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Linster, Michelle Lynn

THE EFFECTS OF THE RACIAL MAKE-UP OF THE COLLEGE ENVIRONMENT ON THE SELF-CONCEPTS OF BLACK COLLEGE STUDENTS

The University of North Carolina at Greensboro PH.D. 1985

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THE EFFECTS OF THE RACIAL MAKE-UP OF THE COLLEGE ENVIRONMENT ON THE SELF-CONCEPTS OF BLACK COLLEGE STUDENTS

by

Michelle L. Linster

A Dissertation Submitted to
the Faculty of the Graduate School at
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ABSTRACT

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The purpose of this study is to investigate the degree to which the self-concept scores of black college students are influenced by the racial make-up of their college environment and an experimental manipulation designed to vary the distinctiveness of their race. This study investigated the degree to which the results of this study could be efficiently explained by the insulation hypothesis, the distinctiveness theory, and a later reference group theory. In addition, the study examined the relationship between subjects' self-concepts, socio-economic status and academic performance.

One hundred twenty black female and 120 black male college students served as volunteer subjects. An equal number of males and females were obtained from the predominantly white University of North Carolina at Greensboro, and predominantly black North Carolina A&T State University, both located in Greensboro, North Carolina. During the first session, background information was obtained and the Tennessee Self-Concept Scale, (TSCS), was administered. In the second session, subjects were assigned to one of three experimental groups where they competed against a same sex black confederate, same sex white confederate, or worked alone on a symbol cancellation task. The TSCS was re-administered after completion of the task.

The results of the present study indicate that black students from A&T scored higher than black students from UNC-G on the Physical TSCS sub-scale pre-test but not on the Social sub-scale pre- test. In addition, females scored higher on the TSCS sub-scale pre-scores than males. The mean difference between the male and female population was greatest between UNC-G males and females. UNC-G females scored significantly higher than UNC-G males. The results further indicate that the influence of these campus and sex differences on the subjects' self-concept scores was to an extent determined by the experimental condition that the subjects experienced.

In addition, while not one of the theories tested could explain the results entirely, the distinctiveness theory was more efficient in explaining more of the significant and insignificant results obtained in the study. The most persuasive assumption of this theory was related to the transiency of the race and sex variables on subjects' self-concepts. Finally, the results indicate that the influence of an integrated environment does not necessarily result in a negative influence.

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I dedicate this manuscript, with all my love, to my mother, Mrs. Susie B. Linster and my brothers and sisters for their emotional and financial support throughout my college career. Thank-you for believing in me.

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CHAPTER 1

INTRODUCTION

The task of understanding and explaining the self-concept and other related self-referent constructs, such as self-esteem, self-evaluation, and self-image, has been an issue for many personality theorists. Research in this area has proceeded in several directions which have included: a) the development of the self-concept; b) variables that influence the self-concept; and c) the correlation between individuals' self-concepts and behavior (Wylie,1979).

While each of these areas has been subjected to experimental investigations, the bulk of the research has focused on identifying and explaining the influence of certain variables on subjects' self-concepts. Those variables that have provoked the most interest have been related to individuals' socio-economic and social positions, ethnicity, sex, and age.

Findings, prior to the early 1970's (Clark, 1963; Eirkson, 1966; Pettigrew, 1964) have generally indicated that members from minority or impoverished groups tend to score lower on self-concept measures than their counterparts from majority or economically advantageous groups. Results such as these have served as evidence to support the assumptions that members from groups with minority status, such as blacks and females, have lower self-concept scores than members from the dominant groups, for example, whites and males. However, more recent findings

(Chowdrow, 1974; Healey, 1974; Rosenberg, 1975; Wells, 1978; Wylie, 1974; 1979) have not entirely supported these conclusions. Rosenberg and Simmons (1972) have reported instances where no significant differences were found in the self-concept scores of their black and white student population samples. They have also found instances where the results indicated a higher self-concept mean for their black population than the white population. Similar findings have been demonstrated by Gritter and Saslow (1969), Levine and Ruiz (1977), and Wells (1978). Moreover, null results have been demonstrated when the sex of the subjects was considered. Chowdrow (1974) and Healey (1974) found no difference in the self-concept scores of their male and female population sample, when variables such as age and socio-economic status were taken into consideration.

In an in depth review of the published literature, Wylie (1979) noted that the findings in the area of self-concept research are so ambiguious that no conclusive statements can be made concerning the relationship among subjects' self-concepts, sex, age, social and economic status, and ethnicity. These conclusions are consistent with those from an earlier review. Wylie (1974) maintained that the evidence for the previous assumptions were often based on controversial, uninterpretable, and missing data. Moreover, Wylie has argued that researchers must be aware of the influence of other factors in the individuals' environment which interact with their ethnicity to exert a combined influence on the self-concept. For example, the type of racial environment (predominantly black or predominantly white) that individuals experience may influence their perceptions of themselves.

This influence may result in significant differences between the two groups which remain significant across different age, educational, and socio-economic levels.

Current studies have indicated that the mean self-concept level may differ among different sub-groups in the black population due to the environmental differences. Brookover and Passalacqua (1981), and Wylie (1979) have all reported significant differences in the self-concept scores of black students when the racial make-up of the school and neighborhood were the independent variables. These researchers reported higher self-concept scores for black students in segregated or predominantly black settings than for black students in integrated settings. Findings, such as these, are in direct opposition with the predictions of earlier theorists who have assumed that segregation may impair the self-esteem as well as the achievement of black students. In light of these findings, and others (Baughman, 1971; Rosenberg, 1975), interest in ascertaining the influence of the make-up of the racial environment on the self-concept of black children has heightened. A number of hypotheses and theories have been proposed to explain this occurence, yet few theories have been subjected to scientific investigation.

The present study explored the relationship between the racial make-up of college students' educational and social environment and their self-concepts. Specific hypotheses focused on the extent to which the results of this study could be efficiently explained by the reference group theory, the distinctiveness theory, and the insulation hypothesis.

The following discussion represents a review of the literature on the self-concept of black students. Descriptive and operational definitions of the self-concept are provided and the measurement technique used in this study is evaluated. Theories and hypotheses related to the development of the self-concept are discussed. Research focusing on variables which may influence subjects' self-concepts, such as ethnicity, sex, socio-economic status (SES), and academic ability and school performance is presented. The goals, design and hypotheses of this study are discussed in terms of their relationship to the theories and pertinent research in this area.

Definitions of the Self-Concept

Various definitions of self-concept have appeared in the literature. Though qualitatively different in some aspects, many of these definitions are based on the underlying assumption that the formation of the self-concept results from the type of experiences individuals have with significant others, such as family members and friends. Mead (1934) described the self-concept as a by-product of various learning experiences. The attitudes that individuals develop toward themselves are correlated with the attitudes of and interactions with the "organized community or social group which gives [individuals] unity of self" (Mead, 1934; p.154).

Rogers (1961) has defined the self-concept in a similar manner. He maintained that the self-concept evolves from the type of social interactions individuals experience with others in their environment. In addition, Rosenberg and Simmons (1972) defined the self-concept as an

individual's overall perceptions of his or her self-worth. They maintained that an individual with a positive self-concept possesses more self-respect and self-appreciation for hisself or herself than an individual with a low self-concept.

Taking a phenomenological approach to describe the self, Combs (1981; pp. 323-324) described the self-concept as the perceptual organizations of individuals' personal meanings or perceptions of their own behavior. Similarly, Holland (1981) defined the self-concept as the way individuals see themselves. By this definition, the self-concept reflects the individuals' perceptions of themselves. The concepts that people possess are subjective and may not be based on how they are in reality. Holland termed this private subjective image as the "personal face" and distinguished it from the "social face" and "real face". The social face refers to how individuals behave in public (p. 323). This aspect of the self-concept is changable and depends upon the impressions the individuals wish to present. The real face, however, refers to how the individuals are in reality without their social masks. According to Holland (1981), "if [individuals] could be peeled like an onion with [their] outer shell of pretense and pride removed, [their] real self would be exposed" (p.324).

While these authors have all provided qualitative definitions of the self and self-concept, they are basically phenomenological in nature and do not provide operational definitions that aid in a quantitative measure of the self-concept. When attempting to obtain a precise and measurable definition of the self-concept, theorists are confronted with several problems.

First, many of the definitions that have been used to describe the self-concept have also been used to define self-esteem, self-image, and similar constructs. Therefore, researchers have used these constructs interchangably with other self-referents. Second, there has been much disagreement as to whether a subjective construct like the self-concept could be defined in a quantitative manner.

In an attempt to offset the second problem, Wylie (1974; 1979) has argued for the inclusion of self-descriptive behaviors as operational definitions in defining the self-concept. She has maintained that the use of objective and operational definitions would enhance the accuracy of the prediction of behaviors which are related to the self-concept. Several researchers have used self-descriptive adjectives when measuring the self-concept and other self-referent constructs. For example, Fitts (1965) operationally defined the self-concept as a ratio of the total number of self-favorable adjectives that individuals ascribe to themselves to the total number of favorable adjectives available. Other theorists (see Wylie, 1979 for a review) have defined the self-concept in a similar manner when they employ self-descriptive adjectives or phrases to describe the self-concept.

In summary, several theorists have proposed phenomenological definitions of the self-concept. However, in an attempt to provide more precise definitions of the self-concept and its relationship to behavior, self-descriptive adjectives are being used to define the self-concept. In addition, several theorists have addressed the multidimensionality of the self when they defined the self-concept (Fitts, 1965; 1981).

In the present study, the definition of the self-concept used is consistent with Fitts' definition of the self as it is measured by the Tennessee Self-Concept Scale. Thus, self-concept was defined as the manner in which individuals perceive themselves.

> "Self-concept refers to what a person believes he is, how he feels about himself, and how he believes he acts. It also refers to how an individual sees himself physically, morally, socially, and so on" (Healey, 1974; p.8).

As will be seen below, the Tennessee Self-Concept Scale because of its many sub scales, implies that the self-concept may not be a unidimension al concept. Thus, in the working definitions used in the present study it is assumed that there are many components to the self-concept.

Measurement of the Self-Concept

Various assessment techniques have been used to measure the self-concept. These techniques have included self-concept scales, semantic differential techniques, as well as the use of pictorial stimuli and other techniques (Wylie, 1974). One of the most widely used assessment tools employed to measure the self-concept and used in this study is the Tennessee Self-Concept Scale, (TSCS).

The TSCS has been used on many occassions to determine the effects of a variety of factors on subjects' self-concepts (McGuire and Tinsley, 1981). This scale differs from other self-concept techniques in that it purports to be a multidimensional description of the self (Vacchiano and

Strauss, 1968).

The TSCS is a standardized five point Likert-type scale. Developed by Fitts (1965), the scale was based on a sample of 626 persons from various parts of the country, with an age range from 12-68 years of age. Initially, the TSCS norm group was purported to be comprised of an equal representation of both sexes, black and white populations, educational, and economic levels (Fitts, 1965; Thompson, 1972). Later studies (see Thompson, 1972) have shown, however, that college students and whites were over-represented in the norm group. This over-representation created a systematic bias against the under-represented populations such as adolescents and blacks. This bias effect has consistently provided lower scores for these groups when compared to the norm group. New norm groups have been established, however, to reduce this effect.

The TSCS is composed of ninety self-descriptive statements and ten lie items taken from the MMPI-L scale. These self-descriptive items were taken from a pool of self-descriptive phrases. Item selection was based on the agreement ($r=.82$) of seven clinicians. The ninety items consist of half negative and half positive phrases to control for passivity and conformity in individuals' responding. The lie items form the self-criticism scale and measure the amount of individuals' overt defensiveness.

The scale is divided into different sub-scales that reflect individuals' internal frame of reference (how they describe themselves) and external frame of reference (their perception of how others see them). It provides three scores reflecting the internal dimension and five scores reflecting the external dimension of the self-concept. The

internal dimension is reflected in the Identity, Self-Satisfaction, and Behavior sub-scales. The external dimension is exhibited in the Physical, Moral-Ethical, Personal, Family and Social sub-scales. "The internal and external frame of references form a three by five grid containing fifteen cells. Each self-concept item on the TSCS is defined by both an internal and external referent" (McGuire and Tinsley, 1981; p.449).

Criticisms of the TSCS have included insufficient data related to the internal consistency of the scale and the lack of construct validity of the sub-scales in the instrument. Fitts (1981) argued that the TSCS provides measures of internal consistency regarding individuals' self-concepts and "collectively these measures provide relevant data about the scale itself" (p.226).

In a supporting study, Van Tuinen and Ramanaiah (1979) found "significant and high reliability values ranging from .56 to .75 with the median value of .68" (p. 22) for the TSCS sub-scales. Similarly, Vacciano and Strauss (1968) provided more data to substantiate the construct validity of the TSCS sub-scales. However, their results provided additional support for the sub-scales measuring subjects' external frame of references rather than their internal frame of reference. In a later study, McGuire and Tinsley (1981) demonstrated construct validity for both the internal and external sub-scales using college students as their subject population. Based on their results they maintained that the TSCS was a valid measure of the self-concept for college populations.

Despite criticisms launched against the TSCS, the scale appears to be one of the most effective measures of the self-concept that is currently in use (Wylie, 1979) which measures specific aspects of the self-concept as well as the overall self-concept.

Theories of Self-Concept Development

As indicated by previous definitions of the self-concept, many researchers in this area (Rosenberg & Simmons, 1972; Combs, 1981; Holland, 1981; pp.323-324) have assumed that individuals' self-concepts are acquired from an interaction with others in their environment. They maintained that some type of social interactions are the primary basis for self-concept development. Mead (1934) has maintained the impossibility of individuals developing self-concepts outside any type of social interaction. Therefore, many of the existing theories have been developed to explain the effect of social and cultural factors on individuals' conceptions of themselves. As mentioned previously (Mead, 1934; Rogers, 1961; Holland, 1981), the basic assumption of these theories has been that individuals' self-concepts develop out of a relationship between themselves and significant members in their environment. From these significant others, individuals learn how they are evaluated by others and how to evaluate themselves. This concept of the self that individuals develop "is a process of continual evaluation in terms of continually changing perspectives" (Schneider, 1977; p.28). Schneider (1977) has argued that individuals' sense of self, however, is affected by only those evaluations that are important to them. He maintained that those evaluations that are viewed as unimportant or made

by people insignificant to these persons will be ignored. The impetus to change or re-evaluate their self-concepts based on unimportant evaluations is often lacking.

Coopersmith (1967) has demonstrated that the type of self-concepts that individuals develop are highly correlated with the type of evaluations or opinions their parents possess of them. In a study investigating the relationship between individuals' self-concepts and parental evaluations, Coopersmith found that the mothers of 10-11 year old boys with high self-esteem attributed more positive characteristics to their sons than the mothers of boys with low self-esteem.

Turner (1968) has argued that individuals' senses of self are also evaluated against their personal best. Perceptions of their personal best are based not only the perceptions of their performance but this performance relative to the performance of others. According to Festinger (1954) individuals evaluate their abilities and opinions by comparing them with those of other people in similar situations. These comparisons are made more often in instances where there are no concrete evaluative standards. Festinger maintained that in this type of situation, people seek out similar others and use them as a comparison group. As the similarity between the individuals and the group decreases, the tendency to compare themselves against these people will decrease. Thus, Festinger has argued in his Social Comparison Theory that individuals will seek out those people who are comparable to them and use these people as a comparison group.

Several other theories developed to explain self-concept development have been based on the previous principles. One set of theories that untilizes Festinger's assumptions and others proposed by the learning approach are the reference group theories and are discussed below. The theories explain, specifically, the effects of the environment on differences in the self-concept scores of different ethnic groups as a function of their ethnicity.

Reference Group Theory. The Reference group theory has assumed that people's self-concepts are directly affected by their social positions and the educational and economic resources available to them relative to their comparison group. This theory may be grouped into two distinct categories. While the basic assumptions are the same, the theorists differ in their identification of their population sample's reference or comparison groups. Traditional reference group theorists have maintained that individuals will always use the dominant groups (whites, males) in society as their reference group. Recent theorists, however, have argued that individuals' interaction or membership groups will serve as reference groups.

Traditional theorists, like Clark (1963), Eirkson (1966), Lewin (1948), and Pettigrew (1964), have argued that the self-concepts of members from minority groups, especially blacks and females, would be lower than the self-concepts of members from groups with minority status, such as whites or males, but similar to the self-concepts of members from another minority group. Lewin (1948) and Pettigrew (1964) have suggested that individuals from minority groups, especially blacks,

internalize white stereotypes of their inferiority and come to accept this view as their own. Acceptance of these negative stereotypes and definitions ascribed to blacks, results in a deficiency in the black individuals' self-esteem and lower self-concepts. The extent to which individuals differ significantly from the dominant groups in society would be directly correlated with the amount of self or group devaluation that they experience.

As support for these contentions, numerous studies have been published that have provided evidence indicating a devaluation of black characteristics by black children. Clark (1963) has postulated that black children will automatically experience feelings of inferiority which develop from the social position of their racial group in society. Moreover, Clark has reported that black children rarely overcome this sense of shame associated with their social status.

In addition, Proshansky and Newton (1963) have argued that one of the most serious problems or conflicts for black people is the low level of self-esteem that inevitably occurs as a result of their race.

Rainwater (1966) has reported that these negative conceptions of the self are reinforced in black children. Black children living in a segregated community are continiously confronted with symbols of their social, educational, and economic inferiority. In a situation such as this, black children learn that their race and color are synonymous with inferiority and learn to despise themselves and other black people as they did in the Rainwater study.

Similarly, Pettigrew (1964) concluded that black children's negative attitudes toward other blacks are manifested by both their reluctance to identify with other blacks and to assign positive characteristics to a black subject population.

Research findings in this area have not entirely supported the previous contentions. Based on these findings, theorists have begun to reevaluate the assumptions made by traditional theorists (Baughman, 1971). Recently, theorists have maintained that members from minority groups do not necessarily use the dominant groups as a reference group. These theorists have assumed that individuals will not use as a comparison group those persons whose ideas, activities, and opinions are significantly different from their own. Nor will the individuals choose people who are not involved in the same situation.

Baughman (1971) has shown that black students, especially younger children, will use their own racial group as a comparison point during the formative years of the development of the self-concept. Generally during childhood, black children spend most of their time in an essentially black environment. Their community provides

> "the child with his frame of reference, and it is within the black community that the comparative process...functions. Thus the critical consideration in regard to the generation of self-esteem is that the black child compares himself with other black children not with white children. The evaluative framework for the black child is provided by the black community in which his group is actually a sub-culture"
> (Baughman, 1971; p. 44).

The self-concepts of black children are based on the type of feedback they receive from significant members in their community and not on the stereotype or the social position that the community at large ascribes to their racial group. For example, Rosenberg and Simmons (1972) found that black children in a segregated setting compared themselves with their black friends at school or in the neighborhood. In an earlier study, Baughman and Dahlstrom (1968) reported that when black children were asked to compare themselves, family, and friends to others, they chose other black people and black institutions as comparison groups. The researchers reported that even with the availability of white institutions present, not one of the children interviewed used them.

As black children mature their interactions with whites increase, thereby increasing their awareness of the attitudes that society holds for their ethnic group. However, Allen (1981) and Wells (1978) have suggested that black children in integrated settings may not necessarily compare themselves with whites. Rather, black children may compare themselves with friends in the same setting.

Heiss and Owens (1972) have suggested that in certain situations, black children may use a different reference group "according to the specific kind of self-evaluative area involved" (p. 27). They noted that individuals would use a totally black reference group when comparing themselves on a dimension that is irrelevant to the white society or their overall success. For instance, black children may not use a white reference group when making self-evaluations or self-appraisals about their competence as a parent or an appraisal about their attractiveness

to the opposite sex.

Baughman (1971) has suggested that in a situation where black children do compare themselves with whites, the comparison does not necessarily result in a negative self-concept. In situations where a comparison may force the individuals to re-evaluate themselves, they do not have to interpret the experience as an inadequacy within themselves. The children may attribute these results to outside forces. For example, black students may attribute a loss in a competitive situation to the inadequacies in the opportunities available to them. By assigning blame to the system, the individuals protect their self-concepts.

In view of the information that has been provided by recent studies, Wylie (1979) has concluded that hypotheses focusing on specific aspects of the students' self-concepts as a function of racial status may provide a better understanding of the influence of ethnicity and race on self-concept development.

Distinctiveness Theory Another theory that has been proposed to explain the influence of ethnicity and other factors on the development of the self-concept is the distinctiveness theory. Based on principles of the information processing theory, this theory assumes that individuals notice or attend to aspects of their environment that are different or been rewarding in their past. Based on this assumption, McGuire and McGuire (1981) have argued that the characteristics of the environment or the group that will be most influential on individuals' self-concepts are those characteristics that they do not possess relative to the majority group. They have postulated that those aspects of the

individuals' psychological or physical environment that influence their self-concepts are to some extent situationally determined. Unlike traditional reference group theories, this theory does not assume that variables, such as ethnic status, sex, and SES, will automatically influence individuals' self-concepts. McGuire and McGuire have noted that these variables and others will have an influence on people's self-concepts and self-evaluations only when they are conscious of these variables. Furthermore, individuals become aware of these variables only when they distinguish these people from the rest of the group. For instance, McGuire and McGuire proposed that sex may influence the manner in which a black female evaluates herself when she is interacting with a group of black males. If she moves into a group of white females, sex becomes an unimportant variable and race becomes the salient variable which distinguishes her from her interaction group. Similarly, if the same female interacts with a group of white males, both sex and race would be salient variables in her perception of herself.

In a study investigating the influence of individuals' ethnic origin on the self-concept, McGuire and McGuire found that people's awareness of their race and its impact on the self-concept decreased as the number of minority members in the group increased. As the number of minorities increased, the saliency and influence of their ethnic status decreased. Similarly, as the number of minority group members decreased, the saliency of their race increased. The results indicated that this effect occurred automatically without regard to the type of setting, e.g., academic or social, that the individuals experience.

In summary, both the reference group theory and the distinctiveness theory have been used to explain the influence of certain variables on the development of the self-concept. The theories differ, however, in the approach they have used to explain the influence of these variables. The traditional reference group theorists have explained differences in the self-concept scores of members from minority groups and members from the dominant group. However, they failed to explain instances where differences are not found between the groups or where intra-group differences are found. Later reference group theorists have been developed to explain this effect and intra-racial differences in the self-concept. Similarly, the distinctiveness theory has provided an explanation for the intra-group and inter-group differences in the self-concept. Additionally, this theory has been used to predict when certain factors will influence self-perceptions and self-evaluations.

All the theories described have assumed that certain variables, such as ethnicity, sex, SES, and academic ability will have an effect on the type of self-concept individuals develop and the type of evaluations they make about themselves. Therefore, a brief discussion of the research investigating the previously mentioned variables is presented below.

Variables Affecting the Self-Concepts

Ethnicity. Many studies investigating the effects of ethnicity on individuals' self-concepts have primarily focused on the self-concept scores of individuals from both black and white racial groups and across different age and socio-economic levels. As previously stated, the

general consensus of the data has been that black children score lower on self-concept measures than their white counterparts (Pettigrew, 1964; Wylie, 1979). This conclusion is consistent with the popular view that black children, as well as members from other disadvantaged groups, develop negative concepts of the social position of their group due to the effect of discrimination and negative stereotypes.

Support for these contentions has been primarily based on studies measuring pictorial preferences, color preferences, and the number of negative statements or stereotypes subjects assign to their ethnic group. Taylor (1966) demonstrated that black children, ages six to seven, assigned negative statements or stereotypes to a stimulus object more often when the stimulus object was a black child than when a white child served as the stimulus object. He reported that words such as "stinky, lazy, and dirty" were attributed more often to the black child.

Bernstein and DiVesta (1972), using both black and white fifth graders as subjects, found that pleasant adjectives were learned more often and with fewer errors when they were paired with a picture of a white child rather than a picture of a black child. This effect was observed for both black and white subjects. Moreover, black subjects attributed more negative statements or stereotypes to their group than they did to the white group. These researchers hypothesized that the ease with which the adjectives were learned and applied to the stimulus object were representative of the attitudes of the subjects toward the object.

In a supporting study, Uwanno and Stabler (1977) found that both black and white children attributed more positive meanings to white color stimuli while more negative meanings were assigned to black color stimuli. These authors reported that subjects' attitudes toward color stimuli were positively correlated with their racial attitudes.

Parallel research by Winnick and Taylor (1977) has shown that 32% of the black children in their study indicated a greater preference for white stimuli than black stimuli when asked to chose between a black and a white child as a potential playmate and friend.

Using black college students as subjects, Brighman (1971) found that they too assigned more negative stereotypes to their group than to any other ethnic group. The results also indicated that these subjects assigned more negative statements to other blacks when they were asked to write their perceptions or to indicate the extent to which they agreed with a statement when it involved a general attitude toward blacks. These results were viewed as support for the contention that blacks devalue themselves and their race and accept the negative views assigned to them.

In the studies cited above, factors, such as SES, sex, and age were adequately controlled. However, Greenwald and Oppenheim (1968) have argued that earlier studies created a bias in their results by employing extremely dark and unattractive dolls or pictures as their black stimuli. They suggested that black children may not have perceived the dolls or pictures as representatives of themselves or their family members and friends due to the color and attractiveness of the stimulus object. Therefore, the experimental confounds caused by the type of

stimuli employed may have attributed to the results obtained.

Taking these variables into consideration, Gritter and Saslow (1969) investigated the effects of attractiveness on the preference choice of black and white children. They found that "facial" physiognomic characteristics of the stimuli were more significant than color in determining selection. In a similar study where the attractiveness of the pictorial stimuli was matched across ethnic groups, Levine and Ruiz (1977) found that ethnicity of pictorial stimuli had no effect on Anglo, Black, and Chicano children's preferences. Both black and white children chose the most attractive child as their playmate regardless of his or her race. Based on these findings, the researchers concluded that if not controlled, the attractiveness variable would be a potential confound in research investigating children's preference.

In addition to the attractiveness variable, Rosenberg and Simmons (1972) found that color was a salient variable in black children's selection of color stimuli. They noted that black children consistently showed a preference for models with physical attributes that were associated with whites. When asked to rate the attractiveness of different black models, black students were more likely to rate light brown models as more attractive than either very dark or very light models. The extremely dark brown models were rated as the least attractive. Rosenberg and Simmons maintained that these findings were consistent with the traditional view that links beauty as well as other positive attributes with the physical qualities of the white population. This preference still persists despite the flourishing ideologies of

black awareness and black pride.

But, do black children's preference for lighter models indicate a negative self-concept? In the same study, Rosenberg and Simmons (1972) demonstrated that while blacks showed a greater preference for lighter models, this preference was not related to their self-concept. They also found no significant difference in the self-concept scores of dark and light skinned black children and white children. These researchers suggested that black children would compare themselves to the other black children around them and blacks in general but not with members from different groups (whites) that they do not interact with. This explanation is consistent with the "insulation hypothesis" proposed by Rosenberg and Simmons (1972). A detailed description of and support for this hypothesis will be presented later.

Other researchers (Wells, 1978) have argued that while pictorial studies have indicated a tendency for black children to prefer lighter stimuli, these results do not necessarily denote a hesitancy of the subjects to identify with their race. Nor are the results indicative of the development of negative or inadequate self-concepts on the part of their subjects. Similar results have been obtained by Healey (1974) and Thompson (1972).

In summary, recent studies have shown that attractiveness and skin color are two important variables in the selection of pictorial stimuli and dolls by black and white children but may be unrelated to the self-concept. Similarly, the previous researchers have suggested that earlier studies may have obtained biased results by not taking the effects of these factors into consideration when choosing black models.

In view of the inconsistencies in the findings related to the influence of subjects' ethnic background on their self-concept, researchers (Baughman, 1971; Brookover and Passalacqua, 1981; Wells, 1978) have attempted to explain why these differences occur Brookover and Passalacqua (1981)have pointed out that many studies have employed different self-referents, such as, self-esteem, self-image, and self-evaluation, to assess subjects' self-concepts which may affect the findings obtained. In addition, they maintained that the mean self-concept levels may differ among different sub-groups of blacks. Similarily, Wylie (1979) noted that the comparison of groups not matched on other variables such as SES, intelligence, or sex may also contribute to the inconsistencies found within the literature. For example, black students in segregated schools scored higher on self- concept measures than black students in integrated schools. This effect was demonstrated consistently even when subjects' SES, sex, and intelligence (as measured by subjects' Grade Point Averages) were matched.

Similarly, McGuire and McGuire (1981) maintained that integration may account for some of the differences in the self-concept scores of black students. They suggested that it is the experience of being a minority in an integrated setting that produces differences in the self-concept scores between black students im predominantly black and predominantly white schools.

While within group differences may be expected to exist among whites as well as blacks., the author was unable to identify any research that have examined the effects of integration and segregation on the self-concepts of white students. This lack of research may be due to the

small number of white students that actually attend predominantly black schools or are in a minority situation for an extended period of time.

Sex. Female social and economic positions have generally been inferior when compared to those of their male counterparts. Despite women's progress in the last two decades, Carpenter (1981) and Rosenkrantz (1968) have reported that the sex-role stereotypes still exist and may in some instances influence the self-concept of males and females and the value placed on their performance. For instance, Rosenkrantz (1968) demonstrated that the self-concepts of his subjects, both males and females, were directly correlated with the stereotypes which have been associated with each group. Later studies (Bem and Bem, 1970; Pheterson, Kiesler and Goldberg, 1971) have reported similar results. In studies investigating the influence of sex-role stereotypes on subjects' perceptions of the value of their performance, these researchers found that females consistently rated themselves less positively than they did their male partners. In contrast, males rated their female partners less favorably than they rated themselves.

It is apparent that females are at a disadvantage when they compare themselves to males. However, the degree to which females are influenced by their social position "will be affected by the degree to which they adhered to a belief in traditional sex-role stereotypes, 'that is consensual beliefs about the differentiating characteristics of men and women in our society'" (Carpenter, 1981; p. 3). This fact is especially important since that not all females accept their assigned sex-roles and social positions. For example, not all females use males as a reference group, but rather other females. Therefore, their conceptions of their

sex may not reflect the appraisals made by their male counterparts. Similarly, Hacker (1970) has reported that some women do not accept the sex-role stereotypes and even when they do, they do not translate their situation as negative.

Chowdrow (1974) has indicated that the self-concepts of females are not necessarily lower than the self-concepts of their male counterparts. In fact, the self-concepts of females may be equal to or greater than the self-concepts of males despite the social positions and status assigned to them. These contentions have been supported extensively in the literature by studies finding either insignificant differences in the self-concept scores of males and females or females scoring higher than males (Healey, 1974).

In a review of forty-seven studies employing the most widely used assessment techniques, Wylie (1974;1979) reported that the findings have indicated more null results than significant results. Null results were consistently shown in studies employing idiosyncratic instruments as well. The effect was further demonstrated when an assessment was made of specific aspects of the self-concept, such as self-esteem or self-acceptance as well as overall measures of the self-concept.

However, Wylie (1979) reported that methodological problems have included the failure of the experimenter to match groups on other variables in addition to sex, such as intelligence or SES, which may also influence the subjects' self-concepts.

Moreover, many of the studies that have investigated the effects of sex on self-concepts have employed primarily children and adolescents as subjects. In comparison, relatively few studies have used college students and fewer still, adults, in their subject population. This effect may appear more important if one accepts the notion that a positive relationship exists between subjects' age and the way they view the sex-roles that have been assigned to them or their sex as a group. Also, sex-roles may be accepted or adhered to more by younger children and adolescents than by adults (Peterson, 1981).

In view of the ambiguity of the data one must agree with the conclusions of Wylie (1979) and Peterson (1981) that evidence establishing an accurate relationship between subjects' sex and self-concepts is unclean and any conclusions that are made at this point would be premature.

Sex and Race Interaction. Studies investigating the effects of sex on the self-concepts of black students have found that black males score higher on self-concept measures than black females (Healey, 1974; Wylie, 1979). This difference is greater when subjects are in racially mixed environments than when the environments are racially homogeneous. However, the defensiveness scores for males in integrated settings are higher than those of females in the same setting and both males and females in segregated settings. Thus, some researchers have concluded that these results may represent a tendency of black males to inflate their self-concept ratings when their race and their sex are the distinctive features of the groups. (McGuire and McGuire, 1981;

Thompson, 1972; Wylie, 1979). The effect has been found for black students in intergrated settings. Similar data have not been obtained for white students due to the relatively few whites who experience measurable minority situations (Wylie, 1979). Therefore, further research in this area is warranted.

Socio-Economic Status. Healey (1974), Rosenberg (1975), Rosenberg and Simmons (1972), and Wylie (1979) have all noted that researchers generally assume that individuals' SES play an important role in the development of the self-concept. Wylie (1979) has suggested that parents from lower socio-economic levels may hold different views of success and different standards for their children than parents from higher socio-economic groups. Differences in parental expectations have been linked in some instances to the differences in the self-concepts found between economically distinct groups.

Rosenberg and Simmons (1979) have argued that stereotypes associated with the SES will affect children's self-concepts when their economic level differs significantly from other children with whom they interact. In an extensive research study, Rosenberg (1975) concluded that the effect of the SES on the self-concepts of black children was dependent upon the reference groups with whom they compared themselves. He maintained that subjects' socio-economic class was more likely to influence their self-concepts when they were in a heterogeneous economic environment than when the environment was homogeneous. This effect was particularly relevant when the effects of the SES on the self-concepts of black children in a heterogeneous racial setting were assessed.

Rosenberg and Simmons' hypothesis is consistent with the distinctiveness theory.

According to the distinctiveness theory, subjects' SES becomes a relevant influence on their self-concepts as the economic heterogeneity increases in their group. When subjects' comparison groups are economically homogeneous, their economic status is not a salient factor and will not have a significant impact on their self-concept.

In summary, some research studies have shown that the effects of subjects' SES on their self-concept is due in part to the economic heterogeneity in that environment. However, more research investigating this effect is necessary before any definitive conclusions may be obtained.

Academic Achievement. One of the reasons that interest in the self-concept has increased so rapidly in the last two decades has been due in part to the experimental findings indicating a positive relationship between individuals' academic success and their self-concepts. In a review, Brookover and Passalacqua (1981) reported that research findings in this area have indicated positive correlations between subjects' academic success and their self-concepts. These findings are parallel with an earlier theory of personality integration by Seeman (1959).

Seeman has proposed that individuals' with totally integrated self-concepts would function more completely in all areas of their life including the academic area. In a review, Fitts (1972) pointed out that Seeman's general hypothesis has been proven by various researchers. For

example, Achord and McCary (1975) have found a positive relationship between their subjects' GPA and the subjects' overall self-concepts or total self-concept scores on the TSCS. This effect was significant at the .05 level. In conjunction, Kunce, Gestinger, and Miller (1972) found significant correlations between subjects' self-concepts and their GPA during the first, second and third quarters of the academic semester. Furthermore, Fitts (1972) reported that earlier studies have clearly established a positive correlation between subjects' overall self-concepts and the personality integration scores (PI), which describes their perception of their positive assets, obtained from the TSCS. The findings showed that "college students who were found to be high in PI have higher GPAs than random, normal comparison groups despite the fact that there were no differences in basic intellectual ability" (Fitts, 1972; p. 29).

In parallel, Wylie (1979) reported that students' GPAs were also highly correlated with their concepts of achievement. Moreover, she maintained that the correlation between subjects' self-concepts of achievement and GPAs exerted more influence on distinct aspects of the self, such as ability, than on their overall self-regard.

Support for this premise has been provided by Brookover, LePere, Hamcheh, Thomas and Erickson (1965). These researchers found correlations between GPA and the self-concepts of achievement ranging from .56 to .65 for seventh and eight grade students. Rosenberg and Simmons (1972) reported that students assumed to be "good students" were more likely to be "good" in terms of their performance ability, which measures their perceptions of their academic achievement, than in their

overall ability.

Parallel studies (Rosenberg, 1975; Wylie, 1979) have investigated the relationship between students' racial group, GPA, and self-concepts. As Wylie (1979) noted, most researchers have found mean differences in the self-concept levels of students from different ethnic groups and socio-economic levels and attempted to explain these discrepancies. For example, Rosenberg (1975) and Rosenberg and Simmons (1972) argued that academic achievement is associated with the overall self-concept of white children but not of black children. This effect may be due to the fact that achievement tests, such as IQ tests, may not be viewed by black students as representative of their true abilities. They further noted that black subjects were significantly more likely than their white age-matched peers to indicate that they were smarter than their actual school performance indicated.

In summary, experimental evidence has found a positive correlation between academic ability and self-concept, especially for white students. However, a direct causal relationship has not been determined between the two factors. Additionally, the extent to which racial differences may be correlated with students' self-concepts of achievement needs further investigation.

Racial Composition of the School Environment. Studies conducted prior to the late 1960's concluded that segregation had an adverse effect on the self-concepts of black students while integration was viewed as enhancing the self-concepts of blacks. In a review of the literature, Brunner (1963) concluded that segregation dramatically affects the type

of self-image and self-concepts that black students develop. The deprivation that blacks suffer as a result of racial discrimination and prejudice evokes a feeling of inferiority and worthlessness. These findings have been sustained by Cliff (1965) and others (see Wylie, 1979 for a review).

Studies investigating the influence of the racial make-up of the environment on the self-concept of black students, from the late 1960's to the present, have not entirely supported previous findings. Powell and Fuller (1970; in Rosenberg and Simmons, 1972) compared the self-esteem scores from the TSCS for 614 black and white students. The results of this study indicated that the self-concepts of black students in predominantly black schools were significantly higher than the self-concepts of black students in predominantly white schools. Rosenberg and Simmons (1972) reported that the black students in predominantly black schools averaged in the 60th percentile on their self-concept measures while black students in predominantly white schools averaged in the 40th percentile. Similar findings have been demonstrated by Bachman (1970). Bachman concluded that segregation does not have a negative influence on the self-concepts of black students as was previously indicated. He maintained that segregation serves as an enhancer for a positive self-concept. In parallel, Katz (1968) found that the self-concepts of black students decreased as the number of whites in their school increased.

Subsequent research by Rosenberg and Simmons (1972) has shown that the environmental influence on black students' self-concepts may be negative when they are reared in a predominantly white school. Crain and Weisman (1972) investigated the effects of complete segregation, complete integration, and a combination of the two in play, school, and in the neighborhood on the self-concept of black children. A completely integrated environment existed when the black children played mostly with white children, attended a predominantly white school, and lived in a predominantly white neighborhood. The results indicated that black children who experienced a completely segregated environment during childhood had significantly higher self-esteem scores. Children reared in a completely integrated environment ranked second in their scoring. Those children experiencing a mixed environment, regardless of the type of environment, obtained the lowest self-esteem scores. Parallel research by Rosenberg (1975) found that a significantly higher percentage of blacks in segregated schools had more stable self-concepts than blacks in integrated settings.

In her 1979 review, Wylie arrived at similar conclusions. She maintained that the two most methodologically sound studies, Bachman (1970) and Rosenberg (1975), found that blacks in predominantly black schools scored higher on self-esteem and self-concept measures than black students in predominantly white schools. This trend was demonstrated even in "studies in which the uncontrolled variables were of the sort which might be expected to create the opposite effect" (Wylie, 1979; p. 198). Similar results have been obtained with white students reared in different religious environments (Rosenberg and

Simmons, 1972). These findings will be discussed later in detail.

Several explanations have been proposed to account for the influence of the racial make-up of students' environments, specially the school, on their self-concepts. Theses explanations will be discussed below.

Theories of the Effects of Ethnicity on the Self-Concept in Integrated and Segregated School Settings

Several theories that have been employed as explainations of the self- concept development, have also been use to explain the influence of ethnicity on the self-concepts of minority group members. Two such theories that have been used to explain the influence of ethnicity on people's self-concepts are the reference group theory and the distinctiveness theory. These theories will be discussed below in conjunction with the insulation hypothesis developed by Rosenberg and Simmons (1972).

Insulation Hypothesis. The insulation hypothesis has assumed that black children will compare themselves to those people with whom they have sustained interactions rather than those groups in society with whom they have little if any interaction. Black students in segregated settings, that is predominantly black or completely black settings, compare themselves to black students or black friends and other black people in general. Thus blacks in this type of environment use their interaction group or membership group as a reference point. Additionally, these are the individuals that have an influence on the

type of self-concept the students develop.

In contrast, black students in integrated settings, that is predominantly white settings, compare themselves to the white students they interact with and also, the white population at large. Black students in integrated settings are forced to compare themselves with individuals who are dissimilar to themselves in some aspects. These students generally use as a reference group those people that have higher social and economic positions, higher GPAs, and may have had more opportunities available to them.

Rosenberg and Simmons (1972) have argued that segregation insulates black children from many of the adverse experiences which may confront black children as a result of their ethnic background. The effects of desegregation limit black children, especially young children, from gaining a full awareness of the social position of their group. The racial insulation provided by desegregation distorts the perceptions that the children form of their group. This tendency of blacks to elevate the status of their group relative to its actual standing in society has been referred to as an inflation mechanism. Rosenberg and Simmons (1972) have noted that this mechanism operates more strongly in younger children and less so in high school students and adults. For example, they reported that when black children in segregated environments were asked to rate four different groups, blacks, Jews, white Catholics, Catholics and white Protestants, according to which group Americans like best, best, 80% rated blacks as either first or second. Moreover, 60% of the black children rated their group first. In comparison, 60% of the white children rated blacks at the bottom. This

discrepancy between the ratings of black and white children decreased with age. However, even at the high school level, 15 years and above, blacks were less likely than whites to rate their group at the bottom. Based on these results, Rosenberg and Simmons (1972) concluded that the discrepancy between the two groups was a function of the inflation mechanism which accounted "for their erroneous reading of reality" (p. 33).

In a similar study, Rosenberg and Simmons (1972) further demonstrated that this mechanism operates in most people and is not exclusively operating in blacks. Using white Catholic, Protestant, and Jewish children, who were also from a relatively segregated environment, as subjects, they found that these children also inlate the status of their own group when asked to rank how most people viewed their group. The children consistently ranked their group the highest. The results indicated that the ratings that white Catholics and Protestants gave their group declined with age, though there was still a tendency to inflate the status of their own group even at the high school level. The results are consistant with earlier findings obtained using black students as subjects. Based on these results and similar others, Rosenberg and Simmons have concluded that the inflation mechanism operates in all groups, although it is used to a greater extent by blacks.

The extent to which the inflation mechanism is effective in enhancing the self-concepts of blacks and other minority group members will depend upon the amount of interaction they have with other racial groups, especially whites. In an integrated environment, black children

may experience more discrimination, prejudice, and ridicule either directly or indirectly toward their group or the values they hold in esteem. Integration, then, appears to enhance black childrens' awareness of their ethnic status by making them aware of the differences between themselves and their immediate peers. Additionally, it functions as a barrier to the successful use of the inflation mechanism by children in the integrated environment. For example, Rosenberg and Simmons (1972) have demonstrated that black students in predominantly white schools were more likely to rank blacks lowest when asked to rate different ethnic and religious groups based on which group most people liked best. Their rankings were in agreement with the rankings made by white students. This trend was consistent for all age groups.

Similar results were obtained using Jewish students, living in predominantly Protestant neighborhood, as subjects. Rosenberg and Simmons have explained these results by noting that it was easier for their subjects to deny or ignore their group's actual position in society when they are in a segregated environment. In segregated environments ideas of black pride, black achievement, and black power may flourish unchallenged, resulting in higher levels of self-esteem and self-worth. However, situations which foster black pride may not exist in integrated settings. Similarly, black children in integrated settings are more likely to be confronted with the reality of their status in comparison to their white peers.

While the inflation mechanism may be effective in isolating black students from the stereotypes associated with their group, it does not affect the manner in which they view other groups. For example, Laurence (1970) found that while both black and white students tend to inflate the status of their respective groups, they shared similar prejudices when rating other groups. Both black and white students were asked to rank five ethnic groups based on how most Americans perceived them. Subjects in each group assigned their group to a higher position in society than it actually possessed. However, they were in agreement in their ratings of other ethnic groups, such as Mexicans, Chinese, and Russians.

In summary, Rosenberg and Simmons have proposed that blacks do not necessarily perceive their group in the same way members from other ethnic groups perceive them. Rather, their perceptions may be influenced by the inflation mechanism which operates for both black and white children in segregated settings. The effectiveness of this mechanism, however, is influenced by the amount of interaction children have with members of different ethnic groups.

Distinctiveness Theory. Unlike the insulation hypothesis, the distinctiveness theory has assumed that black students do not have to engage in sustained interactions with whites before they are used as a comparison group. Rather, McGuire and McGuire (1981) argue that whenever blacks move into ethnically mixed situations where they hold a minority status, their ethnicity will have an effect on their self-concepts. The distinctiveness theory assumes that blacks will use whites as comparison

groups in any situation where blacks are in the minority. The interactions between the two groups may be sustained or temporary.

In a recent experiment, McGuire and McGuire (1981) investigated the effects of the racial make-up of students' school environment on their ethnic awareness. They hypothesized that the influence of ethnicity on their self-concept would vary according to the racial make-up of the school environment and the subjects' ages. The results indicated that younger children were less likely than older children to refer to their own ethnicity in their self-descriptions. In addition, black and Mexican-American students, in racially-mixed schools were more conscious of their ethnic background than whites. Finally, the data showed that as the minority representation increased in the subjects' schools the influence of their race became less important and salient.

Reference Group Theory. In contrast to the insulation hypothesis and the distinctiveness theory, the later reference group theory assumes that blacks in both segregated and integrated environments will use other blacks as their comparison groups rather than the whites with whom they interact. For example, Allen (1981) found that black college students were more likely to establish black unions and association within their integrated setting and use individuals from these organizations as a comparison group.

In addition, the reference group theory has maintained that differences between the self-concepts of black students in integrated and segregated school settings are related to the students' academic success relative to the success of their reference group. Brookover and

Passalacqua (1981) found that while black students in predominantly white schools performed better on achievement tests than black students in segregated schools, their performance was still lower than that of their white peer group. They suggested that the grades alone were not so important but students' grades relative to the grades of their reference group were the important factor in determining the influence of academic ability on their self-concepts. Therefore, even though black students in integrated schools may score higher than blacks in segregated schools, their academic performance relative to that of their comparison groups may be lower. Similarly, Rosenberg and Simmons (1972) found that in the segregated schools they surveyed, less than 32% of the student population had a grade of a B or greater. By comparison, over 50% of the students at the predominantly white schools surveyed had a B average. Therefore, in a segregated school, a B may be more outstanding and prestigious than in an integrated school setting.

Additionally, Brookover and Passalacqua (1981) and Rosenberg and Simmons (1972) have noted that high achieving blacks in segregated settings are more likely to receive more praise, encouragment, and approval than black students in white schools. Thus, the esteem associated with success in predominantly black schools may be lacking for blacks in the integrated settings. In view of these findings and previous findings (see Wylie, 1979) related to the relationship between the self-concept and academic performance, one might assume that black students in integrated schools would receive higher self-concept scores. However, as indicated previously, this effect has not been substantiated by the data.

Consequently, Brookover and Passalacqua (1981) have argued that comparisons relating the self-concept to academic achievement should not be made between blacks in integrated and segregated schools. They further maintained that the evaluations of school performance are different and the norms for achievement are not the same in the two settings. Therefore, they suggested that the "self-concept of achievement as expressed in one social system is ... not comparable to the self-concept of achievement in another social system" (p. 292). They suggested that further research should attempt to identify the aspects of these environments which may account for the differences obtained.

The research presented here does not confirm many of the social views concerning the effects of segregation and integration on the self-concept of black students. Wylie (1979) has concluded that the most methodologically sound studies have shown a positive correlation between segregation and the self-concepts of black students.

Summary. The hypotheses and theories reviewed all attempt to explain the influence of integration and segregation on the self-concepts of black students. Though the primary focus here have been on the the effects of integration on black students, these theories may be used to explain the influence of minority group membership on self-concept for other minority groups, and females, as well. They all have assumed that the minority experience will exhibit an influence on individuals' self-concepts. However, they differ in their explanations of this effect. The insulation hypothesis has assumed that the integrated environment will have an adversive effect on black students only if they hold sustained interactions with whites in that

environment. In contrast, the distinctiveness theory has stated that integration will have an effect on black students' self concept any time they are placed in a minority situation and aware of their minority status. This theory has maintained that transient as well as sustained interactions regardless of the types of interactions, will influence blacks' perceptions of themselves. Finally, the reference group theory has assumed that an integrative experience will have no effect on black students' self-concept whether they have sustained or temporary interactions with their white counterparts. Further research is necessary to ascertain the conditions under which minority group membership will exert a negative influence on the self-concepts of the members of the group and the extent to which this influence is explained by the theories previously discussed.

Statement of the Problem

The study investigated the degree to which differences in the self-concept scores of black college students in predominately black or white college environments would be influenced by experimentally manipulating the distinctiveness of the race of their comparison group, and hence the distinctiveness of their own race during an experimental task. The purpose of this manipulation was to determine the degree to which the results could be explained by the insulation hypothesis (Rosenberg and Simmons, 1972), distinctiveness theory (McGuire and McGuire, 1981), and the reference group theory, specifically the recent theory.

Previous studies by Brookover and Passalacqua (1981), Wylie (1979), and others (Rosenberg and Simmons, 1972; McGuire and McGuire, 1981) have shown that black students attending predominantly black or segregated schools score higher on self-concept and self-esteem measures than black students attending predominantly white schools. These researchers have postulated that lower self-concept scores of blacks in predominantly white schools are the result of negative discrepancies between the black students and their comparison groups. They have disagreed, however, in their identification of the comparison group and the nature of the discrepancy between the black students and their comparison group. On the one hand, the insulation hypothesis has stated that black students in an integrated schools use white students against which they measure their abilities and performance. These comparisons usually inhibit the development of a relatively positive self-concept. This hypothesis would predict lower self-concept scores for blacks at predominantly white schools when compared to blacks a predominantly black schools. This hypothesis further assumes that transient manipulations of the distinctiveness of their race for black students would not have an effect on their self-concepts since it is the prolonged effects of the integrated environment that influence black students' self-concepts.

On the other hand, the distinctiveness theory has proposed that both sustained and transient interactions between black and white students may have an effect on the self-concept of of black students if they are in the minority. The distinctiveness theory has assumed that race will have an effect on students' self-concepts if it is a variable that distinguishes them from their reference group. As indicated

earlier, this perspective would suggest that only certain aspects of the self-concept, i.e., those that are most distinctive would have an effect on the self-concept.

In contrast some theorists (Wells, 1978; Epps, 18972; Harper, 1975) have suggested that differences between the two groups of black students may be related to their feelings of isolation and alienation from the white population. The later reference group theory has not assumed that black students compare themselves to whites but rather to other black students that they interact with or with blacks in general (Wells, 1978). Harper (1975) and Epps (1972) have suggested that black students in integrated schools very seldom become well integrated into their surroundings. Rather black students form black organizations and associations with other black students. These organizations serve as an interaction group for blacks and a comparison group upon which they may judge their abilities. Therefore, this theory would predict no differences in the self-concept scores of black students in predominantly white schools and black students in predominantly black schools.

Finally, the present study was designed to ascertain the relationship between students' self-concepts, sex, SES, and academic ability as measured by their academic performance. As indicated earlier, these variables are assumed to have an effect on students' self-concepts.

The Present Study

In the present study, 120 black female and 120 black male college students served as volunteer subjects. These students were obtained from a predominantly white university, University of North Carolina at Greensboro (UNC-G) and a predominantly black university, North Carolina A&T State University (A&T). Sixty males and 60 females were obtained from each college campus.

During Part 1 of the study, background information was obtained and the TSCS was administered. In Part 2, the subjects were randomly assigned to one of three experimental conditions. Subjects in Group 1 were paired with a same-sex black confederate and performed a symbol cancellation task. Subjects in Group 2 were paired with a same-sex white confederate and performed the same task. Subjects in Group 3, the control group, performed the task alone. The TSCS was then readministered to all subjects.

The experimental hypotheses lead to several predictions. Based on the assumption of the insulation and distinctiveness hypotheses, which would predict lower self-concept scores for black students in integrated schools, it was predicted that:

1) Black students attending UNC-G would score lower on the TSCS pre-test than A&T students.

In conjunction with findings from Bem and Bem (1970), and Rosenkrantz (1968), and Ross (1975) which have indicated sex differences when measuring subjects' self-evaluations, it was further predicted that:

2) Males would score higher on the TSCS

pre-test than females.

In view of the possibility that both race and sex would be a distinctive feature at UNC-G, a predominately female campus, it was predicted that:

3) The male-female differences would be greater for UNC-G students than for A&T students.

Based on the assumptions of the distinctiveness theory which assumes that race will exert an influence on subjects' self-concepts when it is the salient or distinctive variable between the students and their comparison group, it was predicted that:

4) The TSCS post scores would be lower for subjects paired with a white confederate, Group 2, than subjects paired with a black confederate, Group 1, or the control group, Group 3.

5) The campus and sex effect predicted to be significant in the pre-test scores would no longer be significant during the post-test scores due to the experimental manipulation.

6) The pre-scores for A&T students in Group 2 would be higher than their post scores since race was a distinctive variable for this group. No differences were expected between the pre and post scores for Group 1 and Group 3.

7) In parallel, the pre-scores for UNC-G students would be higher than the post scores for those students in Group 1 that compared themselves against a similar other. Here, no differences were predicted for Groups 2 and 3.

8) Students in Group 2 would rate their performance lower on the symbol cancellation task than students in Groups 1 and 3.

These formal hypotheses relate primarily to the overall self-concept as measured by the Total Positive Self-Concept Scale on the TSCS, especially if the insulation hypothesis and the reference group theory predictions are correct. However, if the distinctiveness theory is more adequate, it seems probable that only salient aspects of the self-concept would change as a result of the experimental manipulation. Though not enough research has been done to predict how each sub-scale on the TSCS should change, some obvious candidates are the Physical Self and Social Self Scales which measure the external influences on the self, and the Self-Satisfaction and Behavior Scales which measure the internal dimension.

Finally, while no formal hypothesis was offered, the author investigated the relationship between students' self-concepts, socio-economic status, and past and present academic performance based on their previous SAT scores and high school and current college grade point averages.

CHAPTER II

METHOD

Subjects

Two hundred and eighty-three undergraduate students, 152 from the University of North Carolina at Greensboro (UNC-G) and 131 from North Carolina Agricultural and Technical State University (A&T) participated in the first part of this study. From this group, two hundred and forty students completed the second phase of the experiment. Therefore, the final subject population consisted of 120 students from each college campus, with 60 males and 60 females from each campus.

Data from the remaining 43 students were not analyzed since 12 students failed to meet the requirements of the study and the remaining 31 failed to complete the second phase of the study. Five students from A&T and seven students from UNC-G were dropped from the experiment because they did not meet the requirements of the study. The overall subject no show rate during the second phase of the experiment was greater for UNC-G students (n=25) than A&T students (n=6). This effect may have resulted from the manner in which the students committed themselves to participate in the experiment. UNC-G students, although obtained through campus organizations, volunteered to participate on an individual basis. Conversely, most A&T students were affiliated with a campus organization in which the members as a group agreed to participate. Thus the experimenter had no direct interactions with most of the A&T students prior to the initial session.

Students participating in this study were obtained with the cooperation of UNC-G and A&T student organizations and various faculty members from A&T. The majority of the students participated in the study on a volunteer basis. However, four female students from A&T received partial credit towards their course requirements for their participation in the study. These students were not aware of this fact until after they completed the experiment.

To insure a certain amount of homogeneity within the subject population, the age and the minimum number of years that the students had attended their universities were restricted. The students' ages ranged from 18 to 23. The mean age for the subject population was 20.36, with a mean of 20.08 and 20.57 for UNC-G and A&T students, respectively. The students were required to have attended the perspective universities for a minimum of one year. Overall, the students had spent an average of 3.00 years at their universities. The mean for UNC-G students was 2.85, while it was 3.15 for A&T students.

Experimenters

A black female (the author) and a black undergraduate male served as experimenters. The female administered the initial questionnaire and gathered background information from the female subjects. The male experimenter obtained background information from the male subjects. While the female experimenter did not administer the forms, she was present for the initial experimental session with the male subjects.

During the second phase of the study, the subjects were assigned to the same sex experimenter. Due to an illness, however, the last four males were assigned to the female experimenter. However, no apparent differences in their performance were detected due to the sex of the experimenter.

Confederates

Six students, one black female, two white females, two black males, and a white male served as confederates during the second session. One female confederate was aware of the experimental predictions, the rest were blind to the hypotheses.

Materials

The Hollingshead Two Factor Index of Social Position, ISP, (Healey, 1974), the Tennessee Self-Concept Scale, TSCS, (Fitts, 1965), and a symbol cancellation task (Dolan, 1982) were employed as assessment measures.

The ISP was used to assess the subjects' socio-economic status (SES). The students' socio-economic status was based on the status of their parents, specifically the head of the household.

The ISP is based on the assumption that individuals' SES may be obtained from their precise occupational role and the amount of formal education they have attained. A single score is assigned to each factor which is then scaled and weighted. The two scores are then added together and a single score is obtained. Low scores on the ISP represent higher socio-economic positions.

Based on the score obtained, subjects were assigned to one of five social classes. These classes ranged from major professional positions, such as corporate presidents and federal officials, to share croppers. Assignment of the five social classes were determined as follows:

Social class I:	Scores ranging from eleven to fourteen.
Social class II:	Scores ranging from fifteen to twenty-seven.
Social class III:	Scores ranging from twenty-eight to forty-three.
Social class IV:	Scores ranging from forty-four to sixty.
Social class V:	Scores ranging from sixty-one to seventy-seven.

The ISP is based on the assumption that there exists a positive correlation between people's social class and their social behavior. It is assumed that there is a significant difference in the social behavior of individuals from one economic level and those from another level. This assumption has been validated by factor analysis and the use of the ISP as a social index measure has been validated by previous studies (Gaier & Wambach, 1960; Healey, 1974).

The TSCS was used to assess each subject's overall self-concept level (Total Self-Concept) as well as single components of the self-concept. The subjects were assessed on fourteen different components of the self-concept using the Clinical Research Form of the TSCS. The scales employed are described below.

1. Total Positive Scale: Measures subjects' overall level of self-esteem. Low scores on the scale are associated with low self-confidence and low self-acceptance or

self-worth. High scores are associated with self-assurance and confidence and adequate feelings of self-worth.

2. Identity Scale: Pertain to how the individuals perceive themselves.

3. Self-Satisfaction Scale: These items measure the individuals' general attitudes about their perceptions of their behavior.

4. Behavior Scale: Measures the individuals' self-description about their behavior.

5. Physical Self Scale: These items pertain to the individuals' perceptions of their physical appearance, sexuality, and health.

6. Moral-Ethical Self Scale: These items measure the moral, ethical, and religious aspects of the individuals.

7. Personal Self Scale: These items deal with individuals' perceptions of their own adequacy or worth.

8. Family Self Scale: These items pertain to the relationship between individuals and their family and their perception of themselves as family members.

9. Social Self Scale: These items describe people's general sense of adequacy or worth in their interactions with others.

10. Variability Scale: These items measure the amount of inconsistency from one area of self-perception to another.

11. Distribution of Response Score: Is a measure of the amount of certainty with which the individuals view themselves. The score provides a summary statement of the distribution of the persons' responses across the five response categories.

12. Net Conflict Score: Measures the individuals efforts to consistently respond to either the positive or negative statements. This score

reflects the amount and direction of conflict within the individuals. It is an indication of their tendency to agree or disagree with the items regardless of the content.

13. Self Criticism Score: Reflects the individuals' efforts to represent themselves in a socially acceptable manner. "High scores generally indicate a normal, healthy openness and a capacity for self-criticism... Low scores indicate defensiveness, and suggest that the Positive Scores are probably artifically elevated by this defensiveness." (Fitts, 1965; p.2)

(Definitions taken from Fitts, 1965; Healey, 1974).

On the TSCS positive sub-scales, a low score represents a low self-concept while a high score represents a high positive self-concept.

The symbol cancellation task The TSCS was used as an objective measure of subjects' performance. One reason for employing such a task was that it is less sensitive to the influence of subjects' sex and previous learning experiences than other tasks. Similar tasks have been employed by Dolan (1982).

The symbol cancellation task consisted of four target symbols which were embedded within the rows of symbols. The subjects were asked to scan each row and mark out the target symbols. At the end of each line they were asked to write down the number of symbols in the row. Errors that occurred in identifying the symbols (marking errors) and the total number of symbols in each line were recorded. An example of the practice task and actual task are presented in Appendix C.

Procedure

The experimenters visited several different student organizations and classes to obtain student volunteers. After introducing themselves and informing the students of their purpose, the experimenters gave a brief description of the experiment. See Appendix A. No information concerning the experimental hypotheses was given. Those students interested in participating in the study left their name and number with the experimenters. These students were later contacted by the male or female experimenter to arrange a time for the first session.

During the first session, the TSCS was administered on a group basis, and background information was obtained from males and females, separately. (The Background Information and GPA Information forms are presented in Appendix B).

In the second phase of the study, subjects were randomly assigned to one of three experimental conditions in which they competed against: a) a same-sex black partner; b) same-sex white partner; or c) performed the task alone (control group).

After completion of the task, subjects in the experimental groups were asked to rate their performance based on how well they think they did relative to the performance of their partners. The Self-Rating Form is presented in Appendix B.

The TSCS was then re-administered to all subjects. After completing the scale, subjects were debriefed about the experimental hypothesis and questions concerning the experiment were answered. The Debriefing Statement and experimental instructions are presented in Appendix C.

Independent and Dependent Variables

The experimental design was a 2x2x3x2 fixed factor design with one repeated measure. The independent variables were college campus (2), sex of student (2), experimental conditions (3), and pre-post-test (2). The dependent variables were the subjects' self-concept scores, measured on two different occassions, (the with-in subjects' factor), performance errors, and their self-ratings of their performance. Students' SAT scores, SES, and high school and college GPA's were covariates. A diagram of the experimental design is presented in Table 1.

CHAPTER III

RESULTS

Data were collected and analyzed on the thirteen TSCS pre and post sub-scales, subjects' ratings of their performance on the task, the total number of errors occurring on the task, and the type of errors (marking or counting) which occurred. Data on the subjects' high school and college grade point averages, SAT scores, and socio-economic status were also analyzed. Subjects' SES information was analyzed in greater detail to determine whether differences existed in the familial backgrounds of A&T and UNC-G students. While these variables were not associated with any of the experimental hypotheses, they were analyzed to aid in the discussion of the obtained results.

A 2x2x3 analysis of covariance was performed on each of the TSCS pre and post sub-scale scores and subjects' self-ratings. The covariates were subjects' SAT scores, high school and college grade point averages, and SES. A 2x2x3 analysis of variance was conducted on the total number of errors, marking errors, counting errors, SES, and on each aspect of the subjects' academic performance. In order to account for significant group main effects and group interactions obtained on the TSCS pre-scores, difference scores (pre-scores minus post-scores) were computed and subjected to an analysis employing a multivariate analysis of covariance.

The Scheffe Post Hoc test (Ferguson, 1976) was employed to analyze significant interaction effects. The results are discussed relative to the dependent variables and experimental hypotheses. In one instance, when discussing the MANOVA results on the difference scores, significant univariate results are discussed while the overall MANOVA results were not significant. The reader is cautioned about the inferences and generalizations generated due to the lack of overall MANOVA support. In addition, since the occurrence of a Type 1 error may have influenced the results obtained for hypotheses 4, 5, and 6, the reader is cautioned about the conclusions generated especially in view of an insignificant Total Self-Concept Score.

Self-Concept Scores

TSCS Pre-Scores. The analyses of covariance conducted on the thirteen TSCS sub-scales revealed several significant outcomes. The results of the analyses are discussed relative to the experimental hypotheses to expedite the discussion.

Hypothesis 1: Black students attending UNC-G would score lower on the TSCS Total Self-Concept scale pre-test than A&T students. The analyses of covariance conducted on the TSCS Total Self-Concept sub-scale revealed no significant differences between the two groups $F(1,224)= 0.29$. However, significant differences were obtained on several sub-scales.

The analyses of covariance performed on the TSCS pre-scores indicated significant campus effects on the Social, $F(1,224)=7.89$, $p<.006$; and Physical Self sub-scales, $F(1,224)=5.09$, $p<.025$. According to the results, A&T students scored higher on the Physical sub-scale ($M=75.87$) than UNC-G ($M=69.05$). This result was consistent with the first experimental hypothesis which predicted that A&T students would score significantly higher than UNC-G students on the TSCS.

In contrast to the prediction, UNC-G students scored higher on the Social Self sub-scale ($M=67.60$) than A&T students ($M=65.20$). In addition, no significant campus differences were obtained on the Total Self-Concept Scale or the other TSCS suc-scales. Thus, the first experimental prediction was only marginally confirmed by the data.

Hypothesis 2: According to the second prediction, males would score higher on the overall self-concept than females, as well as on other sub-scales. Again, the analysis of covariance conducted on the Total Self-Concept sub-scale revealed no significant difference between the two groups.

However, a significant sex effect was obtained on the Moral-Ethical $F(1,224)=15.05$, $p<.0001$; Family, $F(1,224)=10.05$, $p<.002$; Social, $F(1,224)=5.45$, $p<0.20$; Self-Criticism, $F(1,224)=8.79$, $p<.003$; Behavior, $F(1,224)=6.18$, $p<.015$; Identity, $F(1,224)=13.10$, $p<.0001$; Total Variability, $F(1,224)=4.64$, $p<.032$; and the Distribution Score, $F(1,224)=7.32$; $p<.007$, sub-scales.

The results indicated that females scored higher than males on the Moral-Ethical (M=69.50, M=64.75), Family Self (M=65.91, M=65.34), Social Self (M=67.75, M=65.05), Self-Criticism (M=33.02, M=36.93), Identity (M=123.12, M=117.56), Behavior (M-113.09, M=107.75), Total Variability (M=52.20, M=48.93), and the Distribution Score (M=120.32, M=112.29) sub-scales. These results are in direct opposition to the second experimental hypothesis which predicted that males would score significantly higher than females on the TSCS pre-scores. Thus, prediction two was not confirmed by the experimental results.

Hypothesis 3: The third experimental hypothesis predicted that the significant sex differences obtained on the TSCS sub-scales would be greater between UNC-G males and UNC-G females than between A&T males and females. The results indicated a significant campus by sex interaction on the Total Self-Concept sub-scales, $F(1,224)=5.40$, $p<.021$. Further analyses using the Scheffe Post Hoc Method found that UNC-G females scored significantly higher (M=346.77) than UNC-G males (M=325.30) on the overall self-concept sub-scale. While the experimental hypothesis predicted that the discrepancies in scoring would be greatest between UNC-G subjects than A&T subjects, it was assumed that UNC-G males would score higher than UNC-G females. As indicated previously, the prediction was not confirmed.

Significant campus by sex interactions were also obtained on the following sub-sales: Family, $F(1,224)=17.23$, $p<.0001$; Social, $F(1,224)=15.52$, $p<.0001$; Identity, $F(1,224)=36.48$, $p<.0001$; Behavior, $F(1,224)=4.38$, $p<.038$; Self-Satisfaction, $F(1,224)=4.91$; $p<.028$ and the

Net Conflict, $F(1,224)=10.99$, $p<.001$. The significant interactions were further analyzed using the Scheffe Method.

In partial support of the experimental hypothesis, the analyses indicated a significant difference (=.01) between UNC-G females and UNC-G males, respectively on the Family (M=70.77, 62.72), Social (M=70.97,64.23), Identity (M=128.78, 112.80), and the behavior (M=113.23, 104.15) sub-scales.

In contrast to the experimental prediction, the results indicated significant differences (=.01) between the means on the Self-Satisfaction, Identity, and Net-Conflict sub-scales for A&T females and males. The means for females and males were as follows: Self-Satisfaction (M=113.90, 108.50), Identity (M=114.23, 128.78) and Net Conflict (M=10.57, 2.52). In addition, A&T females scored higher than UNC-G females on the Self-Satisfaction Scale (M=113.90, 109.60). No other significant differences were obtained.

In summary, the results of the significant campus by sex interactions provided partial support for prediction three. Though some significant differences were obtained between the A&T males and females, the discrepancies between UNC-G males and females were consistently higher, as indicated by the significant Total Self-Concept pre-test mean differences.

TSCS POST SCORES.

The analysis of covariance performed on the TSCS post-scores indicated several significant findings. The results of the analyses are discussed relative to hypothesis four and hypothesis five.

Hypothesis 4: According to hypothesis four, the post-test scores for the TSCS would be lower for subjects paired with a white confederate, Group 2, than subjects paired with a black confederate, Group 1, or the control group, Group 3. The analysis of covariance performed on the Total Self-Concept sub-scale indicated no significant group differences. Thus the hypothesis was not supported by the results from subjects' overall self concept measure.

However, significant group main effects were obtained on the following sub-scales: Self-Criticism, $F(2,224)=6.47$; $p<.002$; Identity, $F(2,224)=5.61$; $p<.004$; and Self-Satisfaction, $F(1,224)=3.55$; $p<.030$. The post hoc analysis conducted on the Self-Criticism sub-scale means indicated that subjects in Group 1 (M=30.91) and Group 2 (M=31.05) scored significantly lower (=.05) than subjects in Group 3 (M=33.99). These results were consistent with the results obtained on the Self-Criticism pre-test.

In parallel, the post hoc analysis performed on the Identity sub-scale means revealed that subjects paired with a white confederate scored lower (M=116.75) than subjects paired with a black confederate (M=120.26) and in the control group (M=123.31). This difference was significant at or below the .05 level. While the group effect was significant on the Identity sub-scale pre-test, also, the nature of the significant effect differed. The significant difference obtained between Group 1 and Group 3 present in the pre-test was not significant on the post-test.

The significant effect obtained on the Self-Satisfaction sub-scale post-test was not found on the pre-test. Further analysis using the Scheffe Method indicated a significant difference between the control group (M=105.51) and subjects paired with a black or white confederate (M=110.16, 110.28, respectively). These results are inconsistent with the fourth prediction.

In summary, the analysis of covariance performed on the TSCS post-test did not confirmed prediction four. While the prediction was not confirmed by the overall self-concept measure, the Identity sub-scale proved sensitive to the experimental manipulation and provided limited support for hypothesis four.

Hypothesis 5: The fifth hypothesis assumed that the campus and sex differences significant in the pre-test would not be significant on the post-test due to the treatment manipulation. The hypothesis predicted no significant campus or sex effects on the post-test. This hypothesis was not confirmed by the data. The analysis of covariance conducted on the TSCS sub-scale post-test revealed a significant campus effect on the Self-Satisfaction, $F(1,224)=6.73$; $p<.009$; sub-scale. These differences were not significant on the TSCS sub-scale pre-test. The results indicated that A&T students scored significantly higher (M=111.43) on the Self-Satisfaction sub-scale than UNC-G students (M=105.86). This change was not due to an increase in the scores for A&T students but a decrease in the scores of UNC-G students.

In parallel, the post-hoc analysis revealed a significant sex effect on the following sub-scales: Moral-Ethical, $F(1,224)=15.99$, $p<.0001$; Family, $F(1,224)=8.15$, $p<.005$; Social, $F(1,224)=4.52$, $p<.035$; Self-Criticism, $F(1,224)=3.99$, $p<.032$; Identity, $F(1,224)=18.64$, $p<.0001$; and Behavior, $F(1,224)=4.83$, $p<.029$. These findings were consistent with the pre-test findings. Thus, the significant sex effect obtained on the TSCS sub-scales' post-test did not support the experimental hypothesis.

The analysis of covariance conducted on the TSCS sub-scale post-test revealed a significant campus by sex interaction on the Total Self-Concept Scale, $F(1,224)=10.18$; $p<.002$. This effect was consistent with the results obtained on the TSCS pre-test. Therefore, prediction five was not confirmed by the results from subjects' overall self-concept measure.

In addition, a significant campus by sex interaction was also obtained on the following TSCS sub-scales: Moral Ethical, $F(1,224)=5.10$; $p<.025$; Personal, $F(1,224)=4.71$; $p<.031$; Family Self, $F(1,224)=25.87$; $P<.0001$; Social, $F(1,224)=13.56$; $p<.0001$; Identity, $F(1,224)=38.87$; $p<.0001$; Behavior, $F(1,224)=6.47$; $p<.012$; and Net Conflict, $F(1,224)=9.33$); $p<.003$. Again, these results are consistent with the TSCS pre-test results and inconsistent with the fifth prediction.

Finally, the significant sex by group interaction (Table 24) and the campus by sex by group interaction (Table 25) obtained on the TSCS post-test did not confirm the present hypothesis. Thus, based on the TSCS post-test, hypothesis five was not confirmed by the data.

TSCS DIFFERENCE Scores.

In view of all the pre-task group differences, an analysis of covariance was conducted on the TSCS difference scores with the TSCS sub-scale pre-scores as covariates. Again the results are presented relative to the independent variables and the experimental hypotheses associated with those variables.

Hypothesis 6 and 7: According to hypothesis six the pre-test scores for A&T students in Group 2 (white partner) would be higher than their post-test scores since race was a distinctive variable at the time of the post-test. In conjunction with this hypothesis, hypothesis seven assumed that the pre-test scores for UNC-G students in Group 1 (black partner) would be lower than the post-test scores since race was not a distinctive variable at the time of the post-test.

The Manova performed on the difference scores indicated a significant campus by group interaction for the Total Positive Self-Concept Scale, $F(2,208)=3.71$, p .026. The post hoc comparisons performed on these scale means indicated the following differences.

The results from the mean comparisons performed on the Total Self-Concept Scale indicated that: 1) UNC-G students in Group 2, (white partner), scored higher (=.05) on the pretest (M=844.58) than on the post-test (M=338.83); 2) A&T students in Group 2, (white partner), scored higher (=.01) on the post-test (M=337.88) than they did on the pre-test (M=333.55); and 3) A&T students in Group 3, (control group), scored higher (=.01) on the pre-test (M=350.18) than they did on the post-test (M=342.6). No other significant differences were obtained

between the means.

Significant campus by group interactions were also obtained on the following sub-scales: Physical Self, $F(2,208)+3.58$, $p<.03$; Social Self, $F(2,208)=5.31$, $p<.006$; Identity, $F(2,208)=3.70$, $p<.026$; and Self-Satisfaction, $F(2,208)=3.22$, $p<.042$. Post hoc comparisons were performed on all significant interactions. Differences are significant at or below the .05 level of significance.

The results obtained from the analysis of the Physical Self Sub-Scale indicated that: 1) A&T students in Group 3 scored higher on the pre-test (M=71.95,) than on the post-test (M=68.85); 2) UNC-G students in Group 2 scored higher on the pre-test (M=73.26) than on the post-test (M=67.78).

The results obtained from the analysis of the Identity Self Sub-Scale means found the following differences at or below the .05 level. UNC-G students in Group 3 scored higher on the pre-test (M=126.30) than on the post test (M=119.19). In addition, A&T students in Group 2 scored higher on the pre-test (M=122.30) than on the post test (M=119.43). See Figure 3.

The results for the Social Self Sub-Scale (Table 37) indicated that: 1) A&T students in Group 1 (M=68.08) and Group 2 (M=62.30) scored higher on the pre-test than on the post-test (M=65.75,60.85); and 2) A&T students in Group 3 scored higher on the pre-test (M=67.60) than on the post-test (M=63.92).

The post hoc comparisons performed on the Self-Satisfaction Sub-Scale means revealed the following significant differences at or below the .05 level of significance. The results indicated that: 1) A&T students in Group 1 scored higher on the post-test (M=114.33) than on the pre-test (M=112.03); 2) A&T students in Group 3 scored higher on the pre-test (M=110.38) than on the post-test (M=107.30); 3) A&T students in Groups 1 and 2 scored higher on the post-test (M=114.33, 112.65) than A&T students in Group 3 (M=107.30); 4) A&T students in Group 3 scored higher (M=107.30) than UNC-G students in Group 3 (M=103.73); and 6) UNC-G students in Groups 1 and 2 scored higher on the post-test than UNC-G students in Group 3. The previous effect was also obtained on the pre-scores.

In summary, the significant campus by group interactions obtained on the TSCS sub-scales revealed several important findings. First, UNC-G students in Group 2 (white partner), generally scored lower on the post-test sub-scales, as indicated by the significant difference obtained on the Total Self-Concept Score. Second, A&T students in Group 2, (white partner), scored higher on the post-test on the Family Sub-Scale. However, no significant differences were obtained between the pre- and post-scores on the other TSCS sub-scales. Third, A&T students in Group 1, (black partner), generally scored higher on the TSCS post-test than on the pre-test. This effect is indicated via the significant difference between the pre- and post-scores on the Total Self-Concept. Though not significant, a similar trend was indicated for UNC-G students in Group 1, (black partner). Finally, UNC-G students in Group 3, (control group), generally scored higher on the pre-test than

on the post-test.

The previous findings provided limited support to prediction six. According to prediction six, A&T students in Group 2 would score higher on the pre-test than on the post-test. No differences were expected between the pre- and post-scores for Groups1 and 3. As indicated by the results, A&T students in Group 2 did score higher on the Identity Self Sub-Scale. However, no other significant differences were obtained. Additionally, A&T students in Group 1 scored significantly higher on the TSCS post-test which is in direct opposition with prediction six. Thus, prediction six has only limited support based on the findings.

In parallel, hypothesis seven predicted that UNC-G students in Group 1 would score higher on the post-test than on the pre-test. While this trend was indicated in the data, it was not significant. In addition, there was a significant difference between the pre- and post-scores for UNC-G students in Group 3. Thus, prediction seven was not confirmed by the data.

Subjects' Performance Ratings

Hypothesis 8: The final experimental hypothesis predicted that subjects paired with a white confederate would rate their performance lower on the symbol cancellation task than subjects paired with a black confederate. The results of the analysis of covariance performed on the subjects' ratings revealed a significant campus main effect, $F(1,148)=9.83$, $p<.002$, and group main effect, $F(2,148)=15.59$, $p<.0001$. The results also indicated significant campus by group, $F(2,148)=4.27$, $p<.040$, sex by group, $F(2,148)=6.36$, $p<.013$, and campus by sex by group,

$F(2,148)=7.48$, $p<.007$, interactions.

The results indicated that UNC-G students rated their performance less favorably (M=2.87) than A&T students (M=2.60). Similarly, subjects paired with a black partner (Group 1) rated their performance more favorably (M=2.53) than subjects paired with a white partner, Group 2, (M=2.98). This effect was consistent with the experimental hypothesis.

The post hoc comparisons performed on the significant interaction effects revealed the following differences. The results of the analysis of the campus by groups interaction means indicated that: 1) A&T students in Group 1, (black confederate), (M=2.46) rated their performance more positively than A&T students in Group 2 (M=2.75), and UNC-G students in Group 1, (black confederate) (M=2.53), and Group 2, (white confederate) (M=3.20); and 2) UNC-G students in Group 2, (white confederate) (M=3.20) rated their performance less favorably than all other students.

The analysis of the sex by group interaction means found that males in Group 1, (black confederate), (M=2.30) rated their performance more favorably than Group 2 males (M=3.05), females in Group 1, (black confederate), (M=2.75), and Group 2, (white confederate), (M=2.90). than males in Group 2 (M=3.05). No significant differences were No significant differences were indicated between females in Groups 1 and 2, or between males and females in Group 2.

The post hoc comparison performed on the campus by sex by group interaction means indicated that A&T males in Group 1 (M=2.05) rated their performance more favorably than all other experimental groups. UNC-G males in Group 1 (M=2.55) rated their performance more favorably

than UNC-G males and females in Group 2 (M=3.20, 3.25), A&T females in Group 1 (M=2.90), and A&T males in Group 2 (M=2.90). In addition, A&T females in Group 2 (M=2.60) rated their performance more positively than A&T females in Group 1, A&T males in Group 2, and UNC-G males and females in Group 2. Finally, UNC-G males (M=3.20) and females (M=3.25) rated their performance less favorably than all other experimental groups.

In summary, the results of the campus by sex by group interaction for the performance ratings indicated that A&T and UNC-G males in Group 1 rated their performance more positively than all other groups. In contrast, UNC-G males and females in Group 2, (white partner), rated their performance less positively than all other experimental groups.

Subjects' Error Results

To ascertain whether the subjects' performance ratings were reflective of their actual performance on the task, an analysis of variance was conducted on each category of subjects' errors. Subjects' errors were divided into three categories: counting errors, marking errors, and the total number of errors incurred on the task. The results are presented below.

Counting Errors. The ANOVA performed on the counting errors, errors made due to an error in counting and/or failing to complete the task, found a significant campus main effect, $F(1,148)=3.29$, $p<.004$.

The results of the campus effect indicated that UNC-G students (M=15.39) made a greater number of errors than A&T students (M=7.21Groups 1 and 2, respectively). The results of the group effect indicated that Subjects in the control group, Group 3, (M=15.43) made significantly more errors than subjects paired with a black confederate (M=8.24) or paired with a white subject (M=0.21)). This difference was significant at the .01 level of significance. No other significant differences were indicated.

Marking Errors. The ANOVA conducted on subjects' marking errors, errors occurring when the wrong symbols were cancelled out, indicated a significant group effect, $F(2,148)=3.66$, $p<.027$. The post hoc comparison indicated a significant difference between the control group (M=25.45) and Groups 1, (black partner), and 2, (white partner), (M=1.73,2.11). Again, no difference was indicated between those subjects paired with a black or white confederate.

Total Number of Errors. The ANOVA performed on the total number of errors, counting plus marking, revealed a significant group effect, $F(2,148)=5.68$, $p<.004$. The post hoc comparisons performed on the data revealed a significant difference (=.05) between the number of errors made by subjects in Group 3 (M=20.40) and the subjects paired with a black or white partner (M=4.99, 6.16). The results indicated a greater number of errors for subjects in Group 3 than in Group 1 or Group 2.

In summary, the results of the ANOVAs performed on the error scores found no difference between the performance of subjects paired with a black partner and a white partner (Groups 1 and 2). However, the control group (Group 3) made a significantly greater number of errors than subjects in the treatment groups. In addition, UNC-G students made more counting errors than A&T students. This effect was caused by the large number of UNC-G students who failed to complete the task.

In conclusion, the significant group effect obtained in the subjects' performance ratings was not based on their actual performance. However, the campus differences were directly correlated with subjects' actual performance. The results of the actual performance task showed that UNC-G students made significantly more errors than A&T students.

Correlation Effects

Covariate Effects for the TSCS Pre-Scores. The analysis of covariance performed on the TSCS sub-scale pre-scores indicated significant correlations between subjects' SAT scores, current college grade point averages (GPAs), and self-concept scores. Subjects' high school grade point averages and ISP scores were not significantly correlated with their self-concept scores.

The analyses indicated that subjects' SAT scores were significantly correlated with the Physical Self, $F(1,224)=7.02$; $p<.001$; Self-Criticism, $F(1,224)=3.92$; $p<.049$; and the Net Conflict, $F(1,224)=21.16$; $p<.0001$, sub-scales. A positive correlation was obtained between subjects' SAT scores and Self-Criticism score. The findings indicated that subjects with lower SAT scores scored higher on the

Physical and Net Conflict Self-Concept Scales. In contrast, subjects with high SAT scores scored higher on the Self-Criticism Scale.

The correlation between subjects' college grade point averages and self-concept scores were significant on the following sub-scales: Moral Ethical, $F(1,224)=10.78$; $p<.001$; Personal Self, $F(1,224)=11.63$; $p<.001$; Total Self-Concept, $F(1,224)=4.07$; $p<.045$; Personal, $F(1,224)=11.63$; $p<.001$; and Distribution Score, $F(1,224)=4.07$; $p<.045$. The results indicated that students with higher college GPAs scored higher on these sub-scales than students with low GPAs.

In summary, the results indicated a significant correlation between subjects' SAT scores, current college GPAs, and self-concept scores. In addition, the college grade point averages were correlated with more TSCS sub-scales than SAT scores.

Covariate Effects for the Performance Ratings. The analysis of covariance performed on the subjects' performance ratings indicated a significant effect for the covariates, SAT scores, $F(1,148)=7.54$; $p<.002$; and college grade point averages, $F(1,148)=4.90$; $p<.028$. The results indicated a negative correlation between subjects' SAT scores, college GPAs, and performance ratings. Those subjects with high SAT scores and GPAs rated their their performance on the cancellation task more favorable than those students with lower scores. (See Table 10 and 11).

Covariate Effects for the Error Results. The analysis of covariance conducted on the subjects' error scores found no significant correlation between subjects' performance on the cancellation task and the

covariates. See Table 30-32.

Academic Information

The analysis of variance performed on subjects' grade point averages and SAT scores revealed significant campus and sex differences within the subject population. The analysis of variance performed on subjects' high school grade point averages found a significant campus main effect, $F(1,224)=28.50$; $p<.0001$; and sex main effect, $F(1,224)=9.21$; $p<.003$. The results indicated that UNC-G subjects entered college with higher GPAs (M=2.99) than A&T students (M=2.72). Similarly, females had higher high school GPAs (M=2.93) than males.

The ANOVA performed on subjects' SAT scores also found a significant campus main effect, $F(1,224)=56.01$; $p<.0001$; and a sex main effect, $F(1,224)=8.41$; $p<.004$. A significant campus by sex interaction, $F(1,224)=7.89$; $p<.005$ was also indicated (Table 30).

Again, the results indicated a significant difference (=.01) between A&T and UNC-G students. UNC-G students had higher SAT scores (M=816.67) than A&T students (M=705.67). However, the sex results found higher SAT scores for males (M=782.67) than females (M=739.67).

The sex by campus interaction means found to be significant were analyzed further using the Scheffe Method. The results were indicated a significant difference between the following groups at or below the .05 level of significance. The findings indicated that: 1) A&T females' SAT scores (M=663.33) were significantly lower than the SAT scores of A&T males (M=748.00), UNC-G males (M=817.33), and UNC-G females (M=816.00); 2) The SAT scores of A&T males were significantly lower than the SAT

scores of UNC-G males and females. No other significant differences were obtained.

The ANOVA conducted on the subjects' college grade point averages at the time of testing indicated a significant campus main effect, $F(1,224)=65.24$; $p<.0001$ (Table 35). In contrast, to the subjects' pre-college academic success, the results revealed higher current grade point averages for the A&T students (M=2.58) than UNC-G students (M=2.11). No other differences were obtained. See Table 31.

In summary, the analyses of variance performed on the subjects' academic performance found significant differences between UNC-G and A&T students. UNC-G students possessed higher high school GPAs and SAT scores than A&T students. In contrast, A&T students possessed higher grade point averages at the time of testing than UNC-G students.

Index of Social Position Scores

The analysis of variance performed on the subjects' Index of Social Position scores (ISP) revealed a significant campus main effect, $F(1,224)=11.94$; $p<.001$; a sex main effect, $F(1,224)=3.78$; $p<.050$; and a campus by group interaction, $F(2,224)=3.13$; $p<.045$, (Table 33). The results indicated higher ISP scores for UNC-G students (M=47.33) than A&T students (M=39.97). In this instance, high ISP scores are indicative of a lower SES. Thus, the SES for A&T students was higher than the SES of UNC-G students. The ISP mean score for the A&T subjects was in Level III, while the ISP mean score for UNC-G subjects was in Level IV. Therefore, not only did A&T students rank higher than UNC-G students in term of their socio-economic position, but they were in different

socio-economic levels based on the ISP Tables, (See Table 38).

The post hoc comparisons performed on the campus by group interaction means found to be significant indicated lower ISP scores for A&T students in Group 2 (M=35.55) than for any other experimental group. Similarly, UNC-G students in Group 3, A&T students in Group 1, and Group 3 (M=43.53, 43.40, 40.95) scored significantly lower than UNC-G students in Groups 1 and 2 (M=48.55,51.15). These differences were significant at or below the .05 level of significance. No other significant differences were found.

In summary, A&T subjects ranked higher than UNC-G subjects relative to their socio-economic status. The SES difference is directly correlated with the sex and educational level of the head of households for the subjects. In parallel, females ranked higher in term of socio-economic status than males. Finally, the results indicated that A&T students in Group 2 ranked higher on social standing, while UNC-G students in Group 1 and 2 ranked lower than any other groups.

CHAPTER IV

DISCUSSION

The purpose of the present study was to investigate the degree to which the self-concept scores of black college students are influenced by the racial make-up of their college environment, and the experimental manipulation, which varied the distinctiveness of their race. The study investigated the degree to which the results could be efficiently explained by the insulation hypothesis, the distinctiveness theory, and the later reference group theory. In addition, the study examined the relationship between subjects' self-concepts, SES, and past and present academic performance utilizing subjects' SAT scores, high school and college grade point averages.

The results of the study provided support for several experimental predictions and are presented below. Characteristics of the subject population which might have accounted for the nature of the results and the experimental design are also presented. Finally, recommendations for future research are suggested.

Predictions of the Study

Several predictions proved significant in this study. First, prediction one was partially confirmed by the results. According to the first prediction, UNC-G students would score lower on the TSCS pre-scores than A&T students. This prediction was based on the assumptions of both the insulation hypothesis and the distinctiveness theory. The results indicated that UNC-G students scored lower on the Physical-Self Sub-Scale. However, UNC-G students scored higher on the Social-Self Sub-Scale than A&T students. In addition, no other sub-scales indicated a difference between the two groups. These latter results are in direct opposition to the previous theories. While the insulation hypothesis does not provide an adequate explanation of these results, the distinctiveness theory does. Assumptions generated by this theory may be used to explain the findings on the Social Sub-Scale.. Epps (1972) and Allen (1981) have reported that most black students in predominantly white school settings tend to rate themselves as being more socially outgoing than their white counterparts. This effect may be due in part to the attitudes black students generally hold about their white counterparts.

The low pre-scores obtained on the Physical-Self Sub-Scale would be indicative of a negative influence of race on their concept of physical beauty. This difference occurred between the two groups since that variable was more distinctive for UNC-G students when they compare themselves to the rest of the population. In addition, the direction of these results are consistent with blacks attitudes toward physical appearance. Previous findings have shown that blacks have historically

rated their physical appearance lower when comparing themselves and other blacks to whites (Rosenberg and Simmons, 1972). These findings are consistent with findings of the reference group theories (Erikson, 1966; Pettigrew, 1964; Rainwater, 1966) which have shown that black students did rate physical attributes associated with the white population more positively than those physical characteristics associated with blacks. UNC-G students are constantly confronted with the differences in the physical appearance between blacks and whites while A&T students are not. Finally, while UNC-G students did score significantly lower on the Physical-Self Sub-Scale than A&T students, their scores were in line with the scores of the TSCS norm group.

The results did not confirm the second hypothesis. The data indicated that females scored significantly higher than males on the positive self-concept sub-scales. These results are consistent with earlier findings by Chowdrow (1974), Hacker (1970), and Wylie (1979). However, they are inconsistent with the findings of Bem and Bem (1970) and Ross (1975) where females rated themselves significantly lower than males and obtained lower self-concept scores due to the negative stereotypes associated with their social position. One reason for the discrepancy between the two previous studies and the present results may be related to the race of the subjects. In the previous studies, data were collected on white females. However, studies employing black females have generally found females scoring higher than males, especially when race was not a distinctive variable (Rosenberg and Simmons, 1972; Wylie, 1979).

The results also found higher variability scores for females than males which is indicative of low personality integration for the female population which may have inflated the positive self-concept scales. However, further analysis of the variability scores indicated a significantly high variability scores for A&T females which accounted for the male-female differences on the Total Variability Scale. This effect was not, however, found for UNC-G females. Their variability scores were in line with the mean for the norm group. In addition, differences in the UNC-G male and female population basically accounted for the significantly high positive self-concept scores obtained by the females. Thus, while females did score higher on the variability scale than males, this difference did not influence the significant effects obtained on the positive self-concept scales.

Despite the null results for prediction two, the third hypothesis was partially supported by the data. The findings showed that the sex differences were consistently greater for UNC-G students than A&T students. UNC-G females scored consistently higher than any other group on the positive self-concept scales. UNC-G males, however, scored lower than all groups on the scales. A&T students were more moderate in their score range and rarely differed in their scores. While this portion of the prediction was confirmed, it was assumed that the UNC-G males would score higher on the TSCS sub-scales than UNC-G females and would account for the significant difference predicted by hypothesis three. However, for UNC-G males, both race and sex may have been a distinctive feature since the male-female ratio is greater at UNC-G than A&T. Still, the results obtained are inconsistent with the present assumption that UNC-G

males would score higher than UNC-G females.

In her review of the pertinent findings on this subject, Wylie (1979) reported that males scored higher than females on the self-concept scales, especially when they are in an integrated setting. In addition, males tended to score higher on the defensiveness scales. The occurence of high positive self-concept scores and high defensiveness scores have led some researchers (McGuire and McGuire, 1981; Thompson, 1972) to suggest that the high scores are not reflective of the male subjects' actual perceptions but a tendency for males to inflate their self-concept ratings. In this study, however, males in an integrated setting scored lower than females. In addition, the defensiveness scores for both the UNC-G males and females were in line with the means of the TSCS norm group. Therefore, these results may be indicative of the actual influence of the integration effect on black males, rather than females being more defensive. The results also indicated a significant difference between A&T males and females on the Identity and Self-Satisfaction Scales. However, this difference was not as great as the difference found within the UNC-G subject population.

The results indicated that while prediction four was not confirmed by the overall findings, it was supported by the results of the Identity Sub-Scale. Based on the assumption of the distinctiveness theory, it was predicted that subjects paired with a white confederate, Group 2, would score lower on the TSCS post-test than subjects paired with a black confederate, Group 1, and the control group, Group 3. This effect was anticipated for subjects in Group 2 regardless of their sex or campus affiliation. While this prediction was not confirmed by the findings on

the overall self-concept measure, the Identity sub-scale provided strong support for this contention. The results from the Identity post-test showed that subjects in Group 1 and 3 scored significantly higher than Group 2. However, on the Self-Criticism and Self-Satisfaction sub-scales the performance of subjects in Group 2 was consistent with the performance of subjects paired with a black confederate. On these sub-scales the two groups differed significantly from the control group. These differences may be related to the presence of the confederate and knowledge that they had competed on the task. The competitive situation that the treatment groups experienced may have influenced their later response on the TSCS. In addition, since these subjects generally performed well on the task, the positive feelings of accomplishment generally associated with success on a task may have influenced their answers on the TSCS. Support for this contention has been substantiated by earlier findings (Wylie, 1974; 1979). The results of these studies have shown that subjects are more likely to assign more positive descriptions to themselves after performing successfully on a task.

The MANOVA results also indicated significant group interaction effects which were in opposition with hypothesis four. The results indicated apparent group differences which would not have been predicted by the distinctiveness theory. These results are consistent with predictions of the insulation hypothesis and reference group theories.

The results did not confirm prediction five. The analysis of covariance performed on the TSCS post-scores found significant campus main effects, sex effects, and campus by sex interactions. These results are in opposition to the predictions of the distinctiveness theory

(McGuire and McGuire, 1981) which assumed that aspects of the students' environment that influenced their self-concepts are to some extent situationally determined. Since the sex and campus variables were not salient in the experimental situation, these variables should not have an influence on subjects' self-concept scores. The previous results, however, support the assumptions of the insulation and reference group theories which would have predicted such transient effects (Rosenberg and Simmons, 1972; Brookover and Passalacqua, 1981).

The MANOVA also provided limited support for the sixth hypothesis. According to prediction six, A&T students competing against a white confederate, Group 2, would score higher on the pre-test than on the post-test. No differences were expected between those students competing against a black confederate, Group 1, or the control group, Group 3. The results showed that A&T students paired with a white confederate did score significantly higher on the Identity Self Sub-Scale. However, no other significant differences were obtained. While the assumptions of the distinctiveness may explain the significant Identity Sub-Scale differences and the null results obtained on the other TSCS sub-scales, it does not account for the effect obtained in the self-concept scores for A&T students paired with a black partner. In addition, while the insulation hypothesis does provide an explanation for the null results it cannot be employed to explain the significant results indicated in the data. The reference group theory, however, may argue that the evaluative effect of competing against another black student may have accounted for this effect. Since blacks rarely use white students as a reference group, they may not have felt the same amount of pressure to

succeed (Wells, 1978; Wylie, 1979 for a review). In addition, it was noted that most A&T students especially males, indicated to the experimenter that the black confederate "must be from UNC-G". This occurred less often for A&T females. However, UNC-G females indicated to the experimenter that they "knew she was an A&T student". Some students went on to say that they "had seen her a lot at A&T" However, the black confederate was not an A&T student, but rather a UNC-G graduate student. The assumption that students had about the black confederate may have produced a certain amount of rivalry, not occurring for students paired with a white confederate, which influenced their answers on the post-test.

The MANOVA results did not confirm prediction seven. Hypothesis seven assumed that the TSCS score would be higher on the post-test than on the pre-test for UNC-G students paired with a black confederate since race was no longer a distinctive variable. No significant difference was anticipated between the pre- and post-scores for subjects paired with a white confederate, Group 2, or in the control group, Group 3. While this trend was indicated in the data, the results did not reach significance.

The results confirmed prediction eight. Those subjects paired with a black confederate rated their performance higher than subjects paired a white confederate. The results also indicated that A&T males and UNC-G males in Group 1 rated their performance significantly higher than any other group. In parallel, UNC-G males and females paired with a white partner rated their performance lower than A&T students.

In contrast, the analyses of variance performed on the subjects' errors did not indicate a significant difference between the number of errors made by subjects paired with a black confederate and a white confederate. Thus the group differences obtained in the subjects' comparison ratings were due to the subjects' perceptions of their performance relative to the characteristics of the confederate. In addition, while UNC-G students in Group 2 rated their performance lower than other groups, they actually made the least number of errors.

These results however, indicated a significant difference in the number of errors made by the control group (Group 3) and the groups paired with a white or black confederate (Group 1 and Group 2). The control group made a significantly greater number of errors than Groups 1 and 2. Differences between the control and experimental groups may be due to the fact that the experimental groups knew that their performance on the task would be compared to the performance of another person whom they had met. The control subjects, however, were simply told to complete the task and "do your best". The knowledge that their results would be compared against another person's performance facilitated subjects' performance in the experimental groups. These results are consistent with previous findings by Zajonc (1965), and Martnes and Landers (1972) which have indicated an increment in arousal and the performance of subjects when they were aware that their performance was being evaluated, assuming that the task was simple and not complex.

Finally, the results of this study indicated that some TSCS sub-scales were more sensitive to the manipulation of the campus or sex variables, while others were sensitive to the manipulation of race, rather than reflecting these influences in an equal fashion. Some scales, such as the Personal and Physical scales, were significant when the race variable was manipulated in the experimental task. Other scales, such as the Moral-Ethical sub-scale, appeared to tap sex differences. In addition, the Social and Physical sub-scales were more reflective of the campus variable. Finally, Identity, Self-Satisfaction, Behavior, and Total Self-Concept sub-scales were more reflective of the manipulation of the race variable than the sex variable, though they appeared to be sensitive to both variables. The Family sub-scale was the only scale that appeared to tap both the racial and sex influences in an equal fashion. Finally, the Self-criticism, Variability, and Distribution Score sub-scales were loosely associated with both variables, but not to the degree of the positive self-concept scores. Here, significant sex and race differences were indicated only once on each scale.

These results support assumptions of the distinctiveness theory (McGuire and McGuire, 1981; Wylie, 1979) which state that variables , such as race and sex, may not influence the overall self-concept but rather entities of the self-concept. Therefore, by measuring only the overall self-concept, researchers may obtain null-results and reach false conclusions in instances where specific areas of the self are influenced by a variable and not the overall self-concept. Therefore, future research in this area should consider the factors' influence on

specific entities of the self-concept as well as the overall self-concept. Thus, more research is needed to determine aspects of the subjects' self-concepts influenced by their race and sex.

Summary. Predictions concerning differences in the subjects' TSCS pre-scores due to the racial make-up of the environment were partially confirmed by the results of the TSCS sub-scales. Similarly, pre- and post-score differences related to the distinctiveness of the race of the subjects' partners was partially confirmed by the results. Predictions concerning subjects' performance ratings and race and sex interactions on the TSCS were also confirmed. The study failed to confirm predictions two and four. While the results obtained were not always consistent with the predictions of the distinctiveness theory, it explained the results more efficiently than either the insulation hypothesis or the reference group theories. In addition, this theory was also effective in explaining the null results obtained.

Covariate Influence

The results of the analysis of covariance performed on the TSCS pre-test indicated a positive correlation between subjects' SAT scores, current college grade point averages (GPAs), and their TSCS scores. A negative correlation was found between subjects' SAT scores and subjects' self-concept scores on the Physical-Self and Net Conflict Scales. Those subjects with low SAT scores were more positive about their physical appearance, however, they were more likely to agree with positive statements regardless of the content. A positive correlation was obtained between subjects' SAT scores and Self-Criticism Scores. The

results indicated that subjects with higher SAT scores were more open and less defensive about their perceptions of themselves. These findings were consistent with the results obtained on the post-test.

The results also indicated a positive correlation between subjects' college GPAs and their self-concept scores on the Physical-Self, Total Self-Concept, and Distribution Score Sub-Scales. Those subjects who were more positive about themselves in specific areas were also more positive in their overall concept. These findings are consistent with those of Achord and McCary (1975), Brookover and Passalacqua (1981), Fitts (1972), and Wylie (1979). As previously mentioned, these researchers, also, found a positive correlation between subjects' overall self-concept and academic performance. Additionally, Wylie (1979) has observed that subjects' perceptions of their academic achievement may be associated with specific entities of the self as well as the overall self-concept. This finding is indicated in the present study. Again consistent findings were obtained on the TSCS post-test.

The analysis of covariance performed on the subjects' performance ratings indicated a significant correlation between subjects' performance ratings and their SAT and GPA scores. Those subjects with high SAT scores and GPAs generally rated their performance on the task more favorably. Thus, those students with higher academic standings were more likely to rate themselves favorably and less likely to rate their performance lower than the performance of their opponent.

The analysis did not indicate a significant correlation between subjects' SES, high school GPAs, and self-concept. The lack of significance between subjects' pre and post self-concept scores and high school GPAs was anticipated. Subjects' high school GPAs were no longer an indicator of their academic success, rather their college GPAs were better measures of academic ability and a more salient predictor than the high school scores.

The lack of significance obtained between the subjects' self-concept pre-scores and their socio-economic status, as measured by the ISP, was not expected. Previous studies (Rosenberg and Simmons, 1972; Rosenberg, 1975; Wylie, 1979) have indicated the influence of the subjects' SES on their self-concepts only when they are in heterogeneous economic environments. Thus, the results of the ISP correlation were consistent with some findings reported in the literature (Wylie, 1979).

Population Differences

The results of the analyses performed on subjects' academic information and SES information, revealed significant differences between the A&T and UNC-G students. The results indicated a significant campus difference on the analyses performed on the SAT scores, high school GPAs, college GPAs, and ISP scores. UNC-G students possessed higher SAT scores and high school GPAs than A&T students. In parallel, A&T students possessed higher current college GPAs and ranked higher in terms of their socio-economic status than UNC-G students. These results are consistent with earlier findings by Astin and Cross (1981) and Allen (1981). Astin and Cross (1981) reported that black students in

traditionally white schools were more likely to come from families within a lower income bracket and receive larger amounts of financial aid. Moreover, these students were more likely to report that the financial aid assistance offered by their respective colleges was a major factor in their choice.

In contrast, black students in predominantly black colleges tended to come from better educated families with higher income level than students in predominantly white colleges. In addition, these students generally obtained higher GPAs during college than students at predominantly white schools (Thomas, 1981).

The results also indicated a significant sex effect on subjects' SAT scores, high school GPAs, and ISP scores. Females possessed higher high school GPAs while males had higher SAT scores than females. The significant sex effect obtained in the SAT scores was associated with the significant difference that occurred between A&T males and females. The results indicated that A&T possessed significantly higher SAT scores than A&T females. No significant differences were indicated between the SAT scores of UNC-G males and females.

A campus by group interaction was also obtained on the analysis of variance performed on the subjects' ISP scores. UNC-G students that were to be paired with a black and a white confederate scored lower in terms of their socio-economic position than UNC-G students to be placed in the control group and all A&T students. Moreover, there was more variability in the ISP scores of subjects in these groups than UNC-G students in Group 3. One reason for this effect may have been that UNC-G females assigned to the control group were members of the black sororities on

that campus. Thus, the results may reflect the similarity in these students' socio-economic background in comparison to UNC-G students that do not belong to those organization.

In contrast, A&T students that were assigned to Group 2 ranked higher in terms of their socio-economic standing than all other groups. Again, the majority of male students assigned to this group belonged to or were affiliated with the same fraternity. Again, the discrepancy between A&T students assigned to Group 2 (white partner), and the rest of the A&T subject population have reflected the fraternity influence.

The existence of population differences between black students in predominantly black and predominantly white college settings is important for self-concept research. The variables on which these studies differed (Astin and Cross, 1981) have been shown to have a positive influence on entities of the self-concept and the overall self-concept (Wylie, 1979). Thus, previous findings (Baughman, 1971; Brookover and Passalacqua, 1981; Rosenberg, 1975) reporting higher self-concept scores for black students in predominantly black settings may have been influenced by the differences in the two subject populations. The results may reflect the influence of the racial make-up of the environment as well as other factors such as academic ability on the self-concept. Therefore, further research is warranted to ascertain whether these population differences affect the self-concept of black students in different environments and if they can account for differences obtained by previous studies (see Wylie, 1979). Finally, researchers must be aware of these differences and their potential influence on the results they obtain when they compare the self-concept

scores of black college students from either a predominantly black or predominantly white college setting to their white counterparts.

In summary, the analyses of variance performed on the subjects' background data indicated the following differences. First, UNC-G students tended to have better grades in high school and higher SAT scores than A&T students. In addition, they were more likely to come from families with lower income levels and less educated families. Second, females came from families with higher income levels than their males counterparts. This effect, however, was due to differences between the A&T male and female population. Third, UNC-G students paired with a black and white confederate came from families in lower income brackets than UNC-G females in Group 3 and all A&T students. In parallel, A&T students paired with a white confederate came from families with higher incomes than A&T students in the control group or paired with a black confederate.

Group Differences on the TSCS Pre-Scores

The analysis of variance performed on the subjects' TSCS pre-scores found significant group differences on several TSCS sub-scales. These differences may have been related to the manner in which the initial TSCS was administered and subjects' assignment into the groups. First, students' assignment into the experimental groups was not completely randomized due to the time constraints of the confederate, the subjects, and the experimenters. Some subjects were more likely to be paired with the black or white confederates if they were available to return to the laboratory during the times the confederates were available. If subjects

were not available during these times, they were automatically assigned to the control group. In addition, those subjects who were administered the TSCS at the same time were more likely to end up in the same group, especially during the later part of the experiment.

In parallel, the TSCS pre-test was administered on a group basis. For most students, those persons taking the test along with them were roommates, close friends, or fraternity brothers and sorority mates. The presence of these "other people" may have influenced the manner in which subjects interpreted and answered the responses on the TSCS. In addition, these students were more likely to be assigned to the same group during the later part of the experiment as indicated previously.

The factors mentioned above may have introduced confounds into the study and influence the nature of the results. Future studies in this area may wish to take these factors into consideration when designing experiments and assigning subjects to the experimental conditions.

CHAPTER V

SUMMARY

The results of the present study indicate that black students from a predominantly black university, A&T, and a predominantly white university, UNC-G, differed significantly on the Social and Physical TSCS sub-scale pre-scores. In addition, both A&T and UNC-G females generally scored higher on the TSCS sub-scales pre-scores than males. However, the mean difference between the male and female samples was greatest between UNC-G males and females. The results further indicated that the influence of these campus and sex differences on the subjects' self-concept scores was to an extent determined by the experimental condition that the subjects experienced. These results are consistent with the assumptions of the distinctiveness theory (McGuire and McGuire, 1981).

In Addition, not one of the theories tested, insulation hypothesis (Rosenberg and Simmons, 1972), distinctiveness theory (McGuire and McGuire, 1981), and the later reference group theories (Baughman, 1971; Brookover and Passalacqua, 1981; Heiss and Owens, 1972; Wells, 1978), could explain the results entirely. However, the distinctiveness theory was effective in explaining both significant results and the null results obtained in this study. The most persuasive assumption of this theory was related to the transiency of the race and sex influence on subjects' self-concepts. McGuire and McGuire (1981) have proposed that

the influence of certain variables such as sex and race would influence the subjects' self concept only when individuals are conscious of these variables.

The results also showed a significant correlation between subjects' SAT scores, current grade point averages, and specific TSCS sub-scales. These results are consistent with earlier findings in the literature (Achord and McCary, 1975; Kunce, Gestinger, and Miller, 1972; Wylie, 1979) which have shown a positive correlation between subjects' academic performance and certain entities of the self as well as the overall self-concept. The results did not indicate a significant correlation between subjects' high school grade point averages, SES, and self-concept scores.

In addition, the findings of this study found significant campus differences in terms of subjects' academic performance and socio-economic status. Again, these results are consistent with earlier findings (Allen, 1981, Astin and Cross, 1981) which have shown that the black student populations in predominantly black colleges differ significantly from the black student population in predominantly white colleges, in terms of academic attainment and socio-economic background.

Moreover, the results found some TSCS sub-scales Physical and Personal to be differentially sensitive to race, while others, Moral-Ethnical, appeared to be sensitive to sex. In addition, these results are indicative of the notion proposed by Wylie (1979) that variables, such as race or sex may influence specific entities of the self while not affecting the overall self-concept. Therefore, future research is needed to determine which entities of the self are

influenced by variables such as race and sex.

Finally, the results indicated that black students' experience in an integrated environment does not necessarily result in a negative influence. Rather, the influence of subjects' race may have a positive effect as indicated by the high positive Social Self pre-scores. Thus, the integrative experience may have positive as well as negative influences on different entities of black students' self-concepts. Further research is needed to determine the specific entities of the self-concept where the integrative experience produce positive as well as negative influences on black students' self-perceptions.

BIBLIOGRAPHY

Achord, C.D., & McCary, P. The impact of attrition on the self-concept and anxiety level of nursing students at the University of Northern Colorado. Colorado Journal of Educational Research. 1975, 14, 25-26.

Allen, Watler R. Correlations of black adjustment, achievement, and aspirations at a predominately white southern university. In G.E. Thomas (ed.) Black students in higher education. Westpoint: Greenwood Press, 1981, 126-141.

Astin, H.S., & Cross, P.H. Black students in black and white institutions. In G.E. Thomas (ed.). Black students in higher education. Westpoint: Greenwood Press, 1981, 30-45.

Bachman, J.G. Youth in transition, volume II: The impact of Family Background and intelligence on tenth-grade boys. Ann-Arbor: Survey Research Center, Institute for Social Research, 1970.

Baughman, E.E. Black americans: A psychological analysis. New York: Academic Press, 1971.

Baughman, E.E., & Dahlstrom, W.G. Negro and white children: A psychological study in the rural south. New York: Academic Press, 1968.

Bem, S., & Bem, D.J. Case study of a non-concious ideology: Training the woman to know her place. In D.J. Ben. Beliefs attitudes, and human affairs. Monterey, Cal.: Brooks/Cole, 1970.

Bernstein, M.E., & Di Vesta, F.J. The formation and reversal of an attitude as functions of assummed self-concept, race, and socioeconomic class. Child Development, 1972, 2, 63-76.

Bloom, B. Human characteristics and school learning. New York: McGraw-Hill, 1976.

Brighman, J.C. Racial stereotypes: Measurement variables and the stereotype-attitude relationship. Journal of Applied Social Psychology, 1971, 2, 63-76.

Brookover, W.B., Lepere, J.M., Hamachek, E.D., Thomas, S., & Eric Erikson, E.L. Self-concept of ability and school achievement: Improving academic achievement through students' self-concept enhancement. U.S. Office of Education, Cooperative Research Project No. 1636. East Lansing: Educational Publication Services, Michigan State University,

1965.

Brookover, W.B., & Passalacqua, J. Comparison of aggregate self-concepts for populations with different reference groups. In M.D. Lynch, A.A. Norem-Hebeisen, & K. Gregen. Self-concept: Advances in theory and research. Massachusetts: Ballinger Publishing co., 1981.

Brunner, C. Deprivation--its effects, its remedies. Educational Leadership, 1965, 23, 103-107.

Carpenter, J.W. Social roles and biases in social-perception processes: An examination of sex differences. Unpublished Masters' Thesis, University of North Carolina at Greensboro, 1981.

Chodrow, N. Family structures and feminine personality. In M.Z. Rasaldo & L. Lamphere (eds.). Woman, culture, and Society. Stanford, Cal.: Stanford University Press, 1974, 43-67.

Clark, K.B. Prejudice and your child (2nd ed.). New York: Beacon Press,1963.

Cliff, V.A. Factors relating to the educational of culturally deprived negro youth. Educational Theory, 1965, 14, 76-82.

Coleman, J.S., Campbell, E.Q., Hobson, C.I., McPartland, J., Mood, A.M., Weinfeld, F.D., & York, B.L. Equality of Educational Opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

Combs, A.W. Some observations on self-concept research and theory. In M.D. Lynch, A.A. Noren-Hebeisen, & K. Gergen. Self-concept: Advances in theory and research. Massachusetts: Ballinger Publishing Co., 1981.

Coopersmith, S. The antecedents of self-esteem. San Francisco: W.H. Freeman, 1967.

Cottrel, N.B., Wack, D.L., Sekerak, G.I., & Rittle, R.H. Social facilitation of dominant responses by the presence of an audience and the mere presence of others. Journal of Personaility and Social Psychology, 1968, 9, 245-250.

Crain, R.L., & Weisman, C.S. Discrimination, personality, and achievement: A survey of northern blacks. New York: Seminar Press, 1972.

Dolan, C.A. The effects of public self-consciousness and competition on state anxiety. Unpublished Masters' Thesis. University of North Carolina at Greensboro, 1982.

Epps, E.G. Black students in white schools. Worthington, Ohio: C.A. Jones Publishing co., 1972.

Erikson, E.H. Identity, youth and crisis. New York: W.W. Norton, 1966.

Ferguson, G.A. Statistical analysis in psychology and education. New York: McGraw-Hill, 1976.

Festinger, L.A. A theory of social comparison process. Human Relations, 1954, 7, 117-140.

Fitts, W.H. Tennessee self-concept scale: Nashville: Counselor Recordings and Tests, 1965.

Fitts, W.H. The self-concept and psychopathology,. Nashville: Dede Wallace Center, 1972.

Fitts, W.H. Issues regarding self-concept change. In M.D. Lynch, A.A. Norem-Heisen, & K. Gerger. Self-concept: Advances in theory and research. Massachusetts, Ballinger Publishing Co., 1981.

Greenwald, H.J., & Oppenheim, D.B. Reported magnitude of self misidentification among Negro children-artifact? Journal of Personality and Social Psychology, 1968, 8, 49-52.

Gritter, A.G., & Saslow, Y. Color and physiognomy as variables in racial misidentification among children. Proceedings of the 77th Annual Convention of the American Psychological Association, 1969, 4, (pt.2) 667-678.

Haber, R.N., & Herhenson, M. The Psychology of Visual Perception. New York: Holt, Rinehart, and Winston. 1980.

Hacker, H.M. Women as a minority group twenty years later. In R.K. Unger,& F.L. Denmark (eds.). Woman: Dependent or independent variable. New York: Psychological Dimensions, Inc., 1975.

Harper, D.G. The reliability of measures of sociometric acceptance and rejection. Sociometry, 1968, 31, 219-227.

Harper, F.D. Black students, white campus, Washington,: APGA Press, 1975.

Healey, G.W. Self-concept. A comparison of negro, anglo, and spanish american students across ethnic, sex, and socioeconomic variables. San Francisco: R and E Research Associates, 1974.

Heiss, J. & Owens, S. Self-evaluation of blacks and whites. American Journal of Sociology, 1972, 78, 360-370.

Hill, J.J. Attitudes toward self: An experimental study. Journal of Educational Sociology, 1957, 30, 395-397.

Holland, M. Introductory Psychology. Lexington, Massachusetts, D.C. heath and Co., 1981.

Hollingshead, A.B. Two factor index of social position. In G.W. Healey. Self-concept: A comparison of negro, anglo, and spanish american students across ethnic, sex, and socio-economic variables. San Francisco: R and E Research Associates, 1974.

Gaier, E.L., & Wambach, H.S. Self-evaluation of personality assets and liabilities of southern whites and negro students. Journal of Social Psychology, 1960, 51, 135-143.

Katz, I. Academic Motivation. Harvard Educational Review, 38 (1), 1968.

Kunce, J.T., Gestinger, S.H., & Miller, D.E. "Educational implications of self-esteem. Psychology in the Schools, 1972, 39, 314-316.

Lawrence, J.E. White socialization: black reality. Psychiatry, 1970, 33, 174-194.

Lamberth, J., Rappaport, H, & Rappaport, M. Personality: An introduction. New York: Alfred A. Knopf, Inc., 1978.

Levine, E.S., & Ruiz, R.A. Preference study based on 'like best' choices for photographic slides of anglo, black, and chicano children. Perceptual and Motor Skills, 1977, 44, 511-518.

Lewin, K. Resolving social conflicts. New York: Harper, 1948.

Martens, R., & Landers, D.D. Evaluation potential as a determinant of co-action effects. Journal of Experimental Social Psychology, 1972, 8, 347-359.

McGuire, W.J., & McGuire, C.V. The spontaneous self-concept affected by personal distinctiveness. In M.D. Lynch, A.A. Norem-Hebeisen, & K. Gergen. Self-concept: Advances in theory and research. New York: Ballinger Publishing Co., 1981.

McGuire, B., Tinsley, H.E. "A contribution to the construct validity of the Tennessee Self-Concept Scale: A confirmatory factor analysis." Applied Psychological Measurement, 1981, 5, 449-457.

Mead, G.H. Mind, self, and society from the standpoint of a social behaviorist. Chicago: University of Chicago Press, 1934.

Peterson, A.C. The development of self-concept in adolesents. In M.D. Lynch, A.A. Norem-Heveisen, & K. Gergen. Self-concept: Advances in theory and research. New York: Ballinger Publishing Co., 1981.

Pettigrew, T.F. A profile of the american negro. Princeton, New Jersey: D. Van Nostrand, 1964.

Pheterson, G.I., Kiesler, S.B., & Goldberg, P.A. Evaluation of the performance of women as a function of their sex, achievement, and personal history. Journal of Personality and Social Psychology, 1971, 19, 114-118.

Prohansky, H., & Newton, P. Colour: The nature and meaning of negro self-identity. In P. Watson (ed.), Psychology and race. Chicago: Aldine, 1963, 176-212.

Rainwater, L. Crucible of identity: The negro lower-class family. Daedalus, 1966, 195, 172-216.

Rogers, C. On becoming a person; a therapist's view of psycho therapy. Boston: Houghton Mifflin, 1961.

Rosenberg, M. Society and the adolescent self-image. Princeton, New Jersey: Princeton University Press, 1965.

Rosenburg, M. Which significant others? American Behavioral Scientist, 1973, 16, 829-860.

Rosenburg, M. The dissonant context and the adolescent self-concept. In S. Dragastin, & G.H. Elder, Adolescence in the life cycle: Psychological change and social context, 1975.

Rosenburg, M. & Simmons, R. Black and white self-esteem: The urban school child. Washington: Arnold and Caroline Rose Monograph Series in Ecology, 1972.

Rosenkrantz, P.S., Vogal, S.R., Bee, H., & Broverman, D.M. Sex role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 1968, 32, 287-295.

Schneider, D. Social psychology. Reading, Massachusetts: Addison-Wesely Publishing Co., 1977.

Schwendiman, G., Larsen, K.S., & Dunn, F. Social position, social desirability, and self-esteem. Psychological Reports, 1970, 27, 117-118.

Seeman, J. Toward a concept of personality intergration. American Psychologist, 1959, 14, 633-637.

Taylor, R.G. Racial stereotypes in young children. Journal of Psychology, 1966, 64, 137-142.

Thomas, G.E. The effects of standardized achievement test performance and family status on black-white college access. In G.E. Thomas (ed.), Black students in higher education. Westpoint: Greenwood Press, 1981.

Thompson, W. Correlates of the self-concept. Nashville, Dede Wallace Center, 1972.

Turner, R. The self-conception in social interaction. In C. Gordon & K. Gergen (eds.), The self in social interaction. New York: Wiley: 1968.

Uwanno, T., & Stabler, J.R. Black and white as perceived by Euro-Americans, Afro Americans, and Africans. Perceptual and Motor Skills, 1977, 44, 507-510.

Vacchiano, R.B., Strauss, P., & Schiffman, D. "Personality correlates of dogmatism." Journal of Consulting and Clinical Psychology, 1968, 32, 83-85.

Van Tuinen, M. & Ramanaiah, N. "A multimethod analysis of selected self-esteem measures." Journal of Research in Personality. 1979, 13, 16-24.

Wells, E. The mythical negative black self-concept. San Francisco: R and E Research Associates, Inc., 1978.

Winnick, R., & Taylor, J. Racial preferences: 36 years later. Journal of Social Psychology, 1977, 102, 157-158.

Wylie, R.C. The self-concept: a critical survey of pertinent research literature. Lincoln: University of Nebraska Press, 1961.

Wylie, R.C. The self-concept: A review of methodological consideration and measuring instruments. Lincoln: University of Nebraska Press, 1974.

Wylie, R.C. Theory and research on selected topics: Revised Edition: (Vol. II). Lincoln: University of Nebraska Press, 1979.

Zajonc, R.B. Social facilitation. Science, 1965, 149, 269-274

APPENDIX A

Experimental Instructions

Instructions for Session 1

Thank you for participating in this study. We are interested in determining the influence of certain environmental factors on specific personality characteristics and types of behavior. The study is divided into two sessions. We ask that you participate in both.

You have been given several forms. The top form is the consent form. Please read it carefully. If you have no questions, please sign it.

(After subjects' signed the Consent Form).

The second form, labelled the Background Information Form, is basically self-explanatory. Be specific when you give the occupation of the head of household. For example, if the head of household is a teacher, please tell me whether he or she is a primary, grammer, or high school teacher. If he or she is a factory worker, tell me what type of factory and the exact title or describe the job that he/she performs. Also, if the head is in the Armed Services, please give me the branch, Army, Navy, Marines, and his or her rank.

The head of household refers to the family member with the highest income that provides support to the family unit. If you are unsure as to which family member that you should consider the head of household, list the educational and occupational information for both parents or guardians and label it. For the purpose of this study, parents or guardians will be used as heads of the house unless you have been

financially independent from them for a minimum of two years.

On the last form, labelled GPA Information, be sure to sign and date the sheet. All GPA information will be verified by Academic Advising or the Records Office. If you are unsure about your scores, leave the information blank but sign and date the sheet. That information will be obtained from the Records Office.

Finally, you have been given a Tennessee Self-Concept Scale Booklet and Answer Sheet. Please read the directions and follow them carefully. Be sure to answer all questions based on how you generally feel. Your answers should not reflect your present mood unless it is how you feel most of the time. If you have any questions about the scale please ask. However, I will not be able to tell you what the statements mean. Please remember that all information will be kept confidential.

Are there any questions? After you have completed the Tennessee Self-Concept Scale, please sign-up for a time when you can return for the second phase of this study. Remember, you should allow yourself at least thirty minutes to complete the experiment. The sign-up sheet is on the desk.

Again, thank you for your participation in this study.

Instructions for Treatment Groups

In this phase we are interested in determining the influence of certain personality factors on one's performance of a task. Based on the similarity in your background data, such as GPA, classification, major, SES, sex, the two of you have been selected to compete against one another in this phase of the experiment.

You will be given a symbol cancellation task. At the top of each sheet is a group of target symbols which are embedded within each row. Your task is to scan each row of symbols and mark out any of the target symbols you find within that row. A space is provided for your answer.

Before we begin the actual task, you will have a practice trial to make sure you understand the task. You have two minutes to work on this task.

After Completion of the Practice Task

Are there any questions? You will be given seven minutes to complete this task. Each of you will be rated relative to the performance of your opponent. Your performance will be rated as either: a) significantly higher than your opponent's; b) slightly higher than your opponent's; c) the same as your opponent's; d) slightly lower than your opponent's; e) significantly lower than your opponent's. Please do your best. You may begin.

Instructions for the Control Groups

In this study we are interested in determining the influence of certain personality factors on one's performance of a task. You will be given a symbol cancellation task. At the top of each sheet is a group of target symbols which are embedded within the row. Your task is to scan each row of symbols and cancel out any of the target symbols you find in that row. At the end of each row, you must write down the number of target symbols you find within that row. A space is provided for your answer.

Before we begin the actual task, you will have a practice trial to make sure you understand the task. You have two minutes to work on this task.

After Completion of the Practice Task

Are there any questions? You will be given seven minutes to complete this task. Please do Your best.

Instructions for the Re-Administration of the Tennessee Self-Concept Scale

Please complete the form you have been given. Answer each question based on how you generally feel. Be sure to answer all the questions. Please do not leave any questions blank. If you have any questions, please ask. Remember to answer each question based on how you feel right now.

Debriefing Statement

The present study was designed to detemine the influence of certain factors such as sex, socio-economic status, GPA, and one's comparison group, on the self-concept scores of black students attending predominantly black or predominantly white colleges.

We are interested in finding out if the differences found in the self- concepts of students at predominantly black or white elementary and secondary schools also exists between the two groups at a college level. We predicted that a difference would exist. Specifically, we hypothesized that the mean self-concept scores would be lower for black students at pre- dominantly white colleges when compared with black students attending predomimantly black colleges. Furthermore, we predicted the differences that existed between the two groups would be overshadowed when students from both campuses compared themselves against an experimentally similar reference group. By reference group, we mean that group of people who serve as a standard by which we judge our abilities.

All the data colledted during this experiment will be kept confidential. We ask that you not discuss the details of this experiment with others since they may serve as participants in the future.

We would like to thank you for your participation in the experiment. Are there any questions?

Briefing Statement

In this study, we are interested in determining the influence of certain aspects of the environment on the personality characteristics of college students.

The experiment is divided into two parts, which require 20-30 minutes each. During the first phase, background information, such as sex, age, and classification will be obtained. Also, a personality inventory will be administered. This session will be conducted on a group basis. You will be asked to sign up for the second session which will be conducted on an individual basis.

In the second phase, students will perform a simple task and the inventory will be re-administered.

All information obtained during the experiment will be kept confidential. Students will be assigned numbers to increase confidentially.

To participate in this study, you must be between the ages of 18-23. Also, you must have attended (campus) for a minimum of one year. Due to the nature of the experiment, participation must be on a volunteer basis only.

Are there any questions?

APPENDIX B

Experimental Forms

And

Performance Task

BACKGROUND DATA FORM

I.D. # _____

SEX: Male_____ Female_____

Name of the college you presently attend: _____

How many years have you attended the above college? _____

Major: _____

Classification: Freshman _____: Sophomore _____: Junior _____:

Senior_____: Other_____(specify).

Please check the head of your household. (Note: Head of household refers household refers to the person who is the major wage earner in the family, that is who ever has the higest income).

Mother_____: Father_____: Other_____(specify).

Check the level of formal education completed by the head of household:

Sixth grade or less _____

Seventh - Ninth grade _____

Tenth - Eleventh grade_____

High School Graduate _____

One - Three years of College_____

College Graduate_____

Graduate or Professional Training _____

Please specify the precise occupation of the head of household:

_____

If he/she is self-employed, please indicate the type of business above and give an estimate of the value of the business, in terms of the gross income per year in the space provided _____.

GPA Information

To the best of my knowledge my current GPA is ___ and my high school GPA was ___ and SAT score was ___.

The experimenter has my permission to verfiy this information with the Admissions or Records Office at the college which I presently attend.

Name_____ Date_____

TARGET SYMBOLS ARE: !,#,&, AND,(

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Self-Rating Form

Please rate you performance based on how well you think you did on the task relative to how you think your opponent did. Please rate yourself by choosing the answer that best descrivbes how you feel about your performance on the task.

My performance was:

_____ a) Significantly higher than my opponents's performance.

_____ b) Slightly higher than my opponent's performance.

_____ c) As well as my opponent's performance.

_____ d) Slightly lower than my opponent's performance.

_____ e) Significantly lower than my opponent's performance.

APPENCIX C

Tables

TABLE 1

Experimental Design

		Group 1	Group 2	Group 3
UNC-G	Females	N = 20	N = 20	N = 20
	Males	N = 20	N = 20	N = 20
A&T	Females	N = 20	N = 20	N = 20
	Males	N = 20	N = 20	N = 20

TABLE 2

Pre and Post Score Means of the TSCS Sub-Scales
for the Campus by Sex by Group Interaction

		Pre- Scores			Post-Scores		
	Sub-Scales	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
	Physical	69.65	69.45	67.95	69.15	69.55	67.50
	Moral-Ethical	72.20	70.35	65.20	73.00	71.60	64.90
	Personal	68.05	65.30	67.00	68.35	68.60	66.75
	Family	72.20	71.50	68.60	72.80	71.65	70.05
UNC-G	Social	72.55	70.80	69.55	70.30	71.90	68.95
Females	Self-Criticism	34.60	32.95	36.55	32.65	31.85	35.85
	Identity	130.20	127.75	128.40	130.08	130.45	126.85
	Self-Satisfaction	109.60	103.90	98.85	107.07	107.40	100.05
	Behavior	114.85	113.75	111.10	116.45	115.45	111.25
	Total Positive	354.65	347.40	338.35	353.60	353.30	338.15
	Net-Conflict	0.85	-4.65	-0.20	1.45	-0.40	4.50
	Total Variability	49.55	53.25	54.35	46.75	46.20	47.95
	Distribution Score	124.05	113.20	116.25	120.25	111.45	110.25

TABLE 2(cont)

Pre and Post Score Means of the TSCS Sub-Scales
for the Campus by Sex by Group Interaction

	Sub-Scales	Pre- Scores Group 1	Group 2	Group 3	Post-Scores Group 1	Group 2	Group 3
	Physical	67.15	77.00	69.90	67.65	66.00	71.55
	Moral-Ethical	58.65	64.50	64.00	64.45	64.05	63.85
	Personal	59.25	67.80	66.25	60.80	63.90	66.95
	Family	61.80	63.90	63.45	62.35	62.70	64.10
UNC-G	Social	57.65	68.55	66.50	57.50	67.70	66.70
Males	Self-Criticism	30.70	30.55	34.75	30.75	31.75	33.90
	Identity	103.65	117.40	117.35	104.90	108.70	116.80
	Self-Satisfaction	103.80	114.75	106.00	104.30	108.40	107.40
	Behavior	96.60	109.10	106.75	99.55	107.25	108.95
	Total Positive	304.05	341.75	330.10	308.75	324.35	333.15
	Net-Conflict	0.55	3.90	3.40	5.20	4.60	3.90
	Total Variability	52.80	48.60	47.50	42.85	48.70	41.15
	Distribution Score	100.85	111.65	115.40	107.75	113.80	108.70

TABLE 2(cont)

Pre and Post Score Means of the TSCS Sub-Scales
for the Campus by Sex by Group Interaction

		Pre- Scores			Post-Scores		
	Sub-Scales	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
	Physical	78.90	78.15	67.85	78.85	79.75	66.85
	Moral-Ethical	69.25	70.30	69.70	70.30	69.70	69.30
	Personal	68.08	67.20	69.00	60.80	63.90	66.95
	Family	64.90	68.25	68.10	65.75	67.35	68.80
A&T	Social	62.55	63.60	67.40	65.30	62.95	67.20
Females	Self-Criticism	33.50	30.55	34.00	30.20	30.00	34.35
	Identity	117.23	113.05	122.40	122.00	111.90	122.80
	Self-Satisfaction	115.75	116.50	109.45	116.25	114.75	108.15
	Behavior	110.70	117.95	110.20	112.75	116.80	108.15
	Total Positive	343.68	347.50	342.05	341.00	343.65	339.10
	Net-Conflict	8.90	11.15	11.65	7.55	11.40	11.65
	Total Variability	51.50	53.70	50.80	45.60	50.15	46.90
	Distribution Score	126.45	123.90	118.05	123.00	120.30	118.60

TABLE 2(cont)

Pre and Post Score Means of the TSCS Sub-Scales
for the Campus by Sex by Group Interaction

	Sub-Scales	Pre- Scores Group 1	Pre- Scores Group 2	Pre- Scores Group 3	Post-Scores Group 1	Post-Scores Group 2	Post-Scores Group 3
	Physical	74.50	72.15	76.05	74.95	71.60	70.85
	Moral-Ethical	66.85	65.90	68.60	68.20	68.60	66.95
	Personal	69.20	63.05	70.60	70.50	64.95	68.55
	Family	69.10	60.25	73.55	71.85	65.25	71.75
A&T	Social	68.95	58.10	70.60	70.85	61.70	68.00
Males	Self-Criticism	31.90	30.70	33.00	30.05	30.60	31.85
	Identity	129.00	107.75	130.20	128.25	110.60	127.00
	Self-Satisfaction	108.30	105.90	111.30	112.40	110.55	106.45
	Behavior	111.30	105.95	116.80	115.70	110.95	112.65
	Total Positive	348.60	319.60	358.30	356.35	332.10	346.10
	Net-Conflict	0.30	8.05	-0.80	3.80	8.50	-1.45
	Total Variability	45.70	57.00	42.30	46.80	50.00	44.00
	Distribution Score	112.70	112.45	120.70	112.70	116.15	106.15

TABLE 3

Summary of Analysis of Covariance Campus Effect for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	351.86	5.09	.025
Moral-Ethical Self	1/224	8.11	0.31	
Personal Self	1/224	7.47	0.12	
Family Self	1/224	55.95	0.82	
Social Self	1/224	502.72	7.80	.006
Self-Criticism	1/224	26.04	0.69	
Identity	1/224	107.60	0.60	
Self-Satisfaction	1/224	569.24	2.25	
Behavior	1/224	0.07	0.30	
Total Self-Concept	1/224	496.82	0.29	
Net Conflict	1/224	108.11	0.71	
Total Variability	1/224	158.12	0.98	
Distribution	1/224	25.28	0.51	

TABLE 4

Summary of Analysis of Covariance Sex Effect for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	8.35	0.12	
Moral-Ethical Self	1/224	1110.06	15.05	.0001
Personal Self	1/224	111.85	1.79	
Family Self	1/224	684.80	10.05	.002
Social Self	1/224	351.12	5.45	.02
Self-Criticism	1/224	333.58	8.79	.003
Identity	1/224	2356.90	13.10	.0001
Self-Satisfaction	1/224	9.70	0.30	
Behavior	1/224	1342.32	6.18	.015
Total Self-Concept	1/224	3278.03	1.91	
Net Conflict	1/224	53.28	0.35	
Total Variability	1/224	749.28	4.64	.032
Distribution Score	1/224	3643.81	7.32	.007

TABLE 5

Summary of Analysis of Covariance Group Effect for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	65.14	0.94	
Moral-Ethical Self	2/224	22.68	0.31	
Personal Self	2/224	147.50	2.36	
Family Self	2/224	159.75	2.34	
Social Self	2/224	282.65	4.39	.014
Self-Criticism	2/224	236.27	6.23	.002
Identity	2/224	1198.56	6.66	.002
Self-Satisfaction	2/224	344.91	1.37	
Behavior	2/224	231.30	1.06	
Total Self-Concept	2/224	571.26	0.30	
Net Conflict	2/224	30.78	0.20	
Total Variability	2/224	401.97	2.49	
Distribution Score	2/224	124.52	0.25	

TABLE 6

Summary of the Analysis of Covariance for the Campus (X) Sex Interaction for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	0.07	0.11	
Moral-Ethical Self	1/224	228.22	3.09	
Personal Self	1/224	79.56	1.27	
Family Self	1/224	1173.91	17.23	.0001
Social Self	1/224	1000.00	15.52	.0001
Self-Criticism	1/224	22.53	0.59	
Identity	1/224	6563.39	36.48	.0001
Self-Satisfaction	1/224	1241.14	4.91	.028
Behavior	1/224	951.14	4.38	.038
Total Self-Concept	1/224	9271.08	5.40	.021
Net Conflict	1/224	1677.49	10.99	.001
Total Variability	1/224	46.98	0.29	
Distribution Score	1/224	15.27	0.31	

TABLE 7

Summary of Analysis of Covariance for the Campus (X) Group Interaction for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	13.27	0.19	
Moral-Ethical Self	2/224	111.02	1.51	
Personal Self	2/224	108.11	1.73	
Family Self	2/224	361.57	5.31	.006
Social Self	2/224	739.93	11.48	.0001
Self-Criticism	2/224	15.82	0.42	
Identity	2/224	2111.96	11.74	.0001
Self-Satisfaction	2/224	284.58	1.23	
Behavior	2/224	189.81	0.87	
Total Self-Concept	2/224	4587.58	2.67	
Net Conflict	2/224	204.03	1.34	
Total Variability	2/224	478.86	2.97	
Distribution Score	2/224	56.64	0.11	

TABLE 8

Summary of the Analysis of Covariance for Sex (X) Group Interaction for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	50.12	0.73	
Moral-Ethical Self	2/224	229.08	3.11	.047
Personal Self	2/224	95.27	1.52	
Family Self	2/224	359.37	5.27	.006
Social Self	2/224	119.44	1.85	
Self-Criticism	2/224	25.14	0.66	
Identity	2/224	539.68	3.00	
Self-Satisfaction	2/224	631.62	2.50	
Behavior	2/224	627.14	2.89	
Total Self-Concept	2/224	4378.68	2.55	
Net Conflict	2/224	327.83	2.15	
Total Variability	2/224	342.34	2.12	
Distribution Score	2/224	2089.36	4.20	.016

TABLE 9

Summary of the Analysis of Covariance for the Campus (X) Group Interaction for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	133.89	1.93	
Moral-Ethical Self	2/224	176.38	2.39	
Personal Self	2/224	343.07	5.48	.005
Family Self	2/224	260.80	3.83	.023
Social Self	2/224	773.29	12.00	.0001
Self-Criticism	2/224	1.88	0.50	
Identity	2/224	1230.32	6.84	.001
Self-Satisfaction	2/224	508.00	2.01	
Behavior	2/224	926.68	4.38	.038
Total Self-Concept	2/224	9250.57	5.39	.005
Net Conflict	2/224	75.25	0.49	
Total Variability	2/224	376.97	2.34	
Distribution Score	2/224	554.64	1.11	

TABLE 10

Summary of the Analysis of Covariance for the Subjects' SAT Scores Covariate for the TSCS Sub-Scales Pre-Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	870.09	12.59	.0001
Self-Criticism	1/224	3229.54	21.16	.0001
Net Conflict	1/224	148.93	3.92	.049

TABLE 11

Summary of Analysis of Covariance for the Subjects' College Grade Point Averages Covariate for the TSCS Sub-Scales

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	868.67	12.57	.0001
Moral-Ethical Self	1/224	794.74	10.78	.001
Personal Self	1/224	728.31	11.63	.001
Total Self-Concept	1/224	6633.87	3.87	.050
Distribution Score	1/224	2024.08	4.07	.045

TABLE 12

Campus Effect for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	0.082	
Moral-Ethical Self	0.421	
Personal Self	0.724	
Family Self	2.307	
Social Self	0.623	
Self-Criticism	0.260	
Identity	0.150	
Self-Satisfaction	2.764	
Behavior	0.074	
Total Self-Concept	1.522	
Net Conflict	0.324	
Total Variability	6.890	.009
Distribution Score	0.433	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.251	14	195	0.242

TABLE 13

Sex Effect for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	0.460	
Moral-Ethical Self	3.450	
Personal Self	0.005	
Family Self	0.002	
Social Self	0.065	
Self-Criticism	0.200	
Identity	2.507	
Self-Satisfaction	0.076	
Behavior	0.640	
Total Self-Concept	1.409	
Net Conflict	0.193	
Total Variability	0.006	
Distribution Score	0.160	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.063	14	195	0.394

TABLE 14

Group Effect for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	3.940	.021
Moral-Ethical Self	2.030	
Personal Self	0.667	
Family Self	0.493	
Social Self	0.090	
Self-Criticism	2.163	
Identity	0.540	
Self-Satisfaction	1.271	
Behavior	2.745	
Total Self-Concept	3.169	.044
Net Conflict	0.097	
Total Variability	1.307	
Distribution Score	1.210	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.209	28	390	0.217

TABLE 15

Campus (X) Sex Interaction for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	0.120	
Moral-Ethical Self	1.892	
Personal Self	4.594	.033
Family Self	9.768	.002
Social Self	0.987	
Self-Criticism	0.870	
Identity	4.532	.034
Self-Satisfaction	1.848	
Behavior	7.325	.007
Total Self-Concept	8.400	.004
Net Conflict	1.170	
Total Variability	0.068	
Distribution Score	0.000	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.917	14	195	0.027

TABLE 16

Campus (X) Group Interaction for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	3.582	.030
Moral-Ethical Self	0.118	
Personal Self	1.186	
Family Self	0.384	
Social Self	5.315	.006
Self-Criticism	0332	
Identity	3.700	.026
Self-Satisfaction	3.222	.042
Behavior	2.061	
Total Self-Concept	3.713	.026
Net Conflict	0.419	
Total Variability	0.187	
Distribution Score	0.636	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.656	28	390	0.021

TABLE 17

Sex (X) Group Interaction for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	1.335	
Moral-Ethical Self	1.389	
Personal Self	1.032	
Family Self	0.889	
Social Self	0.562	
Self-Criticism	1.004	
Identity	0.546	
Self-Satisfaction	0.090	
Behavior	0.263	
Total Self-Concept	0.534	
Net Conflict	2.782	
Total Variability	0.985	
Distribution Score	1.667	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.542	28	390	0.041

TABLE 18

Campus (X) Sex (X) Group Interaction for the TSCS Sub-Scales

Variable	F(2, 208)	p Greater Than
Physical Self	0.700	
Moral-Ethical Self	2.970	
Personal Self	2.908	
Family Self	2.291	
Social Self	4.093	.018
Self-Criticism	0.057	
Identity	1.812	
Self-Satisfaction	3.882	.022
Behavior	3.129	.022
Total Self-Concept	3.961	.020
Net Conflict	0.155	
Total Variability	3.100	.047
Distribution Score	0.737	

Test of Significance Using Wilks Lamba Criterion and Canonical Correlations

F	DFHYP	DFERR	p Greater Than
1.199	28	390	0.226

TABLE 19

Summary of the Analysis of Covariance for the Campus Main Effect for the TSCS Sub-Scale Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	200.41	0.92	
Moral-Ethical Self	1/224	22.91	0.34	
Personal Self	1/224	3.43	0.05	
Family Self	1/224	2.95	0.04	
Social Self	1/224	144.62	2.16	
Self-Criticism	1/224	29.19	0.79	
Identity	1/224	15.31	0.95	
Self-Satisfaction	1/224	1201.71	6.73	.009
Behavior	1/224	8.85	0.41	
Total Self-Concept	1/224	104.47	0.69	
Net Conflict	1/224	4.82	0.04	
Total Variability	1/224	166.06	1.20	
Distribution Score	1/224	0.54	0.05	

TABLE 20

Summary of the Analysis of Covariance for the Sex Main Effect for the TSCS Sub-Scale Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	15.99	0.26	
Moral-Ethical Self	1/224	1145.90	17.04	.0001
Personal Self	1/224	122.67	1.86	
Family Self	1/224	542.34	8.15	.005
Social Self	1/224	302.93	4.52	.035
Self-Criticism	1/224	147.44	3.99	.047
Identity	1/224	2999.79	18.64	.001
Self-Satisfaction	1/224	5.71	0.32	
Behavior	1/224	1044.31	4.83	.029
Total Self-Concept	1/224	5583.89	3.67	
Net Conflict	1/224	51.58	0.40	
Total Variability	1/224	248.98	1.81	
Distribution Score	1/224	0.02	0.22	

TABLE 21

Summary of the Analysis of Covariance for Group Main Effect for the TSCS Sub-Scale Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	6.57	0.11	
Moral-Ethical Self	2/224	92.85	1.38	
Personal Self	2/224	34.18	0.52	
Family Self	2/224	84.37	1.27	
Social Self	2/224	93.86	1.40	
Self-Criticism	2/224	239.33	6.47	.002
Identity	2/224	902.49	5.61	.004
Self-Satisfaction	2/224	634.13	3.55	.030
Behavior	2/224	101.56	0.47	
Total Self-Concept	2/224	89.18	0.057	
Net Conflict	2/224	34.29	0.26	
Total Variability	2/224	351.17	2.55	
Distribution Score	2/224	0.14	1.53	

TABLE 22

Summary of the Analysis of Covariance for the Campus (X) Sex Interaction for the TSCS Sub-Scales Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	1.30	0.02	
Moral-Ethical Self	1/224	342.78	5.10	.025
Personal Self	1/224	310.47	4.71	.031
Family Self	1/224	1722.24	25.87	.0001
Social Self	1/224	908.79	13.56	.0001
Self-Criticism	1/224	0.85	0.023	
Identity	1/224	6254.10	38.87	.0001
Self-Satisfaction	1/224	315.83	1.77	
Behavior	1/224	1399.00	6.47	.012
Total Self-Concept	1/224	15488.27	10.18	.002
Net Conflict	1/224	1212.04	9.33	.003
Total Variability	1/224	22.50	0.16	
Distribution Score	1/224	0.08	0.84	

TABLE 23

Summary of the Analysis of Covariance for the Sex by Group Interaction for the TSCS Sub-Scale Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	1/224	94.63	1.51	
Moral-Ethical Self	1/224	169.35	2.52	
Personal Self	1/224	92.95	1.41	
Family Self	1/224	89.61	1.35	
Social Self	1/224	48.04	0.72	
Self-Criticism	1/224	34.99	0.95	
Identity	1/224	319.02	1.98	
Self-Satisfaction	1/224	241.48	1.35	
Behavior	1/224	451.88	2.09	
Total Self-Concept	1/224	3615.00	2.38	
Net Conflict	1/224	400.60	3.08	.048
Total Variability	1/224	209.86	1.52	
Distribution Score	1/224	0.12	1.16	

TABLE 24

Summary of the Analysis of Covariance for the Campus by Group Interaction for the TSCS Sub-Scale Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	27.60	0.44	
Moral-Ethical Self	2/224	54.78	0.81	
Personal Self	2/224	113.12	1.72	
Family Self	2/224	111.69	1.68	
Social Self	2/224	781.45	11.66	.0001
Self-Criticism	2/224	0.85	0.023	
Identity	2/224	1872.19	11.64	.0001
Self-Satisfaction	2/224	241.48	1.35	
Behavior	2/224	178.48	0.82	
Total Self-Concept	2/224	2162.09	1.42	
Net Conflict	2/224	220.54	1.70	
Total Variability	2/224	46.84	0.34	
Distribution Score	2/224	0.07	0.70	

TABLE 25

Summary of the Analysis of Covariance for the Campus by Sex by Group Interaction for the TSCS Sub-Scale Post Scores

TSCS Sub-Scales	df	Mean Square	F	P
Physical Self	2/224	102.17	1.63	
Moral-Ethical Self	2/224	177.76	2.64	
Personal Self	2/224	146.13	2.22	
Family Self	2/224	135.23	2.03	
Social Self	2/224	393.13	5.87	.003
Self-Criticism	2/224	5.64	0.15	
Identity	2/224	267.74	1.66	
Self-Satisfaction	2/224	105.87	0.59	
Behavior	2/224	431.92	2.00	
Total Self-Concept	2/224	2836.23	1.87	
Net Conflict	2/224	53.31	0.41	
Total Variability	2/224	82.15	0.60	
Distribution Score	2/224	0.18	1.90	

TABLE 26

Summary of Analysis of Covariance for Subjects' Performance Ratings

Source of Variation	df	Mean Square	F	P
SAT	1	3.26	7.54	.007
College GPA	1	2.11	4.90	.028
High School GPA	1	1.05	2.43	
ISP	1	0.02	0.46	
Campus (C)	1	4.25	9.83	.002
Sex (S)	1	0.22	0.52	
Group (G)	1	6.74	15.59	.0001
C X S	1	0.10	0.23	
C X G	1	1.85	4.27	.040
S X G	1	2.75	6.36	.013
C X S X G	1	3.21	7.48	.002

TABLE 27

Summary of Analysis of Covariance for Subjects' Counting Errors

Source of Variation	df	Mean Square	F	P
SAT	1	0.65	0.42	
College GPA	1	147.88	0.47	
High School GPA	1	1107.65	3.48	
ISP	1	0.054	0.17	
Campus (C)	1	4785.87	15.05	.0001
Sex (S)	1	443.83	1.40	
Group (G)	2	1095.82	3.45	.034
C X S	1	556.72	1.75	
C X G	2	384.19	1.21	
S X G	2	501.40	1.58	
C X S X G	2	151.65	0.48	

TABLE 28

Summary of Analysis of Covariance for Subjects' Marking Errors

Source of Variation	df	Mean Square	F	P
SAT	1	824.31	0.21	
College GPA	1	265.89	0.68	
High School GPA	1	8839.67	2.27	
ISP	1	6304.16	1.62	
Campus (C)	1	242.18	0.06	
Sex (S)	1	955.24	0.25	
Group (G)	2	14720.64	3.78	.024
C X S	1	7633.59	1.96	
C X G	2	4227.63	1.09	
S X G	2	1284.87	0.33	
C X S X G	2	3509.91	0.90	

TABLE 29

Summary of Analysis of Covariance for the Total Number of Errors

Source of Variation	df	Mean Square	F	P
SAT	1	837.72	0.20	
College GPA	1	14994.33	3.52	
High School GPA	1	2021.56	0.48	
ISP	1	4226.99	0.99	
Campus (C)	1	7181.20	1.69	
Sex (S)	1	2701.31	0.63	
Group (G)	2	7995.48	1.88	
C X S	1	4067.31	0.96	
C X G	2	7047.29	1.66	
S X G	2	1481.77	0.35	
C X S X G	2	2286.08	0.54	

TABLE 30

Summary of Analysis of Variance for the Subjects' SAT Scores

Source of Variation	df	Mean Square	F	P
Campus (C)	1	13.10	65.24	.0001
Sex (S)	1	0.47	2.34	
Group (G)	2	0.30	1.49	
C X S	1	0.64	3.18	
C X G	2	0.30	1.48	
S X G	2	0.12	0.60	
C X S X G	2	0.13	1.57	

TABLE 31

Summary of Analusis of Variance for Subjects' College Grade Point Averages

Source of Variation	df	Mean Square	F	P
Campus (C)	1	13.10	65.24	.0001
Sex (S)	1	0.47	2.34	
Group (G)	2	0.30	1.49	
C X S	1	0.64	3.18	
C X G	2	0.30	1.48	
S X G	2	0.12	0.60	
C X S X G	2	0.32	1.57	

TABLE 32

Summary of Analysis of Variance for the High School Grades Point Averages

Source of Variation	df	Mean Square	F	P
Campus (C)	1	4.36	28.50	.0001
Sex (S)	1	1.42	9.21	.003
Group (G)	2	0.09	0.61	
C X S	1	0.15	0.99	
C X G	2	0.06	0.40	
S X G	2	0.12	0.69	
C X S X G	2	0.28	1.85	

TABLE 33

Summary of Analysis of Variance for the Subjects' Index of Social Position Scores

Source of Variation	df	Mean Square	F	P
Campus (C)	1	3627.04	11.94	.001
Sex (S)	1	1148.44	3.78	.05
Group (G)	2	294.63	0.97	
C X S	1	413.44	1.36	
C X G	2	951.61	3.13	.045
S X G	2	95.04	0.31	
C X S X G	2	27.99	0.92	