to others.

Vaux, Budda and Stewart (1986) looked at network orientation among a group of Black students in a mainly White college. Black students who were reluctant to use social support reported less guidance/advice and tangible assistance from friends, and less tangible assistance from family. A negative orientation was consistently associated with less perceived support from family and friends. No gender differences were reported. In another study on the relationship between network orientation and adult attachment styles Wallace and Vaux (1993) found adults with secure attachment styles less negatively oriented toward their

support networks. Males were also significantly more negatively oriented than females. The authors did not report their findings by race of participants.

#### Social Support and Persistence

The first semester of college is a major life transition for adolescents, involving a diverse set of social, psychological, academic, and financial challenges and stresses (Baker, McNeil, & Siryk, 1985). Freshmen experience many adjustment problems including feelings of worthlessness, inability to concentrate, depression and suicidal thoughts and lower self esteem (Marron & Kayson, 1984; Pascarella & Terenzini (1980). Students with inadequate family support may also experience depression and this may result in diminished class attendance and drop out (Jay & D'Augelli, 1991). Studies also reveal that the most serious problems of college persistence or dropout behavior occur during the first year of enrollment continuing into the second year (Carroll, 1988).

The enrollment and retention rate of Blacks in college as documented by Kobrak (1992) revealed that the number of bachelor's degrees awarded to Black students dropped by 12% after 1978. Many mainly White universities raised their academic standards during the 1980's thereby excluding some Black students disadvantaged by prior schooling. The percentage of Black high school graduates enrolled in universities declined by 44% in 1985. Yeakey and Bennett (1990) found that from 1980 to 1984 the number of African-



American men enrolled in college dropped by 25,300 to 368,089. Over the same period, the number of African-American women in college dropped by 9,761 to 529,096. Meanwhile fewer and fewer African-American men who do enter college leave without a bachelor degree. Degree attainment by African American men dropped by 10.2% between 1976 and 1984 and a 2.9% drop in degree attainment was found for African American women during the same period.

Black student drop out has been attributed to unsuccessful academic performance, and variables reflecting factors other than aptitude and achievement such as inadequate faculty or peer interaction, few Black role models among faculty and staff, financial difficulties, racism and discrimination and entrance into the job market or the military (Galicki & McEwen, 1989).

Hershberger and D'Augelli (1992) explored the relative usefulness of academic and social support variables in understanding Black undergraduate students' completion of a bachelor of arts degree at a large predominantly White university. This study followed freshmen for several years to determine which students completed their degrees. High school academic performance, college academic performance and social support in college were placed in a path model to understand how these variables were related to graduation from college.

Results indicated that Black students experienced less social support and well being than White students but these

measures did not relate to graduation. Social support during the freshmen year was not a powerful predictor of Black students' academic success. However, first year college GPA and precollege academic performance predicted graduation. Students who came to school with low precollege academic scores and who had earned a low GPA were less likely to graduate from the university.

Kraft (1991) investigated factors related to Black students being successful (e.g. graduating from college) at a mainly White college. Ninety-two percent of the women in the sample and 59% of the men reported that social support from faculty, students or family was important for their academic success. Sixty-one percent of the females and 27% of the males reported that faculty support was particularly important to their academic success. More males than females also reported that ability, ambition and effort were important factors in academic success. Students reported that social support was particularly important when it came to difficult school work, and in terms of accessibility of other students or groups to study with and the emotional encouragement that was provided (e.g. having someone who cared, having someone willing to help, even if the need was not immediate). Students mentioned that their parents sharing of their own personal experiences in college, as well as parents' encouragement, contributed to their decision to remain in school.

Levin and Levin (1991) conducted an analysis of academic

retention programs for minority students. Variables that predicted college persistence included: living environment, classroom experience, academic advising, extracurricular activities, financial support and faculty involvement. In their analysis, students' positive interactions with peers, advisors and faculty increased satisfaction with the institutions and persistence.

Lewis (1987), in a telephone survey of 100 Black freshmen at a mainly White university, found that 71% of the students felt that informal contact between Black freshman and professors helped them decide to remain with the university until they graduated. Steward, Jackson and Jackson (1990), however, found the most successful Black students at a mainly White university were loners. Having a very limited social network was positively related to persistence. Participants perceived that not feeling a part of the university campus was a necessity in moving toward success. Participants shared stories about Black peers who needed "too much" interpersonally and were no longer enrolled.

Jay and D'Augelli (1991) found that, for Black students, social support was negatively correlated with GPA, with more social interaction correlated with poorer academic performance. Majors and Billson (1992) found that academic achievement was viewed as not "cool" for many Black students. Thus negative attitudes about academic achievement may go hand and hand with over involvement in the social environment at

college.

Lichtman Bass and Anger (1989) looked at the relationship between academic achievement and attrition among commuter students at a mainly White institution. In this six year longitudinal study, they found that 57% of the Blacks dropped out compared to 38% of the Whites. There were no significant sex differences in persistence or attrition for Blacks or for Whites. For each high school GPA category, e.g., a GPA below or above 3.25, Black students dropped out at a higher rate than Whites. For college GPA below 3.0 Blacks and Whites dropped out at equal rates. An interesting finding was that at GPA above 3.0 Blacks dropped out at a higher rate. Interviews with many of the dropouts (both Black and White) indicated that many took college courses elsewhere. Overall, Lichtman et al. (1989) found that ACT scores and high school GPA were better predictors for White students than for Black students. Allen (1992) also found that Black students on mainly White college campuses often maintained high academic performance levels despite expressing high levels of social alienation or disconnection.

Rice (1989) found that 50% of the Black students in a predominantly White school he was studying dropped out of school for financial and personal reasons. Many students that felt the university was too expensive. They dropped out because they either joined the military; they had personal problems; they became ill; they were looking for employment;

or they were taking a break from school. Rice (1989) found that 12% of the males and 26% of the females rated a sense of belonging, fitting in, and feeling a part of the university as "fair to poor." Of the 176 students who responded to his survey, 100 reported being in good academic standing, yet they chose not to return. Social and academic reasons were not major causes for student dropout. Only four percent of the subjects reported experiencing racism or discrimination on campus

McCauley (1988) looked at eight specific factors of Black students' persistence at a mainly White college environment. She was interested in the relationship between age, sex, high school class rank, SAT scores, family status, academic major, and out-of class activities (e.g., registration and scheduling, library and book store, and organized student activities) and persistence. Her sample included 400 randomly selected, regular-admit, middle to upper-class White students and 139 special-admit (e.g., students with at least a C-average or a lower average SAT score), low income Black students. She found that Black student attrition was significantly greater than White student attrition. However, age, SAT scores, high school class rank and sex were not found to be associated with Black students' persistence. She also found no relationship between withdrawal and persistence with any of the out-of-class activities.

Galicki and McEwen (1989) looked at the relationship of

student residence to retention of Black and White undergraduate students at a predominantly White university. Previous research indicated that living in a residence hall during the first year of college increased the probability of students' persistence and satisfaction with the college experience (Pascarella & Terenzini, 1980). Living off campus had been viewed as providing less opportunity to interact with peers, and living with parents has been found to have a negative influence on student retention (Chickering, 1974, cited in Galicki & McEwen, 1989). Galicki and McEwen (1989) found that Black freshmen who commuted to college had a lower persistence rate (50%), and Black freshmen living on campus had a higher persistence rate (61%). Females, in general, graduated at a higher rate than males.

Trippi and Baker (1989) found that as the number of Black students in a residential house increases, black freshmen women in those houses perform better academically than their male counterparts. When the roommate's family income was higher, Black women were more likely than men to persist to the second year of college. For Black men, whether their roommates were Black or White, did not predict academic performance or persistence. Roommate characteristics and the number of Blacks in a residence hall were associated with better performance and persistence for Black women.

Mallinckrodt (1988) reviewed a study that showed that African-American students who drop out had fewer

self-described "significant" relationships with faculty, students and staff on campus. Students who did not persist had fewer contacts with fellow students and fewer network members in general than did students who persisted in college. White students perceived significantly more social support (e.g., availability of helpful relationships at school) than Black students. There were no significant differences between Black and White students regarding satisfaction with close relationships, finding someone with similar interests to interact with, or perceiving people as unfriendly or distant. Encouragement from family, for Black students, was negatively correlated with persistence. Support from members on campus was important for Black student persistence. No gender differences were reported.

#### Summary of Research on Black Students at Mainly White Colleges

The research findings on Black student adjustment is complex because a multitude of factors is explored in any given study. This paper reports on three factors tied to Black students' adjustment: prior interracial experiences, social support, and network orientation.

A couple of studies pointed to the impact of prior interracial experiences in high school and Black student adjustment at mainly White colleges. Kraft (1991) found that prior interracial experience with White students in high school gave Black students "thick skins" when dealing with other White students. Graham, Baker and Wapner (1985) found

students who had mainly Black friends in high school, as compared to those who had Black and White friends, initially had the lowest social adjustment scores and later had the highest attrition rate. Adan and Felner (1995) found that Black students from mainly Black high schools who then attended a mainly Black college had significantly better adjustment than students who had attended mainly white or integrated high school. For Black students at a mainly White college, students from mainly white high schools had significantly higher levels of adjustment to college than students from mainly black high schools.

Black students at mainly Black colleges have been compared with Black students at mainly White colleges. Allen (1992) found that Black student success on the mainly black campus was related to having supportive relationships. At mainly White colleges, however, Black students emphasized feelings of alienation, sensed hostility, racial discrimination, and lack of social support. Adan and Felner (1995) found that Black students at a mainly Black College were significantly better adjusted than Black students who were attending a mainly White college.

Studies were reviewed that looked at the relationship between social support and adjustment of Black students in various college environments ranging from rural to urban college campuses, residential to commuter college campuses, and from large to small college campuses. The findings are



often complex and even contradictory.

The majority of the social support studies reviewed compared Black and white students on various social support and adjustment measures (Allen, 1992; Cauce, Felner & Primavera, 1982; D'Augelli & Hersberger, 1993, Hersberger & D'Augelli, 1992; Jay & D'Augelli, 1991; Jung & Khalsa, 1989; Mallinckrodt, 1988; Maton & Weisman, 1989; Stewart & Vaux, 1986). Researchers found that Black and White students are both different and similar in a number of ways. Black students, when compared to White students, have significantly fewer college graduates in their social network. They know significantly fewer people on campus when they arrive. They share housing, more often, with other Black students (D'Augelli & Hersberger, 1993). Black students report needing more contact with faculty and needing more social and cultural activities specific to minority interests (Lewis, 1987).

Black students also perceive more social support from family than do White students (Cauce, Felner & Primavera, 1982; D'Augelli & Hersberger, 1993; Mallinckrodt, 1988; Stewart & Vaux, 1986). Black freshmen from low income families perceived significantly less available social support than White freshmen from higher income families (Jay and D'Augelli, 1991). Perceived support from friends was significantly correlated with lower depression among White students while perceived support from family was significantly correlated with lower depression among Black students (Jung & Khalsa,

1989). Black students reported significantly more support from their mothers than White students, but no difference existed in fathers' support or other family members' support (D'Augelli & Hersberger, 1993).

Black students participate in extracurricular activities and join campus groups at the same rate as do White students (Davis, 1991). Their social networks are similar in size. Both groups report having same-race social support networks and both groups report satisfaction with their social support networks (Griffith, 1985; Jay & D'Augelli, 1991; Stewart & Vaux, 1986; D'Augelli & Hersberger, 1993). Black students with high social support from friends report better adjustment than Black students with low social support from friends (Maton and Weisman, 1989). Black students who were reluctant to use social support report less guidance, advice and tangible assistance from friends, and less tangible assistance from family (Vaux, Budda & Stewart, 1986).

In general, research has found that women in college compared to men in college report significantly more negative stressful events in their lives and more physical symptomatology. Also women have been found to affiliate more than men when undergoing a stressful situation (Schmidt, Conn, Greene, & Mesirow, 1982). Women report receiving more social support from their friends than men. Women also report significantly larger social support networks, have more intimate and confiding relationship, and have more frequent

contacts with support persons (Burda, Vaux, & Schill, 1984; Hirsh, 1979; Vaux, 1985b). One study found that Black female respondents report significantly more social support from family than White women, while Black males reported greater average closeness to members in their network than did White male respondents (Stewart & Vaux, 1986).

Black students drop out for a number of reasons. The social support research has often been contradictory and contrary to expectations. Lichtman, Bass and Anger (1989) found no significant sex differences in persistence or attrition for Blacks or for Whites. Galicki and McEwen (1989) found that females in their study graduated at a higher rate than males. Social support (e.g., perceived social support from family and friends) has not been strongly correlated with Black students' academic success during the freshmen year and not a powerful variable in predicting graduation four years later. In another study, social support was correlated with GPA, but its effects were opposite expectation with more social support correlated with poorer academic performance (Jay & D'Augelli, 1991).

Social support size has been found to have a positive and negative effect upon Black students' persistence. Mallinckrodt (1988) found that students with inadequate levels of social support did not persist. Some Black students believe that not feeling a part of the university campus was a necessity for graduating (Steward, Jackson & Jackson, 1990). In another

study, Black freshmen who commuted to college had the lowest persistence rate and Black freshmen living on campus had the highest persistence rate (Galicki & McEwen, 1989). Another study found students who were more socially integrated on campus (e.g., students living on campus as opposed to those living off campus) were more likely to persist than commuters. Parent support among Black student and living at home has also had equally positive and negative impact on persistence.

Informal contact between Black freshman and professors has been found to influence black students' decision to remain in school until they graduate (Lewis, 1987). Participation in clubs and organizations was the strongest predictor for black students feeling a part of the university and not thinking seriously about dropping out (Davis, 1991).

#### Purpose of Study

As this research review indicates, there are many conflicting results in the research on Black students at mainly White colleges. This study addresses some of those issues by conducting a longitudinal study that analyzes changes in student adjustment and social support. We assess adjustment, social support and network orientation over two time periods. Data collected at the beginning of the semester will be compared to data collected near the end of the first semester. This study also looks at race of high school and gender differences and has focused solely on Black students whereas other studies have not. Though this study was

specially set up to investigate racial background differences in adjustment and social support, we were also able to obtain GPA one semester later and enrollment one year later. Background and adjustment variables were used to predict adaptation to college, GPA, and staying in school.

## Hypotheses

### Race of High School

Hypothesis 1: Participants from mainly Black high schools will have a smaller social support network and be less satisfied with social support than participants from integrated or mainly White high schools.

Hypothesis 2: Participants from mainly Black high schools will have a more negative network orientation, at Time One than at Time Two.

Hypothesis 3: Participants from mainly Black high schools will be less well adapted to college than participants from integrated or mainly White high schools.

### Gender

Hypothesis 1: Women will have a larger social support network than men.

Hypothesis 2: Women will be more satisfied with social support than men.

Hypothesis 3: Women will have a more positive network orientation than men.

Hypothesis 4: Women will have better adjustment to college than men.

## Chapter 2

### Method

#### Participants

The study was conducted at Old Dominion University, a mainly white, urban, commuter college located in the South. Participants were Black freshmen and Black community college transfer students who were at the university for the first time. The majority of students, 85%, were freshmen, 8% were community college transfer students, and 7% did not fill out this information on their questionnaire. A total of 74 students (18 males and 56 females) participated at Time One. At Time Two, a total of 60 students (11 males and 49 females) participated. The majority of participants, 83%, were between 19 to 25 years of age.

Participants enrolled in introductory psychology classes, and who participated in both the Time One and Time Two testing, received two research credits for their participation. The Committee for the Protection of Human Subjects reviewed and approved the project.

Of the participants who filled out the Background Questionnaire, 90% were African American and 10% were African, West Indian or of Mixed racial background.

Students were also asked to report on the racial composition of their high school. The categories mainly White, integrated and mainly Black high schools were defined as

follows: Students who reported that the Black student population in their high school was less than 40% Black were categorized as attending mainly white high schools; students who reported that the Black student population in their high school was between 40% and 60% were categorized as attending integrated schools; and students who reported that the Black student population in their high school was over 60% were categorized as attending mainly Black high schools.

Participants came from diverse high school: 40% came from mainly White high schools; 30% came from integrated high schools; 30% came from mainly Black high school.

Parent income was as follows: 25% reported parent income at \$15,000, or below; 40% reported parent income between \$15,000 and \$40,000; and 35% reported parent income as \$40,000 and above.

Father's educational background was as follows: 16% did not graduate from high school; 33% completed high school; 27% attended college; 12% completed college; 6% completed graduate school; and 6% did not report father's educational background. Mother's educational background was as follows: 8% did not graduate from high school; 26% completed high school; 40% attended some college; 17% completed college; 6% completed graduate school; 3% did not report mother's educational background.

Participants living arrangements were as follows: 60% lived on campus; 18% lived off campus, but not with their



parents; 22% lived with their parents.

### Measures

The Personal Background Questionnaire obtained information about student's ethnic identity, parent income, and parents' education.

The Stress Questionnaire is a one-item, open-ended questionnaire designed to have participants describe any recent stressful experience, problem, circumstance or situation that occurred prior to their enrolling at the university. Participants were asked to report whether their experience negatively affected their ability to do their best at school. They were asked to rate their experience, on a 4-point scale, ranging from Not Stressful at All (0) to Very Stressful (3).

The Social Support Questionnaire (SSQ) developed by (Sarason, Sarason, Shearin, & Pierce 1987) was used to measure student's social support. This form was created to meet the need for a short, fast diagnostic tool. The instrument was derived by analyzing the data from three administrations of the regular SSQ form and selecting six items that were strongly related to total SSQ scores. The short form has been shown to be strongly related to psychological symptomatology.

The SSQ requires participants to list the number of people to whom they can turn and on whom they can rely in given sets of circumstances. Satisfaction with social support is assessed with the respondent indicating his or her degree

of satisfaction with each social support item (e.g., someone to count on when you really need to talk). Ratings are provided on a six-point scale, ranging from Very Satisfied (6) to Very Dissatisfied (1).

Social support number (NUM) was calculated by summing the number of support persons listed in each question and then taking the mean number of support persons, as representative of the average number of support persons available. Social support satisfaction (SAT) for each participant was calculated by taking the sum of all satisfaction ratings and calculating a mean satisfaction rating score as representative of each participant's satisfaction with social support. Social support number and social support satisfaction were calculated for each participant at Time One and at Time Two. Each participant obtained four scores: Social Support Number at Time One (NUM1); Social Support Satisfaction at Time One (SAT1); Social Support Number at Time Two (NUM2); and Social Support Satisfaction at Time Two (SAT2).

The six-item SSQ questionnaire was modified so that students could report on social support at school rather than social support in other environments. Two additional items were added to the measure. One question asked participants to report the number of people with whom they studied. The other question asked participants to report the number of people who encouraged them to stay in school. For each item, participants were asked to rate their satisfaction with social support. The

Social Support Questionnaire yielded adequate internal consistency. Standardized alphas ranged between .88 to .93 (see Table 1, p. 79) .

The Network Orientation Scale (NOS), (Vaux, 1985a; Vaux, 1986; Vaux, Burda, & Stewart, 1986; Vaux 1988) was used to measure student's disinclination to use support in time of need. The 20-item questionnaire is negatively correlated with network variables such as size, support received (e.g., emotional guidance, financial assistance) as well as perceived social support from family and friends. Examples of some questions are: "People should keep their problems to themselves," and "You can never trust people to keep a secret."

Vaux et al. (1986) found good internal consistency (mean alpha = .74, range = .60 to .88 in five samples) and good stability ( $r = .85$  and  $.87$ ) over 2-week and 3-week intervals in two samples). Stability over four weeks was also good ( $r = .77$ ) .

Vaux et al. (1986) found three factors: Advisability/Independence, History and Mistrust. Although the NOS has been shown to load on three factors, analyses in the present study indicated that two subscales, Advisability/Independence and History were highly correlated. Mistrust, however, was mildly correlated with a combination of these scales, renamed

Negative Network Orientation Scale. The Negative Network Orientation scale contained items that reflect a general view that a person should not utilize social support, whereas the Mistrust scale more closely assessed feelings of mistrust in using social support. These two subscales were utilized to test the network hypothesis in subsequent multivariate analyses.

Items on the original measure were responded to on a 4-point agree-disagree format. This format was modified so that participants could respond in a similar manner, but with a 7-point scale ranging from Strongly Disagree (1) to Strongly Agree (7). The Network Orientation Scales yielded adequate internal consistency. Standardized alphas for the Mistrust and Negative Network Subscales ranged between .88 to .99 (see Table 1, p. 79).

The Student Adaptation to College Questionnaire (Baker & Siryk, 1984, 1986) is a self-rating Likert-type instrument developed to measure adjustment to college. It has 67 items including various aspects of adjustment to college. Students mark how well they are dealing with the aspect in question on a nine-point scale ranging from Applies Very Close to Me (1) to Doesn't Apply to Me at All (9).

The Academic Adjustment Subscale contains 24 items referring to various facets of the educational demands at college (e.g., "Recently I have had trouble concentrating when I try to study.").

The Social Adjustment Subscale contains 20 items related to various facets of the interpersonal and social demands inherent in the college experience (e.g., "I am meeting as many and making as many friends as I would like at college.").

The Personal/Emotional Adjustment Subscale contains 15 items aimed at determining how the student is feeling both psychologically and physically, that is, whether he or she is experiencing general psychological distress and its somatic accompaniments (e.g., "I have been feeling tense and nervous lately.") .

The Attachment Subscale consists of 15 items concerning how the student feels about being in college and at the college of attendance in particular, (e.g., "I expect to stay at . . . for a bachelor's degree.") .

The Total Adjustment Scale consists of all 67 items. It yields a full scale score that reflects overall adjustment to college. Higher scores are correlated with better adjustment. Coefficient alpha for three samples from two colleges were .84 to .88 for the academic adjustment scale; .90 and .91 for the social adjustment scale; .81 and .85 for the personal emotional scale; .90 and .91 for the attachment subscale; and .93 and .95 for the full scale.

Correlations among the subscales range from .36 to .87; the higher values occur in the comparison of the social adjustment and the attachment subscales, because they share several items. The range of correlations among the three

subscales that do not share items is .36 to .64 .

Measures from the questionnaire have been found to correlate significantly with various external validity criteria appropriate to the subscales, including attrition, grade point average, selection for Phi Beta Kappa, selection and performance as dormitory assistant, and appeals for service from a campus psychological services center (Baker & Siryk, 1980, 1983). The scale was successful in predicting differences among Black students in their adjustment as a function of differences in prior interracial experiences (Graham, Wapner, & Baker, 1984) and as a diagnostic tool for students experiencing adjustment problems to college (Baker & Siryk, 1986).

In this study the Total Adjustment Scale, and the Social, Academic, Personal-Emotional and Attachment subscales yielded adequate internal consistency. Standardized alphas ranged between .81 to .97 (see Table 1, p. 79).

The Interracial Experience Questionnaire was a 16-item questionnaire developed by the author to obtain information about the racial composition of student's high school, information about social support networks in high school and information about the racial composition of social support networks at the college campus.

Participants' grade point average and whether they were still enrolled at the university were obtained from University Records with students' permission.

### Procedures

For the Time One testing, a list of all first-time Black students enrolled at the university was obtained from the MultiCultural Center on campus. A letter was sent with questionnaires. The letter asked Black freshmen and Black community college transfer students, who were in their first year at the university, to participate in a study on "College Life and Social Experiences."

Over 600 questionnaires were mailed to participants' homes or campuses addresses in the first week of October 1994. Sign-up sheets were posted in the Life Sciences Building on campus. Participants were also recruited from the MultiCultural Center on campus. The Time One measures consisted of the following: the Social Support Questionnaire (Sarason, Sarason, Sherin, & Pierce, 1987), Network Orientation Scale (Vaux, Burda, & Stewart, 1986), Student Adaptation to College Questionnaire (Baker & Siryk, 1984, 1985), the Prior Interracial Experiences Questionnaire, and Background Questionnaire created by the author for this study. A Scantron sheet was included in the packet for recording responses to the questionnaires.

Students who participated in the Time One testing were mailed the Student Adaptation to College Questionnaire, the Social Support Questionnaire and Network Orientation Scale at the end of the second week in November (Time Two). Students gave permission to obtain grade point average and enrollment

status from the university.

All consent forms, which had identifying information, were removed from the questionnaires and filed to ensure confidentiality. Participant Scantron sheets were taken to the computer center for data processing.



## Chapter 3

### Results

#### Gender and Race of High School Effects

To test the effects of race of high school and gender on adjustment, social support, and network orientation, a series of 3 x 2 (Type of High School x Gender) Multivariate Analysis of Covariance (MANCOVA) were calculated for Time One data and Time Two data separately. A repeated measures MANCOVA was calculated to analyze effects of Time. Parent's income was used as a covariate to minimize group differences due to parent income.

Hypothesis 1: Participants from mainly Black high schools will have a smaller social support network and be less satisfied with social support than participants from Integrated or mainly White high schools.

The social support and network variables at Time 1 (SAT1, NUM1, MISTRUST, NEG1) and the social support and network variables at Time 2 (SAT2, NUM2, MISTRUST2, NEG2) were included in separate 3 x 2 MANCOVAS.

There were no gender effects. Multivariate tests for Race of High School were also not significant (see Tables 2-3, p. 79-80).

Univariate analyses, however, revealed a significant effect for race of high school on satisfaction with social support,  $F(2, 41) = 3.46$ ,  $p < .05$ , at Time Two. Newman-Keuls post hoc tests revealed that students from integrated ( $M =$

6.09) and mainly Black high schools ( $\bar{M} = 5.64$ ) were significantly more satisfied with social support than students from mainly White high schools ( $\bar{M} = 4.75$ ).

Univariate analysis at Time Two also revealed a trend for an effect for race of high school on Mistrust,  $F(2, 41) = 2.46$ ,  $p < .10$ . Newman-Keuls post hoc tests revealed that participants from mainly Black high schools ( $\bar{M} = 4.86$ ) reported significantly more mistrust than students from integrated high school ( $\bar{M} = 3.87$ ) and mainly White high schools ( $\bar{M} = 4.41$ ) (see Table 4, p. 82).

#### Racial Composition Social Support Network on Campus

Pearson Chi-Square probability analysis was also conducted to examine if race of high school influenced the racial composition of Black participants' social support networks on campus at Time One and at Time Two. Black participants were asked to report on the racial composition of their associates (e.g., people that they interact with, but do not consider to be their friends) and friends on campus. They were asked to report on the racial composition of people they studied with and people who they thought encouraged them to stay in school.

A trend for an interaction between race of high school and racial composition of associates on campus was found at Time Two,  $X^2(4, N = 50) = 8.31$ ,  $p < .10$ . For Black students from mainly White high schools, 40% reported that their associates on campus were other Black students. For students

from integrated high schools, 55% reported that their associates on campus were other Black students. For students from mainly Black high schools, 80% reported that their associates on campus were other Black students. No other significant differences were found between students from mainly Black, integrated and mainly White high schools. However, regardless of type of high school, participants' social support network (e.g., associates, friends, people they studied with, and people who encouraged them to stay in school) were mainly Black at Time One and at Time Two (see Table 5 and 6, p. 83-84).

Hypothesis 2: Participants from mainly Black high schools will have a more negative network orientation, at Time One than at Time Two

A 3 (Race of High School) x 2 (Time) repeated measures MANCOVA was performed to test for the interaction of Race of High School and Time. Gender had to be dropped from this analysis because of too few males at Time Two. The repeated measures were not significant. Univariate analysis, however, revealed a significant effect for Time on Mistrust,  $F(1, 44) = 6.60$ ,  $p < .01$ , with participants reporting significantly less Mistrust at Time Two. The means in the repeated measures analysis are different from the means in the Univariate analysis at Time Two because students who were in the Time One testing but who failed to participate at Time Two were dropped in the repeated measures analysis (see table 7, p. 85).

Univariate analysis also revealed an effect for race of high school on Mistrust,  $F(2, 43) = 3.46, p < .05$ . Newman-Keuls post hoc tests revealed that participants from integrated high schools ( $M = 4.35$ ) and mainly White high schools ( $M = 4.40$ ) reported significantly less mistrust than students from mainly Black high school ( $M = 4.96$ ).

Hypothesis 3: Participants from mainly Black high schools will be less well adjusted than participants from integrated or mainly White high schools.

First the effects of race of high school, and gender on adjustment were calculated for Time One data and Time Two data separately. The analysis revealed no significant differences for type of high school or gender on adjustment to college at Time One or at Time Two (see Tables 8 and 9, p. 86-87).

A repeated measures MANCOVA used to analyze the effects of Time on adjustment was not significant. Univariate analyses, however, revealed a significant effect for Time on Social Adjustment,  $F(1, 45) = 5.30, p < .05$ , with participants reporting significantly higher social adjustment at Time Two (see table 7, p. 85).

#### Freshmen Stress Experience

Participants were asked to describe and to rate any recent stressful experience, problem, circumstance or situation that occurred prior to their enrolling at the university. ANOVA revealed a trend for sex differences with women reporting more stressful experiences than men,  $F(1, 48) = 3.24, p < .10$ . Women were also more likely than men to

provide details about specific stressful experiences (see Appendix L) .

Pearson Product-Moment Correlation Coefficients were calculated to examine the correlations among Stress, Total Adjustment, Social Support, and Negative Network Orientation at Time One and at Time Two.

Total Adjustment at Time One was negatively correlated with Stress,  $r = -.49$ ,  $p < .001$ ; Social Support Satisfaction was negatively correlated with Stress,  $r = -.34$ ,  $p < .01$  and Negative Network Orientation was positively correlated with Stress,  $r = .29$ ,  $p < .05$ . A trend for a positive correlation was found between Mistrust and Stress,  $r = .22$ ,  $p < .10$ .

Total Adjustment at Time Two was negatively correlated with Stress,  $r = -.51$ ,  $p < .001$ . Social Support Number was negatively correlated with Stress,  $r = -.32$ ,  $p < .05$  and Negative Network Orientation was positively correlated with Stress,  $r = .32$ ,  $p < .05$  (see table 10, p. 88).

Time One Correlations between Total Adjustment, Social Support and Network Orientation

Pearson Product-Moment Correlation Coefficients were calculated to examine the correlation among Total Adjustment, Social Support, and Network Orientation at Time One and at Time Two.

At Time One, Total Adjustment was positively correlated with Social Support Satisfaction,  $r = .50$ ,  $p < .001$ , and positively correlated with Social Support Number,  $r = .30$ ,  $p < .01$ . Total Adjustment was negatively correlated with

Negative Network Orientation,  $r = -.33$ ,  $p < .01$ , and negatively correlated with Mistrust,  $r = -.32$ ,  $p < .01$ . Social Support Satisfaction was positively correlated with Social Support Number,  $r = .47$ ,  $p < .001$ . Social Support Satisfaction was negatively correlated with Negative Network Orientation,  $r = -.40$ ,  $p < .001$ . Social Support Number was negatively correlated with Negative Network Orientation,  $r = -.37$ ,  $p < .01$ . Negative Network Orientation was positively correlated with Mistrust,  $r = .33$ ,  $p < .01$  (see table 11, p. 89).

Time Two Correlations between Total Adjustment, Social Support and Network Orientation

At Time Two, Total Adjustment was positively correlated with Social Support Number,  $r = .28$ ,  $p < .05$ . A trend for a negative correlation between Total Adjustment and Negative Network Orientation was found,  $r = -.24$ ,  $p < .10$ . Total Adjustment was also negatively correlated with Mistrust,  $r = -.28$ ,  $p < .05$ . Social Support Satisfaction was positively correlated with Social Support Number,  $r = .36$ ,  $p < .01$ . Social Support Number was negatively correlated with Negative Network Orientation,  $r = -.37$ ,  $p < .01$  (see table 12, p. 90).

Correlations between Time One and Time Two Dependent Variables

The correlation between Time One and Time Two Total Adjustment was,  $r = .693$ ,  $p < .001$ . The correlation between Time One and Time Two Social Support Satisfaction was,  $r =$

.47,  $p < .001$ . The correlation between Time One and Time Two Social Support Number was,  $r = .66$ ,  $p < .001$ . The correlation between Time One and Time Two Negative Network Orientation was,  $r = .77$ ,  $p < .001$ . The correlation between Time One and Time Two Mistrust was,  $r = .68$ ,  $p < .001$  (see table 13, p. 91).

Multiple Regression Results: Adaptation to College, Grade Point Average and Staying in School

Participants' grade point average and whether they were still enrolled at the university were obtained from the MultiCultural Student Services Center. A total of 11 (four males and 7 female) or 21% of the participants in the study did not re-enroll or return to the university for the first semester of the 1995-1996 academic school year.

A series of simultaneous multiple regressions, using Time One data, was conducted to predict Adaptation to College (total scale score), GPA, and Staying in School. Measures of sex, race of high school, social support, network orientation (total scale score), family income, stress and living arrangements were used to predict Adjustment to College. These measures plus Adaptation to College were used to predict GPA, and all measures were used to predict Staying in school (See table 14, p. 92).

Satisfaction with social support,  $b = .38$ ,  $p < .01$ , negative network orientation,  $b = -.26$ ,  $p < .05$ , and stress,  $b = -.35$ ,  $p < .01$ , predicted adaptation to college. All predictor variables accounted for 51.6% of the variance in

Adaptation. Students who were more satisfied with their social support networks and more positively orientated toward seeking social support and less stressed had better adaptation to college. Adaptation did not predict GPA in the Spring. GPA was predicted by stress,  $b = -.38$ ,  $p < .10$ , and living away from campus,  $b = .44$ ,  $p < .05$ . All predictor variables accounted for 38% of the variance in GPA. This is impressive since none of the measures involved previous grades or SAT scores. Staying in School was predicted by higher GPA,  $b = .46$ ,  $p < .05$ , Adaptation to college,  $b = .48$ ,  $p < .05$ , network size,  $b = -.37$ ,  $p < .05$ , family income,  $b = .40$ ,  $p < .10$ , and living on campus,  $b = -.51$ ,  $p < .05$ . All variables accounted for 50% of the variance in retention. Staying in school was indirectly affected by social support satisfaction and stress via their impact of Adaptation to College. Neither sex of participant nor racial composition of high school predicted any of the outcome variables (see figure 1, p. 93).



## Chapter 4

### Discussion

This study hypothesized race of high school and gender differences in the social support and adaptation of Black freshmen and community college transfer students. The race of high school hypotheses stated that participants from mainly Black high schools would be less well adjusted. They would have a smaller social support network and express less satisfaction with social support. They would have a more negative network orientation and more mistrust than participants from integrated or mainly White high schools.

The race of high school hypotheses derived from previous research that found that Black students experienced social, academic, and financial difficulties at mainly White colleges (Allen, 1991, 1992; Dalton, 1991; Jay & D'Augelli, 1991; Henderson, 1988; Loo & Rolison, 1986; McCauley, 1988; Suen, 1983). Graham, Wapner & Baker (1985) found differences in social adjustment and attrition rates among Black students based upon prior interracial experiences in high school. Kraft (1991) found that prior interracial experience with White students in high school gave some Black students thick skins when dealing with other White students. Black students who had attended mainly White high schools also reported that their experience with white students in high school had been

friendlier than what they experienced at the mainly White university. Students with the least interracial experience were often disappointed or puzzled when dealing with White students. Finally, Adan and Felner (1995), replicating Graham et al. (1985), found that greater interracial experience in high school was associated with the most favorable outcomes for Black students at a mainly white college.

In the present study, we statistically controlled for family income and found some support for the hypothesis that prior interracial experiences moderated social support satisfaction and network orientation, but not adaptation to college. Results indicated that at Time Two, students from integrated high schools ( $M = 6.09$ ) and mainly Black high schools ( $M = 5.64$ ) reported significantly more satisfaction with social support than students from mainly White high schools ( $M = 4.75$ ). Also at Time Two students from mainly Black high schools ( $M = 4.86$ ) reported significantly more mistrust than students from integrated high schools ( $M = 3.87$ ) and significantly more mistrust than students from mainly White high schools ( $M = 4.41$ ).

The network hypothesis in this study was supported in that later in the semester, (Time Two), students from mainly Black high schools were significantly more mistrustful than students from mainly White or integrated high schools. There was no significant effect for racial composition of friends on campus but there was a trend for an association between race

of high school and racial composition of associates. In the present study, Black students from mainly White high schools reported that 40% of their associates on campus were other Black students. For students from integrated high schools, 55% of their associates on campus were other Black students. For students from mainly Black high schools, 80% of their associates were other Black students. Most participants' also reported that their friends on campus, people who encouraged them to stay in school and the people with whom they studied with were mostly other Black students on campus.

Our results, in some ways were the opposite of Adan and Felner's (1995) replication of Graham, et al. (1985). Adan and Felner (1995) found that greater interracial experience was associated with better adjustment to college for Black students at a mainly White college. In this study, we found no race of high school effects on the adaptation to college measure. We also found an opposite effect, similar to Kraft (1991), with those Black students with the most prior interracial experiences being less satisfied with social support. In the present study students from mainly White high schools were also least likely to associate with other Black students and it seems more likely that students from mainly White high schools, because of their prior interracial experiences, tried to find social support similar to their previous high school experience.

In this study, Black students from mainly Black high

schools were similar to Black students in the Adan and Felner (1995) study who were from mainly Black high schools and who then attended a mainly Black college. Those students reported better social adjustment than Black students attending the mainly White college. In the present study, students from mainly Black high schools were more likely to associate only with other Black students (e.g., the Black student community on campus) and these students reported higher satisfaction with social support than students from mainly white high schools.

Finally, in the Adan and Felner study (1995), race of high school and race of high school friends were investigated to further understand their impact on adjustment in college. The present study asked an entirely different question, e.g., what is the relationship between students' racial composition of high school and current racial composition of friends and associates on campus. Our results indicate no relationship between racial composition of high school and racial composition of friends on campus. We did find, however, an association between racial composition of high school and racial composition of associates on campus with students from mainly Black high schools maintaining a stronger correspondence between past and current cross-race associations while this trend for students from integrated and mainly White high schools was not as strong. This complex finding suggests the need for a better understanding of

friendship relationships among Black students.

Again, it was contrary to expectations that students from mainly White high schools would report less satisfaction with social support at Time Two. Low social support among students from mainly White high schools may have also derived from a lack of social support from other Black students and negative experiences with White students on campus. As peer groups typically have norms which prescribe behavior and attitude (Hansell, 1984) White or Black group members may try to limit their members interactions across race boundaries. Kraft (1991) also found that the closeness fostered by a small Black community on campus caused serious problems for those Black students who developed relationships with Whites as other Black students disapproved of these cross-race relationships. Such an attitude may have existed among Black students in this sample and may have accounted for low satisfaction with social support among students from mainly White high schools.

Since under natural conditions, people tend to select friends of the same race and sex as themselves (Hansell, 1984), our results also suggest that Black students on campus behaved in a similar fashion regarding same race affiliation. By associating with mainly other Black students they created a Black community within the mainly White college that may have served to buffer stress associated with adjustment to college. Some authors suggest that a Black community on campus also develops because of a general attitude of mistrust toward

Whites (Thompson, Neville, Weathers, Poston & Atkinson, 1990).

The relationship between mistrust, social adjustment and the formation of a Black community on campus may be as Loo and Rolison (1986) hypothesized. Participants in their study mistrusted the larger campus community but felt well integrated into his or her own ethnic group. Our findings support this line of reasoning because in our study mistrust scores were significantly higher at Time One and social adjustment was significantly higher at Time Two.

Finally, one reason for a Black community on a mainly White campus may be because many students also commute to the university and students may have previously known each other in their high school or their neighborhood, thus continuing contact at the university. The development of a Black community on campus may be less a reaction to stress, race or mistrust of Whites and more to do with a continuation of existing friendship networks. Also, in the present study we found that students who were more satisfied with their social support networks and more positively orientated toward seeking social support and less stressed had better adaptation to college. Race of high school did not predict adaptation to college, grade point average or staying in school.

The gender hypotheses stated that women would have a larger social support network, be more satisfied with social support, and have a more positive network orientation, and be better adjusted to college than men. Although most of the

studies on gender differences were based on a mainly white middle class sample, previous researchers found that women have larger networks of friends, more intimate and confiding relationships, more frequent contacts with support persons, and receive more support from multiple sources (Snell, Miller, Belk, Garcia-Falkoni, & Hernandez- Sanchez, 1989; Schmidt, Conn, Greene, & Mesirow, 1982; Vaux, 1985; Wohlgemuth and Betz, 1991).

In this present study, we found no gender differences on our social support or adaptation to college measures. Our failure to find any gender differences in social support may be due to the type of questionnaire we used. Previous research found no differences between Black and White students for social networks size and satisfaction with social support networks (Griffith, 1985; Jay & D'Augelli, 1991; Stewart & Vaux, 1986). Black students, however, report more social support from family than from friends (Cauce, Felner & Primavera, 1982; D'Augelli & Hershberger, 1993; Mallinckrodt, 1988; Stewart & Vaux, 1986) and in one study Black women reported more social support from family, but less from friends, than did their White counterparts (Stewart & Vaux, 1986).

In our measure of social support we asked students to list members of their social network on campus and their satisfaction with social support. Thus, we did not assess an important source of Black students' social support network,

namely social support from family. Future researchers may also find gender differences by using a social support questionnaire that measures subtle aspects of social support. Such a measure might assess such aspects as emotional concern (liking, love, empathy), (2) instrumental aid (goods and services), (3) information about the environment, or (4) appraisal information relevant for self evaluation.

In this study women, however, reported significantly more stressful experiences than men. Women were also more likely than men to provide details about specific stressful experiences. Some responses from women participants were revealing. One female reported that she came from a dysfunctional family and recently had a child and as a result, all her grades dropped. Another female reported that she had problems with her mother and was put out and forced to move from place to place. Another female reported that her car was stolen. One female had an unwanted pregnancy that she chose to terminate and could not stop thinking about. Another female wrote about stress related to not knowing how she was going to pay for her mortgage and school tuition. Another female reported marital problems and one female wrote that prior to attending school, she had a baby and sometimes found it extremely stressful to also have a part-time job on campus.

Some of the males in the sample wrote the following responses to the Stress Questionnaire: One male reported that he experienced a lot of stress related to obtaining financial



aid. Another male reported stress related to finding housing. Two male students had significant others who had died. Finally, one male reported stress related to not preparing himself for college.

An additional goal of this study was to understand factors correlated with success and persistence among Black students. Previous research found that Black students have a high attrition rate. Possible causes of attrition include unsuccessful academic performance, lack of social support, few Black role models among faculty and staff, financial difficulties, racism and discrimination (Galicki & McEwen, 1989).

Previous researchers report that Black students' adaptation to mainly white colleges is correlated with performing well academically, feeling attached to the university, psychological and physical well-being, and social adjustment (Baker & Siryk, 1980, 1984; Jay & D'Augelli, 1991). Other variables correlated with adjustment to college for Black students include, social and academic integration (Tinto, 1975, 1988); satisfaction with the college experience and satisfaction with social support (Hershberger & D'Augelli, 1992); participation in campus activities and organizations and positive perceptions of the university climate (Davis, 1991); and lower drop out behavior (Allen, 1992).

In the present study, sex, race of high school, family income, and GPA did not predict Adaptation to College. The

regression analysis indicated that stress, negative net work orientation and satisfaction with social support predicted Adaptation to College. These predictor variables in the regression analysis accounted for 51.6% of the variance in Adaptation to College. Students who were less stressed, who were more positively orientated toward seeking social support, and who were more satisfied with their social support network had better adaptation to college.

Previous researchers also found that traditional predictors of academic success, such as SAT or ACT scores do not provide an adequate understanding for the academic performance of Black students who attend mainly white colleges (Kraft, 1991; Levin and Levin, 1991). The recognition that academic factors are not entirely predictive of achievement has focused the attention of researchers on the relationship between noncognitive or non ability factors and academic success (McCauley, 1988).

Our findings support the importance of noncognitive factors in the academic success of Black students. In the present study, GPA the following semester was predicted by less stress and living away from campus, especially, at home. Students living at home had the highest GPA, followed by those living off campus, and then those living on campus. The predictor variables in the regression analysis did not involve previous grades or SAT scores yet they accounted for 38% of the variance in GPA. The study showed that students who lived

on campus were less likely to have a high GPA. Students who lived at home were more likely to have a higher GPA. Thus, an important noncognitive variable in the academic success of Black students is student living arrangements.

The research on the relationship between social support and persistence is not always strong. In one study, Black students who graduated from a mainly White college cited social support from faculty, students and family was important in their decision to stay in school (Rice, 1989). Social support was particularly important in terms of accessibility of other students or groups to study with and in terms of encouragement from parents which contributed to students' persistence. Mallinckrodt (1988) also found that African American students who dropped out had fewer self-described significant relationships with faculty, students and staff. Students who did not persist had fewer contacts with fellow students and fewer network members than did students who persisted in college. Surprisingly, for Black students, encouragement from family was negatively associated with persistence. Previous research also found living on campus positively correlated with persistence, and satisfaction with the college experience (Pascarella & Terenzini, 1980; Levin and Levin, 1991). Galicki and McEwen (1989) found that among Black freshmen, those who commuted to college had the lowest persistence rate, and Black freshmen living on campus had the highest persistence rate.

The findings of Steward Jackson and Jackson (1990) contradict research in this area. They found the most successful Black students were Black students who were loners. In our sample, students with small social networks were more likely to stay in school. Social support had both a positive and negative impact on student persistence. On the one hand, those students who had a small support network were more likely to stay in school than students who had a larger support network. Social support size was negatively correlated with persistence. Students who had higher family income and who were better adjusted were also more likely to persist in school.

Student attrition and the perception of social support may vary depending upon the location of the school and the size of the minority student population. For example, in colleges that are primarily residential the student body may be comprised of students from around the country. The availability of racially similar others may be small if the school is in a remote area, if the school has difficulty attracting minority students, or if the student is reluctant to utilize available social support. On the other hand, the availability of other support persons may be larger if a university is in commuting distance of students' hometown. This would allow students to obtain social support from people in their home town community.

### Conclusions

Our study points towards variables other than prior interracial experience in high school for understanding the adjustment, academic success and retention of Black students. Variables such as living arrangement, stress and negative network orientation influence adaptation to college, GPA and retention in complex ways. Our findings, however, should be interpreted with caution because of our small sample size and small number of males who participated. Even though approximately 600 questionnaires were mailed, only 22% of the participants returned completed questionnaires. Of that 22%, approximately one-fifth were recruited from a bulletin board posted in the Life Sciences Building on campus. Perhaps, students viewed a mailing as another unwanted solicitation, whereas the bulletin board sign up gave participants more control. Future researchers might develop more aggressive efforts to increase and to maintain subject participation such as monetary compensation, telephone solicitation and more informal recruitment efforts. The ability to engage Black students in this kind of research may still be formidable because of mistrust.

A strength of this study was its longitudinal nature. We were able to analyze changes in adjustment over time. Though the distance between testings was not optimal, the study found better social adjustment and less mistrust as time in the semester increased. Testing participants earlier in the

semester or before they began school and during the last week of the semester might have resulted in more robust race of high school and gender differences. Future researchers might also pursue factors that contribute to successful adjustment and persistence by looking at a cross section of Black students who are academic achievers.

Finally, this study points toward a need to better understand the positive and negative impact of the existence and nature of a Black student community on a mainly White college campus and its connection to adaptation to college, well-being and persistence. In the present study we found no relationship between adaptation to college and race of high school. While a Black student's decision to maintain a mainly Black support network may initially be invaluable, mistrust in using social support other than from one's own racial group may in the long run negatively impact Black student adaptation to college and persistence by limiting students' exposure to the total college experience.

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Table 1

Reliabilities: Student Adaptation to College, Social Support and Network Orientation

Scale	No. of Items	Range	Standardiz Alpha	
			Time One	Time Two
College Adaptation				
Total	67	1-9	.97	.91
Social	20	1-9	.93	.86
Academic	24	1-9	.95	.87
Personal- Emotional	15	1-9	.92	.86
Attachment	15	1-9	.93	.81
Social Support				
Size	8	0-9	.93	.93
Satisfaction	8	1-6	.88	.89
Network Orientation				
Mistrust	5	1-6	.88	.97
Negative Network Orientation	15	1-6	.95	.99

Table 2

Mean Scores by Race of High School for Social Support  
and Network Orientation

	Race of High School		
	Mainly White	Integrated	Mainly Black
	Time One		
NUM1	2.18	2.90	2.06
SAT1	5.14	5.51	5.03
NEG1	2.70	2.61	2.42
MISTRST1	4.65	4.29	4.82
	Time Two		
NUM2	2.19	2.86	2.98
SAT2	4.75	6.09	5.64
NEG2	2.85	2.49	2.67
MISTRST2	4.41	3.87	4.86

Note: NUM1 and NUM2 refer to Social Support Number at Time One and at Time Two. SAT1 and SAT2 refer to Social Support Satisfaction at Time One and at Time Two. NEG1 and NEG2 refer to Negative Network Orientation at Time One and at Time Two. MISTRST1 and MISTRST2 refer to the MISTRUST Subscale of the Network Orientation Scale at Time One and Time Two.

Table 3

Mean Scores by Race of High School and Sex for Social Support and Network Orientation

	Race of High School					
	Mainly White		Integrated		Mainly Black	
	Male	Female	Male	Female	Male	Female
Time One						
NUM1	2.10	2.26	3.15	2.65	1.68	2.44
SAT1	5.41	4.87	6.31	4.72	4.82	5.24
NEG1	2.62	2.79	2.64	2.58	2.56	2.28
MISTRST1	4.78	4.53	4.12	4.47	4.72	4.92
Time Two						
NUM2	1.91	2.48	2.92	2.80	3.47	2.49
SAT2	4.47	5.03	7.04	5.15	6.08	5.20
NEG2	3.19	2.52	2.59	2.39	3.03	2.31
MISTRST2	4.49	4.34	3.65	4.09	4.92	4.90

Note: NUM1 and NUM2 refer to Social Support Number at Time One and at Time Two. SAT1 and SAT2 refer to Social Support Satisfaction at Time One and at Time Two. NEG1 and NEG2 refer to Negative Network Orientation at Time One and at Time Two. MISTRST1 and MISTRST2 refer to the MISTRUST Subscale of the Network Orientation Scale at Time One and Time Two.

Table 4

Time Two: Multivariate Analysis of Variance: Network Hypothesis

	Race of High School			F
	Mainly White	Integrated	Mainly Black	
Social Support Satisfaction	4.75 <sup>b</sup>	6.09 <sup>a</sup>	5.64 <sup>a</sup>	3.46*
Mistrust	4.41 <sup>b</sup>	3.87 <sup>b</sup>	4.86 <sup>a</sup>	2.46*

Note. Different superscripts indicate significant differences

\*  $p < .05$ . +  $p < .10$ .

Table 5

Time One: Racial Composition of Social Support Network on Campus by Race of High School

	Race of Support Network		
	Mainly Black	Equally Black and White	No on
Mainly Black High Schools (N=22)			
Associates	59%	27%	14%
Friends on Campus	86%	9%	4%
Encouraging Network	72%	0%	22%
Study Network	63%	18%	18%
Mainly White High Schools (N=28)			
Associates	32%	53%	14%
Friends on Campus	57%	21%	21%
Encouraging Network	50%	7%	36%
Study Network	50%	18%	32%
Integrated High Schools (N=22)			
Associates	36%	54%	9%
Friends on Campus	59%	22%	18%
Encouraging Network	54%	18%	27%
Study Network	40%	27%	32%

Table 6

Time Two: Racial Composition of Social Support Network on Campus by Race of High School

	Race of Support Network		
	Mainly Black	Equally Black and White	No one
Mainly Black High Schools (N=15)			
Associates	80%	13%	6%
Friends on Campus	87%	6%	6%
Encouraging Network	73%	6%	13%
Study Network	73%	13%	13%
Mainly White High Schools (N=20)			
Associates	40%	60%	0%
Friends on Campus	60%	25%	15%
Encouraging Network	50%	30%	15%
Study Network	45%	20%	35%
Integrated High Schools (N=20)			
Associates	55%	40%	5%
Friends on Campus	60%	25%	15%
Encouraging Network	40%	30%	25%
Study Network	60%	20%	20%

Table 7

Time One vs. Time Two: Multivariate Analysis of Variance,  
Repeated Measures: Univariate Effects

Race of High School							
	Mainly White		Integrated		Mainly Black		F
Time	1	2	1	2	1	2	
Social Adjust-ment	5.33	5.87	6.04	6.31	5.80	5.98	5.30*
Mistrst	4.57	4.38	4.48	4.05	4.97	4.68	6.60*

\*  $p < .05$ .



Table 8

Mean Scores by Race of High School for Adjustment

	Race of High School		
	Mainly White	Integrated	Mainly Black
	Time One		
TOT	5.63	6.08	5.53
ACA	5.53	6.10	5.16
SOCIAL	5.51	6.16	6.00
ATTACH	6.49	6.98	6.58
PEREMOT	5.50	5.90	5.20
	Time Two		
TOT	5.78	6.23	5.32
ACA	5.83	5.74	4.89
SOCIAL	5.86	6.84	5.36
ATTACH	6.77	7.70	5.87
PEREMOT	5.40	6.03	5.69

Note. TOT refers to the Total Adjustment Scale of the SACQ. ACA refers to Academic Adjustment Subscale of the SACQ. ATTACH refers to the Attachment Subscale of the SACQ. PEREMOT refers to the Personal-Emotional Subscale of the SACQ.

Table 9

Mean Scores by Race of High School and Sex for Adjustment

	Race of High School					
	Mainly White		Integrated		Mainly Black	
	Male	Female	Male	Female	Male	Female
Time One						
TOT	5.60	5.66	6.19	5.98	5.54	5.53
ACA	5.46	5.60	6.19	6.01	5.14	5.18
SOCIAL	5.44	5.59	6.49	5.84	5.83	6.17
ATTACH	6.32	6.67	6.95	7.07	6.68	6.48
PEREMOT	5.67	5.34	6.04	5.76	5.35	5.06
Time Two						
TOT	5.74	5.83	6.48	5.99	4.99	5.65
ACA	5.76	5.91	5.64	5.85	4.39	5.40
SOCIAL	5.74	5.99	7.45	6.23	4.78	5.95
ATTACH	6.59	6.95	8.21	7.20	5.36	6.38
PEREMOT	5.64	5.16	6.48	5.59	5.88	5.51

Note. TOT refers to the Total Adjustment Scale of the SACQ. ACA refers to Academic Adjustment Subscale of the SACQ. ATTACH refers to the Attachment Subscale of the SACQ. PEREMOT refers to the Personal-Emotional Subscale of the SACQ.

Table 10

Correlations Between Adjustment, Social Support and Network Measures with Stress at Time One and Time Two

Time One	Stress	Time Two	Stress
Total Adjust-ment	-.494***	Total Adjust-ment	-.513***
Social Support Satisfaction	-.341**	Social Support Satisfaction	-.164
Social Support Number	-.110	Social Support Number	-.322*
Negative Network Orientation	.297*	Negative Network Orientation	.320*
Mistrust	.220*	Mistrust	.165

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . +  $p < .10$ .

Table 11

Time One: Correlations Between Adjustment, Social Support and Network Measures

	Time One			
	2	3	4	5
1. Total Adjust-ment	.509***	.300**	-.337**	-.328**
2. Social Support Satisfaction	-	.427***	-.404***	-.155
3. Social Support Number		-	-.370**	.004
4. Negative Network Orientation			-	.337**
5. Mistrust				-

\*\* p < .01. \*\*\* p < .001.

Table 12

Time Two: Correlation Between Total Adjustment, Social Support  
and Network Measures

	Time Two			
	2	3	4	5
1. Total - Adjust- ment	.152	.285*	-.240*	-.286*
2. Social Support Satisfaction	-	.361**	-.091	.013
3. Social Support Number		-	-.378**	-.024
4. Negative Network Orientation			-	.164
5. Mistrust				-

\*  $p < .05$ . \*\*  $p < .01$ . +  $p < .10$ .

Table 13

Correlations between Time One and Time Two Dependent Variables

Time One	Time Two				
	1	2	3	4	5
1. Total Adjustment	.693***	.132	.232*	-.337*	-.334*
2. Social Support Satisfaction	.352**	.470***	.365**	-.217	-.191
3. Social Support Number	.222*	.287*	.667***	-.289*	.008
4. Negative Network Orientation	.161	-.147	-.225	.770***	.154
5. Mistrust	-.286*	.139	.051	.281*	.682***

\*  $p < .05$ .    \*\*  $p < .01$ .    \*\*\*  $p < .001$ .    +  $p < .10$ .

Table 14  
Multiple Regression Results on Adaptation to College, Grade Point Average, and Staying in School

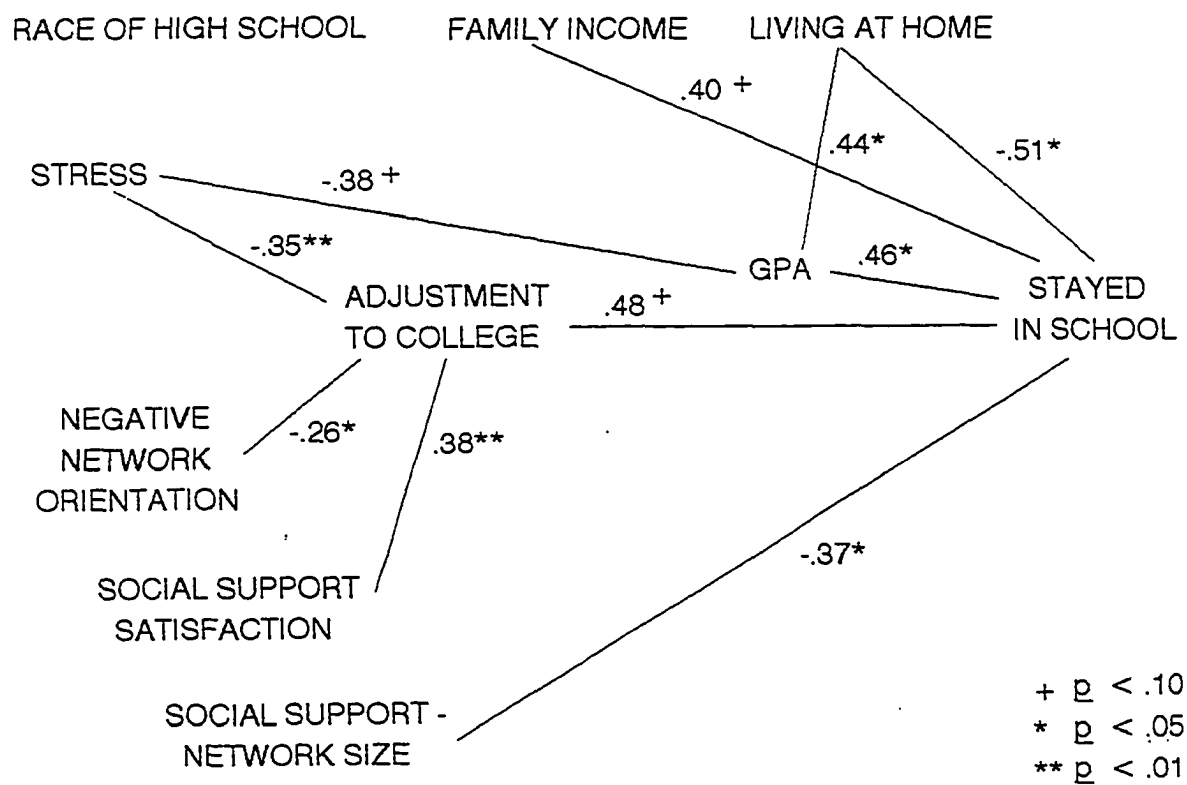
Variables	Total Adjustment		Grade Point Average		Staying in School	
	Beta	T	Beta	T	Beta	T
Sex	.075	.653	-.164	-.898	.184	1.079
Race of High School	-.074	-.665	-.129	-.702	.017	.101
Living	.068	.614	.441	2.362*	-.513	-2.718*
Network Size	.021	.180	-.040	-.221	-.368	-2.186*
Stress	-.351	- 3.068**	-.381	-1.696*	.216	.996
Income	.018	.158	-.292	-1.394	.397	1.989*
NOSTOT	-.258	-2.134*	-.095	-.460	-.229	-1.195
Social Support Satisfaction	.380	3.022**	-.315	-1.601	-.185	-.980
Total Adjustment			-.197	-.773	.476	2.003*
GPA					.456	2.535*
Final Equation Statistics						
	R = .718		R = .616		R = .705	
	R <sup>2</sup> = .516		R <sup>2</sup> = .380		R <sup>2</sup> = .497	
	F (8,44) = 5.88		F (9,26) = 1.77		F (10,25) = 2.47	
	p < .001		ns		p < .05	

Note: All predictor variables accounted for 51.6% of the variance in Adaptation; accounted for 38% of the variance in GPA; and accounted for 50% of the variance in retention. NOSTOT refers to the Network Orientation Scale.

\* p < .05. \*\* p < .01. + p < .10.

FIGURE 1: PREDICTORS OF ADAPTATION TO COLLEGE, GPA, AND RETENTION

SEX





APPENDIX A  
INSTRUCTIONS TO SUBJECTS

General Instructions:

I am an African American graduate student working on my doctorate in Clinical Psychology at Old Dominion University. My dissertation looks at college life and student experiences among entering black freshmen.

In this study, subjects will fill out various paper and pencil questionnaires about their current, as well as prior, social and academic experiences. There will be an October session and a November session. In the October session, it is expected that it will take subjects no longer than one hour to complete five questionnaires.

Subjects who participate in the October session will be contacted in the first week of November and will be asked to complete 3 of the same questionnaires. It is expected to take subjects less than 45 minutes to complete the three questionnaires.

Subjects enrolled in Psychology 201 will receive 2 research credits when they complete and return the questionnaires from both the October and November session. At the end of the first semester, subject's grade point average will be obtained from the registrar's office.

Permission to review student's grade point average for the first semester is needed. All information regarding this study is confidential. All identifying information regarding student's responses will be separated from answer sheets. Students will be debriefed about the results of the research in the second semester.

Please fill out the questionnaires the week you receive them. Please return the questionnaires in the self addressed envelopes at either:

Psychology Department  
Room 250  
Mills Godwin Life Sciences Building (MGB)  
or

MultiCultural Student Services Center  
Webb University Center

Sincerely,

Calvin Graham

APPENDIX B  
CONSENT FORM

Consent Form:

This is to certify that I , \_\_\_\_\_ agree to participate as a volunteer in this study on College Life and Social Experiences.

I understand that my participation is completely voluntary and that I am free to withhold any answer to specific items or questions in the following questionnaires.

I also understand that all information collected will remain confidential with regard to my identity. My last name will be separated from my responses once materials are completed and returned.

I also give the researcher permission to review my academic records at Old Dominion University for research purposes.

I understand that I am free to withdraw at any time. I have the right to contact the Psychology Department Committee for the Protection of Human Subjects at Old Dominion University and/or the University Committee should I wish to express any opinion regarding the conduct of this study. I may also call Calvin Graham or Dr. Barbara Winstead with any questions or comments at (804) 683-4238.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

The following information is needed to keep track of student response sheets. To ensure confidentiality, this cover sheet will be detached during coding of the responses.

Please Print:

Today's Date:

Name:

First

Last

Social Security Number:

Phone Number:

Address:

APPENDIX C  
GENERAL QUESTIONNAIRE INSTRUCTIONS

General Questionnaire Instructions:

The following pages contain a series of questions and statements. Please answer each statement as it personally relates to you. Using a #2 pencil, we ask you to fill in the following information in the grid at the top middle section of the computerized coding sheet. Where it says SEX, please blacken the circle M if you are male and F if you are female. Next, in the bottom left corner, please fill in your Birthday, including the Month, Date and Year. Under the special codes section, you have been provided an identification number for tracking purposes.

On side one and side two of the computerized coding sheet are places to record your responses to most of the questionnaires. Your answers to the items in the questionnaires are anonymous, so please do not write your name on any of the questionnaires. In order to complete the questionnaires you should read each statement or question carefully before answering.

In filling out the coding sheet, please pay attention to the following information: Questionnaire A is not coded on the computerized coding sheet. Simply answer those questions on the answer sheet. Also, part of question # 96 is coded on the coding sheet. You will be reminded of this information when you get to those questions.

Please review your answers when you are finished to ensure that each response is accurate.

APPENDIX D  
BACKGROUND QUESTIONNAIRE

Background Questionnaire

Instructions: Starting with number one on the computerized coding sheet, please blacken the answer that most accurately applies to you.

## 1. Class rank:

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior

## 2. Community college transfer student

- a. Yes
- b. No

## 3. Ethnic background:

- a. African-American
- b. African
- c. West Indian
- d. Mixed Heritage (Black and White parents and/or other racial group)

## 4. Living arrangement:

- a. On campus
- b. Off campus
- c. With parents

## 5. Parents' income:

- a. < 10,000
- b. 10,000-14,999
- c. 15,000-19,999
- d. 20,000-29,000
- e. 30,000-39,999
- f. 40,000-49,999 and above

## 6. Father's highest educational level

- a. Grade school
- b. Some high school
- c. Completed high school
- d. Some college
- e. Completed college
- f. Some graduate school
- g. Completed graduate school
- h. Unknown



## 7. Mother's highest educational level

- a. Grade school
- b. Some high school
- c. Completed high school
- d. Some college
- e. Completed college
- f. Some graduate school
- g. Completed graduate school
- h. Unknown

## 8. What do you expect your grade point average will be at the end of the semester?

- A= 3.5 or Higher
- B= 3.0 to 3.5
- C= 2.5 to 3.0
- D= 2.0 to 2.5
- E= Less than 2.0

APPENDIX E  
SOCIAL SUPPORT QUESTIONNAIRE

### Social Support Questionnaire

Instructions: The following questions ask about people in your environment who provide you both with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the person's initials and their relationship to you (see example). Do not list more than one person next to each of the letters beneath the question.

For the second part, circle how satisfied you are with the overall support you have.

If you have no support for a question, check the words, "No one," but still rate your level of satisfaction. Do not list more than nine persons per question.

Please answer all questions as best you can. All your responses will be kept confidential

Example:

Who do you know you can trust with information that could get you in trouble?

___ No one	1) T.M. ( brother)	4) T.H. (father)	7)
	2) L.H. (friend)	5) L.H. (employer)	8)
	3) R.S. (friend)	6)	9)

How satisfied:

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied
3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied

1. At school- whom can you really count on to distract you from your worries when you feel under stress?

___ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied:

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied
3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied

2. At school- whom can you really count on to help you feel more relaxed when you are under pressure or tense?

___ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied:

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied
3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied

3. At school- who accepted you totally, including both your worst and your best points?

___ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied:

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied
--------------------	----------------------	------------------------

3 - a little dissatisfied      2 - fairly dissatisfied      1 - very dissatisfied

4. At-school- whom can you really count on to care about you, regardless of what is happening to you?

_____No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied:

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied
3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied

5. At school- whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

<u>      </u> No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied:

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied
3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied

6. At school- whom can you count on to console you when you are very upset?

_____ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied:

- |                              |                            |                           |
|------------------------------|----------------------------|---------------------------|
| 6 - very<br>satisfied        | 5 - fairly<br>satisfied    | 4 - a little<br>satisfied |
| 3 - a little<br>dissatisfied | 2 - fairly<br>dissatisfied | 1 - very<br>dissatisfied  |

7. At school, whom can you study with (that is, people you go to the library with, discuss my school work with, etc.)?

- |            |    |    |    |
|------------|----|----|----|
| ___ No one | 1) | 4) | 7) |
|            | 2) | 5) | 8) |
|            | 3) | 6) | 9) |

How satisfied:

- |                              |                            |                           |
|------------------------------|----------------------------|---------------------------|
| 6 - very<br>satisfied        | 5 - fairly<br>satisfied    | 4 - a little<br>satisfied |
| 3 - a little<br>dissatisfied | 2 - fairly<br>dissatisfied | 1 - very<br>dissatisfied  |

8. At school, whom can you count on to encourage you to stay in school?

- |            |    |    |    |
|------------|----|----|----|
| ___ No one | 1) | 4) | 7) |
|            | 2) | 5) | 8) |
|            | 3) | 6) | 9) |

How satisfied:

- |                              |                            |                           |
|------------------------------|----------------------------|---------------------------|
| 6 - very<br>satisfied        | 5 - fairly<br>satisfied    | 4 - a little<br>satisfied |
| 3 - a little<br>dissatisfied | 2 - fairly<br>dissatisfied | 1 - very<br>dissatisfied  |

APPENDIX F  
NETWORK ORIENTATION SCALE

Network Orientation Scale

Instructions: Please indicate on the computerized coding sheet how much you either disagree or agree with the following statements. You will begin with number 9 on the computerized coding sheet. If you strongly disagree with statement number 9, blacken number 1 next to item number 9. If you mostly disagree, blacken number 2. If you somewhat disagree, blacken the 3. If you neither disagree nor agree, blacken the 4. If you somewhat agree, blacken 5. If you mostly agree, blacken 6, and if you strongly agree, then blacken the 7.

1	2	3	4	5	6	7
strongly	mostly	somewhat	neither	somewhat	mostly	strongly
Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
			nor agree			

9. Sometimes it's necessary to talk to someone about your problems.
10. Friends often have good advice to give.
11. You have to be careful to whom you tell personal things.
12. I often get useful information from other people.
13. People should keep their problems to themselves.
14. It's easy for me to talk about personal and private matters.
15. In the past, friends have really helped me when I've had a problem.
16. You can never trust people to keep a secret.
17. When a person gets upset they should talk it over with a friend.
18. Other people never understand my problems.
19. Almost everyone knows someone they can trust with a personal secret.
20. If you can't figure out your problems, nobody can.
21. In the past, I have rarely found other people's opinions helpful when I've had a problem.
22. It really helps when your are angry to tell a friend what happened.



23. Some things are too personal to talk to anyone about.

1	2	3	4	5	6	7
strongly	mostly	somewhat	neither	somewhat	mostly	strongly
Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
			nor agree			

24. It's fairly easy to tell whom you can trust and whom you can't.

25. In the past, I have been hurt by other people in whom I confided.

26. If you confide in other people, they will take advantage of you.

27. It's okay to ask favors of people.

28. Even if I need something, I would hesitate to borrow it from someone.

APPENDIX G  
NETWORK ORIENTATION SUBSCALES

Network Orientation Scale Factors

Factors I:      Advisability/ Independence: Contains items indicating advisability and usefulness (or not) of seeking help and expression of independence.

- 14. It really helps when your are angry to tell a friend what happened.
- 5. People should keep their problems to themselves.
- 11. Almost everyone knows someone they can trust with a personal secret.
- 19. It's okay to ask favors of people.
- 10. Other people never understand my problems.
- 20. Even if I need something, I would hesitate to borrow it from someone.
- 9. When a person gets upset they should talk it over with a friend.
- 12. If you can't figure out your problems, nobody can.
- 1. Sometimes it's necessary to talk to someone about your problems.
- 2. Friends often have good advice to give.

Factor II: History: Contains items indicating a positive or negative history wit help-seeking.

- 1. Sometimes it's necessary to talk to someone about your problems.\*
- 2. Friends often have good advice to give.
- 7. In the past, friends have rally helped me out when I've had a problem.
- 13. I n the past, I have rarely found other people's opinions helpful when I've had a problem.
- 4. I often get useful information from other people.
- 8. You can never trust people to keep a secrete.

Factor III: Mistrust: Contains items suggesting that others may not be trusted.

- 8. You can never trust people to keep a secrete.
- 3. You have to be careful to whom you tell personal things.
- 15. Some things are too personal to talk to anyone about.
- 17. In the past, I have been hurt by other people in whom I confided.
- 18. If you confide in other people, they will take advantage of you.
- 16. It's fairly easy to tell whom you can trust and whom you can't.

Did not load on any factors

- 6. It's easy for me to talk about personal and private matters.\*

APPENDIX H  
STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE

Student Adaptation to College Questionnaire

Instructions: The following statements describe college experiences. Read each one and decide how well it applies to you at the present time (within the past few weeks).

You will begin with number 29 on the computerized coding sheet. Each question can be answered along a continuum (e.g. 1-9). For example, if a statement Applies Very Closely to You, blacken the number 1 next to item number 29. If number 29 Doesn't Apply to You at All, blacken number 9 next to item number 29. If you neither disagree nor agree, blacken the 5. Blacken only one number along the continuum (e.g., 1-9) for each statement.

\*\*\*Caution\*\*\*

Please note that this scale is different from the scale in Questionnaire B.

Applies Very Closely to Me	Doesn't Apply to Me at All
----------------------------	----------------------------

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

29. I feel that I fit in well as part of the college environment.
30. I have been feeling tense or nervous lately.
31. I have been keeping up to date on my academic work.
32. I am meeting as many people and making as many friends as I would like at college.
33. I know why I'm in college and what I want out of it.
34. I am finding academic work at college difficult.
35. Lately I have been feeling blue and moody a lot.
36. I am very involved with social activities in college.
37. I am adjusting well to college.
38. I have not been functioning well during examinations.
39. I have felt tired much of the time lately.

40. Being on my own, taking responsibility for myself has not been easy.

Applies Very Closely to Me

Doesn't Apply to Me at All

1        2        3        4        5        6        7        8        9

41. I am satisfied with the level at which I am performing academically.
42. I have had informal, personal contacts with college professors.
43. I am pleased now about my decision to go to college.
44. I am pleased now about my decision to attend this college in particular.
45. I'm not working as hard as I should at my coursework.
46. I have several close social ties at college.
47. My academic goals and purposes are well defined.
48. I haven't been able to control my emotions very well lately.
49. I'm not really smart enough for the academic work I am expected to be doing now.
50. Lonesomeness for home is a source of difficulty for me now.
51. Getting a college degree is very important to me.
52. My appetite has been good lately.
53. I haven't been very efficient in the use of study time.
54. I enjoy living in a college dormitory. (Please omit if you do not live in a dormitory; any university housing should be regarded as a dormitory).
55. I enjoy writing papers for my courses.
56. I have been having a lot of headaches lately.
57. I really haven't had much motivation for studying lately.
58. I am satisfied with the extracurricular activities

available at college.

Applies Very Closely to Me

Doesn't Apply to Me at All

1        2        3        4        5        6        7        8        9

59. I've given a lot of thought lately to whether I should ask for help from the Psychological/Counseling Services Center, or from a psychotherapist outside of college.
60. Lately, I have been having doubts regarding the value of a college education.
61. I am getting along very well with my roommate(s) at college. (Please omit if you do not have a roommate).
62. I wish I were at another college or university.
63. I've put on (or lost) too much weight recently.
64. I am satisfied with the number and variety of courses available at college.
65. I feel that I have enough social skills to get along well in the college setting.
66. I have been getting angry too easily lately.
67. Recently I have had trouble concentrating when I try to study.
68. I haven't been sleeping very well.
69. I'm not doing well enough academically for the amount of work I put in.
70. I am having difficulty feeling at ease with other people at college.
71. I am satisfied with the quality or the caliber of courses available at college.
72. I am attending classes regularly.
73. Sometimes my thinking gets muddled up too easily.
74. I am satisfied with the extent to which I am participating in social activities at college.
75. I expect to stay at college for a bachelor's degree.



76. I haven't been mixing too well with the opposite sex lately.

Applies Very Closely to Me

Doesn't Apply to Me at All

1        2        3        4        5        6        7        8        9

77. I worry a lot about my college expenses.

78. I am enjoying my academic work at college.

79. I have been feeling lonely a lot at college lately.

80. I am having a lot of trouble getting started on homework assignments.

81. I feel I have good control over my life situation at college.

82. I am satisfied with the program of courses for this semester/quarter.

83. I have been feeling in good health lately.

84. I feel I am very different from other students at college in ways that I don't like.

85. On balance, I would rather be home than here.

86. Most of the things I am interested in are not related to any of my course work at college.

87. Lately I have been giving a lot of thought to transferring to another college.

88. Lately I have been giving a lot of thought about dropping out of college altogether and for good.

89. I find myself giving considerable thought to taking time off from college and finishing later.

90. I am very satisfied with the professors I have now in my courses.

91. I have some good friends or acquaintances at college with whom I can talk about any problems I may have.

92. I am experiencing a lot of difficulty coping with the stresses imposed upon me in college.

- 93. I am quite satisfied with my social life at college.
- 94. I'm quite satisfied with my academic situation at college.
- 95. I feel confident that I will be able to deal in a satisfactory manner with future challenges here at college.

APPENDIX I  
STUDENT ADAPTATION TO COLLEGE SUBSCALES

Academic Subscale

- 3. I have been keeping up to date on my academic work.
- 5. I know why I'm in college and what I want out of it.
- 6. I am finding academic work at college difficult.
- 10. I have not been functioning well during examinations.
- 13. I am satisfied with the level at which I am performing academically
- 17. I'm not working as hard as I should at my coursework.
- 19. My academic goals and purposes are well defined.
- 21. I'm not really smart enough for the academic work I am expected to be doing now.
- 23. Getting a college degree is very important to me.
- 25. I haven't been very efficient in the use of study time lately.
- 27. I enjoy writing papers for my courses.
- 29. I haven't had much motivation for studying lately.
- 32. Lately, I have been having doubts regarding the value of a college education.
- 36. I am satisfied with the number and variety of courses available at college.
- 39. Recently I have had trouble concentrating when I try to study.
- 41. I'm not doing well enough academically for the amount of work I put in.
- 43. I am satisfied with the quality or the caliber of courses available at college.
- 44. I am attending classes regularly.
- 50. I am enjoying my academic work at college.
- 52. I am having a lot of trouble getting started on homework

assignments.

- 54. I am satisfied with the program of courses for this semester.
- 58. Most of the things I am interested in are not related to any of my course work at college.
- 62. I am very satisfied with the professors I have now in my courses.
- 66. I'm quite satisfied with my academic situation at college.

Social Subscale

- 1. I feel that I fit in well as part of the college environment.
- 4. I am meeting as many people and making as many friends as I would like at college.
- 8. I am very involved with social activities in college.
- 9. I am adjusting well to college.
- 14. I have had informal, personal contacts with college professors.
- 16. I am pleased now about my decision to attend this college in particular.
- 18. I have several close social ties at college.
- 22. Lonesomeness for home is a sources of difficulty for me now.
- 26. I enjoy living in a college dormitory (Please omit if you do not live in a dormitory; any university housing should be regarded as a dormitory).
- 30. I am satisfied with the extracurricular activities available at college.
- 33. I am getting along very well with my roommate(s) at college. (Please omit if you do not have a roommate).
- 37. I feel that I have enough social skills to get along well in the college setting.
- 42. I am having difficulty feeling at ease with other people

at college.

- 46. I am satisfied with the extent to which I am participating in social activities at college.
- 48. I haven't been mixing too well with the opposite sex lately.
- 51. I have been feeling lonely a lot at college lately.
- 56. I feel I am very different from other students at college, in ways that I don't like.
- 57. On balance, I would rather be home than here.
- 63. I have some good friends or acquaintances at college whom I can talk about my problem I may have.
- 65. I am quite satisfied with my social life at college.

Personal-Emotional Subscale

- 2. I have been feeling tense or nervous lately.
- 7. Lately I have been feeling blue and moody a lot.
- 11. I have felt tired much of the time lately.
- 12. Being on my own, taking responsibility for myself, has not been easy.
- 20. I haven't been able to control my emotions very well lately.
- 24. My appetite has been good lately.
- 28. I have been having a lot of headaches lately.
- 31. I've given a lot of thought lately to whether I should ask for help from the Counseling Center, or from a psychotherapist outside of college.
- 35. I've put on (or lost) too much weight recently.
- 38. I have been getting angry too easily lately.
- 40. I haven't been sleeping very well.
- 45. Sometimes my thinking gets muddled up too easily.

- 49. I worry a lot about my college expenses.
- 55. I have been feeling in good health lately.
- 64. I am experiencing a lot of difficulty coping with the stresses imposed upon me in college.

Attachment Subscale

- 1. I feel that I fit in well as part of the college environment.
- 4. I am meeting as many people and making as many friends as I would like at college.
- 15. I am pleased now about my decision to go to college.
- 16. I am pleased now about my decision to attend this college in particular.
- 26. I enjoy living in a college dormitory (Please omit if you do not live in a dormitory; any university housing should be regarded as a dormitory).
- 34. I wish I were at another college or university rather than this one.
- 42. I am having difficulty feeling at ease with other people at college.
- 47. I expect to stay at college for a bachelor's degree.
- 56. I feel I am very different from other students at college, in ways that I don't like.
- 57. On balance, I would rather be home than here.
- 59. Lately I have been giving a lot of thought to transferring to another university.
- 60. Lately I have been giving a lot of thought about dropping out of college altogether and for good.
- 61. I find myself giving considerable thought to taking time off from college and finishing later.
- 65. I am quite satisfied with my social life at college.

APPENDIX J  
STRESS QUESTIONNAIRE



Stress Questionnaire

96. Instructions: Please think about any recent stressful experience, problem, circumstance or situation that you might have had prior to enrolling at ODU. Did this experience negatively effect your ability to do your best at school? Briefly describe what happened.

On number 96 on the coding sheet, please mark the letter that most accurately describes your answer.

Please rate how stressful this experience was.

A- very	B- fairly	C- a little	D- not stressful
stressful	stressful	stressful	at all

-----  
Please do not write below this line.

APPENDIX K  
PRIOR INTERRACIAL EXPERIENCE QUESTIONNAIRE

Prior Interracial Experience Questionnaire

Instructions: Please estimate the racial composition of your high school for each of the following groups.

97. My High School was:

- a. less than 10 % black
- b. between 10% and 20% black
- c. between 20% and 30% black
- b. between 30% and 40% black
- e. between 40% and 50% black
- f. between 50% and 60% black
- g. over 60% black

98. My High School was:

- a. less than 10 % white
- b. between 10% and 20% white
- c. between 20% and 30% white
- b. between 30% and 40% white
- e. between 40% and 50% white
- f. between 50% and 60% white
- g. over 60% white

99. My High School was:

- a. less than 10 % Hispanic
- b. between 10% and 20% Hispanic
- c. between 20% and 30% Hispanic
- b. between 30% and 40% Hispanic
- e. between 40% and 50% Hispanic
- f. between 50% and 60% Hispanic
- g. over 60% Hispanic

100. My High School was:

- a. less than 10 % Asian
- b. between 10% and 20% Asian
- c. between 20% and 30% Asian
- b. between 30% and 40% Asian
- e. between 40% and 50% Asian
- f. between 50% and 60% Asian
- g. over 60% Asian

101. My High School was:

- a. less than 10 % Filipino
- b. between 10% and 20% Filipino
- c. between 20% and 30% Filipino

- b. between 30% and 40% Filipino
- e. between 40% and 50% Filipino
- f. between 50% and 60% Filipino
- g. over 60% Filipino

102. My social support network (friends in high school) were:

- a. less than 10 % white
- b. between 10% and 20% white
- c. between 20% and 30% white
- b. between 30% and 40% white
- e. between 40% and 50% white
- f. between 50% and 60% white
- g. over 60% white

103. My social support network (friends in high school) were:

- a. less than 10 % black
- b. between 10% and 20% black
- c. between 20% and 30% black
- b. between 30% and 40% black
- e. between 40% and 50% black
- f. between 50% and 60% black
- g. over 60% black

104. Which of the following statements most accurately describes your social support network in high school?

- a. none
- b. adequate
- c. good
- d. exceptional

105. How would you characterize your social support network (friends) in high school.

- a-- acquaintances; I know them very little
- b-- casual friends; I know them somewhat
- c-- good friends; I know them fairly well
- d-- very good friends; I know them very well
- e-- my best friends; I know them extremely well
- f-- my very best friends; I know virtually every thing about them

106. Were your high school friendships mainly

- a. school friendships
- b. friendships that were outside of school

107. Currently, my friends on campus are:

- a. mainly black
  - b. mainly white
  - c. mainly other-Asian, Filipino, or Hispanic
  - d. equally black and white or other
  - e. I do not have any friends on campus.
108. My associates (that is, people I interact with but do not consider to be my friends) on campus are:
- a. mainly black
  - b. mainly white
  - c. mainly Asian, Filipino, or Hispanic
  - d. equally black and white or other
  - e. I do not have any associates on campus.
109. The people on campus that I study with (that is, people you go to the library with, discuss your school work with, etc.) are:
- a. mainly black
  - b. mainly white
  - c. equally black and white
  - d. mainly other-Asian, Filipino, or Hispanic
  - e. I do not study with anyone on campus.
110. The people in school I count on to encourage me to stay in school are:
- a. mainly black
  - b. mainly white
  - c. equally black and white
  - d. mainly other-Asian, Filipino, or Hispanic
  - e. teachers
  - f. no one on campus encourages me to stay in school.

APPENDIX L  
STRESS QUESTION RESPONSES

Stress Question ResponsesBlack Freshmen Women from Mainly White High Schools:

1. I thought I was accused of being racist against whites. It may or may not have been true. What happened was some guy who just happened to be white and 'Jewish' slammed the door in my face. (Knowing I was behind him). The next time I saw him I screamed "I hate him." This caused me to look at myself and wonder if I were really prejudiced. I decided I was not but that I was devoid of all common sense. After that experience, I've become paranoid and haven't stated some of my deepest feelings since.
2. The only problem I have is my grades. I can't stand getting C's. I don't want a 2.0 . I just want to do better. I think by the end of the semester, I will, but I just want the best. Plus courses are boring. I just hate studying for these classes.
3. I have a very dysfunctional family. I also recently had a child. All of these things caused me to direct my attention on them instead of school. As a result, all of my grades dropped.
4. My mom had 7 tumors in her stomach. The experience made me work harder.
5. For 4 1/2 years including this year, I had a chemical imbalance in my brain which causes me to have severe depression bouts and mood swings as well as loss of concentration, less appetite, insomnia, and feelings of worthlessness and helplessness.
6. I had problems with my mom. She put me out. I have been moving from place to place. It has had an effect on school.
7. Someone stole my car. It upset me a great deal, but I still did my best in school
8. I moved out.
9. A friend of mine ran away from home and was planning to go about 5 hours away to a very dangerous city. She didn't go through with it but it was pretty stressful. It didn't really effect me much though as far as academics.
10. In high school, I had an unwanted pregnancy that I chose

to terminate. I can't stop thinking about it.

11. I own a small business providing services to business owners. One of my major clients went out of business owing me money. I needed to pay mortgage and other bills. Money received from school would help me pay mortgage but had to enter school not knowing exactly when money would arrive. Had to start school with the threat of foreclosure pending. This did not effect my ability to perform academically. Feel I have the support of my community (have been active in community) felt I could call on persons to help me resolve problems if became severe.
12. My husband and I separated after four years of a terrible marriage. It has not negatively effect my ability to do my best at school. If anything, it has encouraged and motivated me to do my best, so that I can get the best job I can, and provide for my family ( my two preschoolers and myself). Now he decided to wait until I started school to start giving me a fight for the kids, after he hasn't seen them in over a year!
13. I got pregnant and had a baby. Sometimes, now its extremely stressful because I also have a part-time job on campus. But, I set my goals and pray. I think I'm doing well enough to have been out of school for two years prior to attending college.
14. In math class, even after receiving help from my teacher, I still can not excel in her class.

Black Freshmen Men from Mainly White High Schools:

1. I experienced a lot of stress over obtaining financial aid to be able to start classes here at O.D.U.
2. Mother moved out. No direct academic effect. Lost weight. Met my girl friend and love her. Doing just fine with her at my side.

Black Freshmen Women from Integrated High Schools:

1. Being a single parent, head of household with no assistance from government programs places a large amount of stress on my financial aspects during my college life. I constantly worry about how my rent and where the finances for expenses will come from. I don't put my best in managing my time for study due to worrying about this



most of the time.

2. The most stressful experience I had in coming to O.D.U. is moving from another states so far away. It took me a long time to receive papers I needed to completely enroll. I had to register later and move my belongings was very hard. I am from Ohio which is 12 hours away. It made things very complicated.
3. I started having problems with my roommate. She is an old friend from school. I don't feel it was a good idea to room together it ruined the friendship.
4. Me and my boyfriend just broke up after a five year relationship. I found out the hard way that he was seeing other females. Now, I'm feeling inadequate and betrayed and can't seem to focus on school the way I usually did.
5. My algebra test grade scores haven't been up to par, along with my history mid-term. I am not failing but am making C's. It is stressful because it upsets me. I usually make A's and B's and nothing lower especially when the material is relatively easy. My problem is that I haven't been studying like I should. I'm not that motivated to study because I am always tired or can not concentrate for whatever reasons. My goal is to stop taking noon naps, get to bed on time, and immediately do my work in the afternoons.
6. I cannot think of any specific stressful experience. I am basically easily stressed by simple things.
7. A close friend's father passed away and she suddenly stopped associating with me and several other friends.
8. My financial aid money wasn't processed. Financial aid is my main source of income. This is paying for my education at O.D.U. However, my employer, who works in financial aid, straighten my account out and started the process of my financial aid.
9. Last school year, I had to work in the library on weekends and nights, and I also caught the bus to school. This effected me by having to work nights. It made me tired when I got home. I felt tired and stressed out. The bus affected me by being late for my classes and me missing some of my lectures. All this resulted in me getting on academic probation.
10. My husband lost his license prior to enrollment which left me with having to drive him back and forth to work everyday. He's in the military and has to be at work at

6:30 am. We live in Hampton, so I have to drive back and forth through the tunnel 4 times a day and sometimes more if he has a basketball game on base after work. Driving in Virginia is very stressful which caused me to go home and sleep sometimes instead of doing homework and assignments.

11. I was told by a relative to check myself, to evaluate and change the person that I have become.
12. I did not have money for my parking decal and books before school started. It worked out because I was able to get an emergency loan.
13. The most recent stressful experience that I've dealt with has been graduation. It was stressful because it was bringing me to reality. It was time to grow up and be on my own. Time to experience college.

Black Freshmen Men from Integrated High Schools:

1. I had a housing problem before school. Since, I had a room scholarship, I thought that there was no need to fill out housing papers. Because of this, I almost didn't have a room to stay in. Fortunately, there were two rooms left and I was able to obtain one.
2. A year and a half before coming to O.D.U., my father died, leaving my mother, sister and myself. I felt a little uneasy leaving my mother and sister behind.

Black Freshmen Women from Mainly Black High Schools:

1. The experience was that a friend of mine got into some trouble. I worried but it didn't have an effect on my ability to perform at school.
2. Nasty rumors were being spread around about my high school and things that I did. That situation caused me to miss classes and miss work. It also ruined a couple of friendships, caused discourse between my parents and an ex-friend of my parents.
3. I had a guy friend who used to abuse me physically and emotionally. Because of this, I was usually always depressed and could not concentrate on anything.
4. I have always had problems in math. Math have been my weakest subject. I enrolled at O.D.U. with a positive

attitude concerning math. My experience in math class as been very negative one and has presented the most stress for me here.

5. I had a negative experience that I don't feel comfortable writing about. I can tell you that when it was over I vowed to never get in that situation again. It made me want to succeed in life and I value myself, my life, family and friends more.
6. My mother is at the state of depression. She was one of my best friends. I feel I have lost her. The support of my extended family has lessened; therefore I can't turn to any of them. I often worry about my mother and our financial problems.
7. Yes, in high school, I had a hard time studying, therefore, I did poorly on tests. When I came to college, I still have problems studying or reading and doing good on tests.
8. My mom got mad because she doesn't like some of the choices I make and she said she wasn't going to pay for me to go to college. I guess I kind of lost interest since I won't be coming back next semester. What's the use?
9. Before entering college I almost got in trouble with the law. I was with someone who got caught shoplifting. It did not change the fact that I wanted to do well in school.
10. My now ex boyfriend and I were supposed to stay together through college. And he changed his mind close to the time for me to leave.
11. The change of attitude (negatively) from my family towards me. Nothing seems to even please them. They find something wrong with everything.
12. I had to deal with my job. When I was in high school, I had set hours, now I have to work in order to pay for tuition fees and for other things. I can hardly find the time for myself and my studies. I have to come up with a plan to get my life organized.

#### Black Freshmen Men from Mainly Black High Schools:

1. One of my aunts past away about a week prior to moving in. It affected my concentration very much in the beginning.
2. My mother passed during the middle of the semester and I

felt as though I lost my best friend.

3. I did not prepare myself for college. I wasn't ready to go back to school. I was involved in my activities. I should have prepared myself ahead of time.

Black Freshmen Women Type of High School Not Reported:

1. Trying to decide what classes to enroll in. This experience was overwhelming. It effected me mentally because I was unsure about myself making an adult decision that could affect my life. I sort of make a big deal out of nothing.
2. The semester before I started college , I was kicked out of the house. It was due to problems that I experience because my younger sister and I were taking my step-father to court on molestation charges. I believed it greatly effected my college decision. After graduation, I would not be able to live with my friends and a college dorm seemed the best and safest place to be. If this had not happened , I would have waited a year before enrolling in college. I really could have used this time off from school to get my life together , and would be better equipped to handle college.

## VITA

Calvin Graham was born on January 21, 1957 in Baltimore, Maryland. He received his Bachelor of Arts in Psychology from Fisk University in Nashville, Tennessee in 1979 and his Master of Arts in Clinical Psychology in 1982 from Clark University in Worcester, Massachusetts.

In 1982, Calvin Graham was as a staff clinician working with polymorphous substance abusers. In 1983 he pursued a career in high tech with Digital Equipment Corporation in Massachusetts, and worked for a number of years in the personnel department at Digital's Mid-Atlantic Corporate Headquarters.

Mr. Graham was laid off from Digital in 1991. He was hired as an associate psychologist by Liberty Community Mental Health Center, where he worked with children and adolescents for a year. In 1992, Mr. Graham enrolled in the Virginia Consortium for Professional Psychology. His third year concentration was in pediatric psychology at Cumberland Hospital for Children and Adolescents. In 1996, Mr. Graham accepted an internship opportunity in the United States Air Force. He will be stationed at Wright-Patterson Air Force Base in Dayton, Ohio.

In March 1996, Mr. Graham, co-authored a poster paper with Dr. Winstead. They presented their findings at the South Eastern Psychological Association Conference in Norfolk, Virginia.