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DEFENSIVENESS, SELF CRITICISM AND SELF CONCEPT  
IN A SAMPLE OF BLACK, MEXICAN, AND  
WHITE AMERICAN ADOLESCENTS

By

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## ABSTRACT

### DEFENSIVENESS, SELF CRITICISM AND SELF CONCEPT IN A SAMPLE OF BLACK, MEXICAN AND WHITE AMERICAN ADOLESCENTS

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The purpose of this study was to investigate differences in total self concept, self criticism and defensiveness among Black, Mexican and White American adolescents. The relationship between ethnic group membership and other personality variables was also examined.

The research was conducted in a medium-sized, Midwestern, heavily industrialized and labor intensive urban school setting. A sample was drawn from the population of tenth, eleventh and twelfth grade students in the two secondary schools of the district. One school was predominantly White, the other was predominantly Black. The Mexican American population was less than 10 percent in each of the two schools.

Three major null hypotheses were formulated:

Hypothesis 1. There will be no difference in mean Self Concept scores of Black, Mexican and White American secondary school students.

Hypothesis 2. There will be no difference in mean Self Criticism scores of Black, Mexican and White



American secondary school students.

Hypothesis 3. There will be no difference in mean Defensiveness Positive scores of Black, Mexican and White American Secondary school students.

Subhypotheses: There will be no interaction between race and all other independent variables.

The Tennessee Self Concept Scale (TSCS) and an Information Questionnaire developed by the author were administered to a sample of 301 students. There was a total of five independent variables (race, sex, grade, achievement, and socioeconomic status) and twenty-nine dependent variables (TSCS scores). School was not treated as an independent variable.

An SPSS file was established and the following statistical procedures were programmed: 1) one-way-ANOVA's between all dependent and independent variables, and 2) two-way ANOVA's of all hypothesized relationships between dependent and independent variables. The alpha level for statistical significance was set at  $\leq .05$ .

Hypotheses one and three were not rejected. Hypothesis two was rejected at the .02 level. Ethnic group membership was found to be a variable significantly associated with the following TSCS scores: 1) Psychosis, 2) Personality Disorder, 3) Personality Integration, 4) Number of Deviant Signs, 5) General Maladjustment, 6) Social Self, 7) Moral-Ethical Self, 8) Physical Self, 9) Variation (External), and 10) the five scores derived from response characteristics of subjects.

Findings indicated that White adolescents scored more favorably than Blacks and Mexican Americans in all but four of the fourteen scales. Black and Mexican American students obtained more desirable scores than White students in the following scales: 1) Physical Self, 2) Personality Disorder, 3) General Maladjustment, and 4) Psychosis.

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## CHAPTER I

### INTRODUCTION

Educational researchers have been concerned with the relationship between the self concept and other factors such as learning, academic achievement, socioeconomic status, sex, racial/ethnic group membership, school climate, home environment, social competency, teaching methods, and curricular design. It has been extensively argued that the self concept of a student is an important variable in the educational process. The influence of self concept is a complex topic of potential importance to educational theory and practice.

An individual's self concept is indicative of what type of a person that individual believes that he/she is. The self concept is typically acquired from what "significant-other" people think of that individual. A person adopts, and eventually incorporates into the self-structure the beliefs that he/she feels others have of him/her. A person acquires a notion of a personal self from what other people think of or act toward that person.

A voluminous amount of research has indicated that children reveal varying degrees of self-acceptance, self-esteem, and self-worth, suggesting self-conceptualizations

which may be viewed as positive (high) or negative (low); and which are not only reflective of social-emotional adjustment but also interact with other aspects of psychological functioning, including academic achievement and other school-related outcomes.

### The Problem

A review of the literature indicates that a low (negative) self concept has been observed among children belonging to racial and ethnic minority groups in the United States. Mexican American (Chicano) and Puerto Rican American students have been found to have significantly lower self concepts than their Anglo American (and Black American) counterparts (e.g. Coleman, 1966). In recent years the research outcomes have been contradicting. A number of studies over the past decade have reported that racial minority group students scored higher on self concept measures than white students. Further research on this problem is needed in order to determine the relationship between racial group membership and self concept.

The process of identification is one which begins at a very early age and is considered crucial in the development of the self-image or self concept. One of the earliest forms of identity evident in American children is ethnic and/or racial identity (Clark and Clark, 1939; Goodman, 1952; Morland, 1958; Porter, 1971). The establishment of racial and ethnic identity is influenced by factors such as skin

color (i.e., racial characteristics) and ethnic group membership. These have been considered two of the most important factors in self-identification among minority group children. It is possible that American society reflects a racial and ethnocentric ideology which young children perceive at a very early age. The preschool child eventually learns that racial/ethnic group membership is an important variable in identification and self-evaluation.

Ehrlich (1973) outlined a comprehensive review of the literature on the social psychology of prejudice in support of his theoretical (propositional) perspective. In this book he states that "ethnicity is a major characteristic by which people code themselves and other persons in society" (p. 128). In an examination of the effects of prejudice and discrimination on self-attitudes, Simpson and Yinger (1972) emphasized the role of social learning in the formation and development of the self concept:

Our analysis will be built largely around the experience of learning that one is of an inferior color, but this should be seen as illustrative of the whole experience of learning that one belongs to a minority group. It is in the context of slights, rebuffs, forbidden opportunities, restraints, and often violence that the minority-group member shapes that fundamental aspect of personality--a sense of one-self and one's place in the total scheme of things. (p. 192)

American education has been primarily a process of socialization aimed at assimilation into a dominant White society. The child who enters school with a different linguistic, cultural and socioeconomic background than that

fostered by the total school environment may be expected to confront very real and serious problems in attempting to adapt to a foreign and narrow monolingual-monocultural system. This may be the case regardless of the variable of race.

Becker (1972) conducted a study on teacher attitudes toward their inner-city, lower socioeconomic class (and primarily minority) pupils and found their perceptions to be very negative. This sample of teachers viewed their students as dirty, promiscuous, violent, unambitious, difficult to teach, and virtually uncontrollable. There are other indications that Anglo teachers do not adequately know or understand Mexican American children (Thurston, 1957; Ulibarri, 1960). Mexican American children are considered less important and less favorable than Anglo children. Parsons (1966) studied the opinions held by Anglo teachers toward Mexican Americans in the state of California. He reports: "In general, the Anglo informants characterized the Mexicans as immoral, violent, and given to fighting, dirty, unintelligent, improvident, irresponsible, and lazy." A related finding by Jacobson (1966) is that Anglo teachers of Mexican American students of high IQ tend to perceive them as being more American (Anglo or White) than Mexican.

### Need for Study

A comprehensive review of the literature on self concept and Mexican Americans has yielded conflicting evidence.

Comparisons of Mexican American students' reported self concept to self concept measures obtained from samples of non-Mexican American students have revealed a number of different relationships. Most studies report a lower self concept for Mexican Americans than for Anglos. Other studies have failed to reveal significant differences in self concept measures comparing groups of Mexican American students to their Anglo and/or Black counterparts. A smaller number of studies have yielded higher self concept scores for Mexican Americans than for Anglo Americans. A review of the research literature on self concept and racial/ethnic group membership is presented in Chapter II of this study.

It has been suggested that the contradictory research findings are indicative of changing social, economic, political, and educational conditions over the last decade or two. Zirkel (1973) has suggested that the factor of time is of potential importance in the context of changing social and political conditions of American minorities.

An examination of reported findings and corresponding publication dates suggests that there has been an increase (improvement) in the self concept scores of Mexican Americans over the last decade. It is possible that a change in self concept among American minority students is at least in part related to the Civil Rights Movement of the 1960's and subsequent changes in educational practice which have ultimately led to improved conditions and opportunities for minority group students.

Fantini and Weinstein (1968) have attributed the reported rise of self concept scores of Black students to the Civil Rights Movement and the subsequent emphasis placed on Black pride by the Black community and school systems. However, this interpretation has been ruled out by Cicirelli (1977) on the basis of research findings that are inconsistent and often contradictory.

There exists the possibility that the reported positive change in the self concept of American minority students may be an artifact. One possible factor which may account for the recent and divergent research findings on self concept and ethnic group membership (i.e., a higher self concept for minority children or a lack of differences in self concept scores obtained from comparable samples of minority and majority children and youth) has been termed "defensiveness" on the part of minority subjects.

Researchers have commented on this notion of defensiveness. DeBlassie and Healey (1970) pointed out that Mexican American students are defensive in self-report measures and attempt to convey an overly positive picture of themselves. In a subsequent publication Healey and DeBlassie (1974) found significantly higher Defensive-Positive and lower Self-Criticism scores for both Mexican American and Black American samples than for the Anglo American sample. The data were based on the TENNESSEE SELF CONCEPT SCALE. The authors hypothesized that the "artificially elevated" scores obtained from both minority samples were due to defensiveness in responding.

Long (1969) contended that defensive responding on the part of minority students on self concept instruments occurs in order to convey an overly positive image of the self. Greenberg (1970) considered the possibility that defensiveness may account for high self ratings of low achievers. Samuels (1977) has called attention to the notion of defensiveness as a potential measurement and research problem.

The tendency of subjects to reveal an overly favorable and thus inaccurate picture of the self in personality inventories has been a long-recognized problem in the measurement of personality traits and research based on such data.

Defensiveness and lack of response reliability were given by Williams and Byars (1968) as factors to be taken into account in the interpretation of self concept scores obtained from subjects of minority group status. Soares (1969) found that low socioeconomic background students reported a higher percentage of favorable personality characteristics than middle class students. Findings were interpreted in terms of aspiration level, social pressure, and meeting expectations of others and self. Eisenberg (1967) believes that lower class children develop defense mechanisms against repeated failure and do not care if they succeed in the future. Such defensive dynamics may create new referents for self-evaluation.

The evidence suggests that the notion of defensiveness is one which is worthy of systematic investigation since

its operation may affect true self concept scores and thus threaten the validity of comparative self-concept research findings and instruments.

### Purpose of Study

The primary purposes of this study are: 1) to determine if there are differences in self concept among Black, Mexican and White American secondary school students; and 2) to determine if there are differences in defensiveness among Black, Mexican and White American secondary school students.

This study will also assess the relationship of sex, grade level, academic achievement, and socioeconomic status to the obtained total self concept scores and two different measures of personality defensiveness. The statistical analyses will test for the effect of interaction between scores on a standardized self concept measure and the independent variables identified above. Specific hypotheses to be tested are listed in Chapter III.



## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

Sullivan (1949), Rogers (1951), Jersild (1952), Combs and Snygg (1959), Hamachek (1971) and other phenomenological personality theorists have emphasized the role of the individual's perception of situational conditions as well as the importance of the judgments of "significant-other" people in the formation, development, and modificability of the self concept.

The role of the family in early development and foundation of the self concept has been long remembered (Wylie, 1961). Christian (1976) believes that the family is the primary source of socialization for the child and by the time the secondary socialization process begins, "in which the school and the written word play a major role, the self concept is considered to have been formed in a manner and to a degree that it will not be changed fundamentally thereafter." He stresses the fact that during the primary socialization period "the child internalizes the world of family members and friends," and this has "transcendent significance in the creation of the child's identity during this period" (pp. 18-19). Coopersmith (1967) has also

emphasized the importance of the family, particularly the relationship between the child and parents in terms of emotional closeness and discipline or control over behavior.

As the child enters school, teachers, peers and school materials will have a significant impact on the child's developing self concept (see, for example, Combs, 1962). Kinch (1963) postulated that the self concept develops as a result of social interaction and is an important variable in guiding future behavior. The child attempts to judge and value the self in relation to peers. As the child develops socially, cognitively and emotionally, he/she gains a better conception of self as reflected from significant others; a better understanding of position in society; and the significance of racial/ethnic group membership.

### Studies on Ethnic Identity and Preference

The early studies of Clark and Clark (1939) on racial identification and preference among Black children have generated much interest and subsequent research in the last four decades. Simpson and Yinger's (1972) review of such research led them to conclude that there is substantial support for the following generalizations on race awareness and preference. They summarize as follows:

Race awareness begins at an early age, particularly in societies where the race line is important; in the United States, a large majority of both black and white children express preferences of white dolls, puppets, or play-group members; boys may be more likely to favor white than girls, by age seven or eight the expressed preference of black children for white begins to decline; these patterns have remained quite constant through the last several decades. (p. 193)

Goodman (1952) utilized the doll technique with a sample of nursery school children. She found that Black children, on the average, perceived racial differences at an earlier age than their White counterparts; and that both Black and White children manifested more hostility toward Black dolls than they did toward White dolls.

Werner and Evans (1968) found that four- and five-year-old Mexican American children were able to discriminate between "good" and "bad" dolls on the basis of skin color, classifying good dolls as white and bad as dark. Moreover, boys tended to perceive the white male adult doll as larger than the dark adult doll of exactly the same size. Results showed that feelings of prejudice and ethnic identification were evident in preschool years.

A more recent study of racial awareness and identification was conducted by Durrett and Davy (1970). They used a sample of low socioeconomic background kindergarten children from San Jose, California. Subjects were Black, Mexican American and White children in an integrated setting. Using the doll technique (Black and White only), they found that: 1) Anglos expressed the highest own-race preference in both identification and choice of playmate; 2) Blacks showed the least own-race preference (as above); 3) Mexican Americans valued the Anglo group over the Black; 4) Blacks showed less own-race rejection than that suggested by comparable research reported eleven years earlier; and 5) there was less evidence of self-derogation and hostility on the

part of Black preschoolers than had been previously reported in the literature approximately one decade ago.

Hraba and Grant (1970) examined racial preferences of Black children aged four to eight and found preference for the doll of their own race, suggesting that black children in inter-racial settings are not necessarily white-oriented. The race of the interviewer did not affect choice of doll, and Black doll preference was found to be positively associated with age. Harris (1962) reported that Black males were more likely to identify in terms of race than Black females; whereas White female subjects more often identified themselves in terms of race than White males.

Rice, Ruiz and Padilla (1974) presented a set of three (Anglo, Black and Mexican American) photographs of adult males to groups of preschool and third grade students from the three different groups. Results indicated "a well developed knowledge of racial differences," although Mexican American preschoolers had difficulty in differentiating between Anglo and Mexican American photographs. Anglo preschoolers displayed a significant preference for the photograph of their own ethnicity and the other two groups did not. At the third grade, however, only Mexican Americans showed a clear preference for their own ethnic group. A significant number of Black preschoolers chose the Anglo photograph as the one they would prefer to grow up to be like.

A review of studies of racial awareness and identification in young children has been published by Stevenson (1967). He concluded:

The results from this sample of studies on racial awareness with preschool children are sobering. It is clear that children as young as three can discriminate racial differences and that negative attitudes towards members of another race may be evidenced by children as young as five. The problems for healthy personality development arising from membership in a minority group are also revealed. (p. 213)

The available research studies clearly indicate that ethnic identity and preference of North American children is established at a very early age. Hawk (1967) further added that among the socially disadvantaged, "the self concept is formed through assimilation of external labels that are applied to the person" (p. 199).

#### Self Concept and Ethnic Group Membership

A review of the literature on self concept and ethnic group membership and mixture has been published by Zirkel (1973). He noted that although there have been numerous studies on the subject (most of which appeared in the 1960-1970 decade), "Wilie's (1961) landmark review of the self concept research did not mention any empirical studies relating self concept to ethnic group membership" (p. 211). Zirkel states that "the effects of ethnic group mixture in the school on the self concepts of students is a subject which has evoked perhaps much heat but little light" (p. 214). He also notes that the reported findings for minority

groups other than Blacks are "less numerous but somewhat similar" (p. 213).

Chang (1975) notes that while most of the research on the relationship between the self concept and ethnicity have centered around Blacks and Mexican Americans, "the results of these studies have been conflicting and unclear." The majority of the published research studies on the relationship between self concept and ethnic group membership in the United States has utilized samples of Black students in comparison to White counterparts. A brief review of findings emanating from such studies follows.

There are a number of studies which show no significant differences in self concept for Blacks and Whites (Coleman, 1966; Clark et al., 1967; Gibby and Gabler, 1967; Powers, 1971; Zirkel and Moses, 1971). Several investigators have reported that Blacks have higher self conceptualizations than Whites (Soares and Soares, 1969, 1970; Trowbridge, 1970, 1972; Cicirelli, 1977). However, the majority of studies in the past have revealed significant differences in favor of White students. Among the studies reporting that Black students exhibited lower self concepts than White students are those of Deutsch (1960), Ausubel and Ausubel (1963), Keller (1963), Radke-Yarrow et al., (1965), Brown (1968), Long and Henderson (1968), and Williams (1968).

Studies comparing self concept measurements of Mexican American and White students reveal findings similar to Black-White comparisons. Among the studies showing no significant

difference in self concept between Mexican American and White subjects are those of Carter (1968), DeBlassie and Healey (1970), Klein (1975), and Little and Ramirez (1976).

Studies indicating significant differences between the two groups are more numerous. Coleman (1966) found that Mexican American students had significantly lower self concepts than did Anglo and Black students. McDaniel (1967) reports the same phenomenon for Mexican Americans with reference to Anglos, but not when compared to Blacks. Palomares and Cummings (1968a; 1968b), Evans (1969), and Hishiki (1969) also report lower self concepts for Mexican American students than for White American counterparts.

A study involving Mexican and Anglo American students from kindergarten through the fourth grade was undertaken by Muller and Leonetti (1974) in order to determine if there were differences in self concept, as measured by the PRIMARY SELF CONCEPT SCALE (Leonetti, 1973). The 24 pictorial-item instrument was administered to ten Anglo and ten Mexican American students at each of the five levels. Subjects were from low socioeconomic backgrounds ranging in annual family incomes from \$2,500 to \$4,000. The results indicate that at kindergarten level, Anglo students had significantly higher self concepts than Mexican Americans but differences were not significant at the other four grade levels. There was an upward trend in self concept scores for the Mexican American sample across grades but this was not true for the Anglo American sample. The lack of an overall difference

between the two groups "suggests that (they) do not differ to the extent previously suspected," and that "the school experience seems to have a positive effect on the self concept of the Spanish-surnamed child" (pp. 58-59). The lack of differences may be due to:

1. increased teacher sensitivity toward Mexican Americans in the school district;
2. control of socioeconomic status of subjects; and/or
3. properties of the instrument.

Maldonado (1972) administered the TENNESSEE SELF CONCEPT SCALE to a group of male and female Mexican American tenth, eleventh and twelfth graders from low socioeconomic backgrounds. The scores did not reveal a sense of inferiority and worthlessness typically attributed to members of this particular group. The overall scores on the TSCS were not significantly different for males and females.

Little and Ramirez (1976) administered a semantic differential scale (MYSELF AS I REALLY AM) to a group of Mexican American and Anglo fifth through eighth grade students. No significant ethnic differences in self concept were found, but the ethnicity of the testers significantly influenced self esteem scores of seventh and eighth graders, and not the elementary school students. The Anglo tester was able to elicit more positive self-esteem scores than the Mexican American tester. Although the results could be attributed to different personality characteristics



between the two scale administrators, the authors suggested that the older students may have more accurately perceived the Anglo as a typical evaluator (i.e., an individual with power and authority) and thus described themselves more positively. This interpretation is subject to an empirical test. However, the finding suggests that the ethnicity of the tester should be taken into account in the design of a self concept study utilizing a sample of middle school age students.

Zirkel and Moses (1971) found that self concept was affected by ethnic group membership but was not influenced by the ethnic group composition or mixture in a particular school.

A study was conducted by Petersen and Ramirez (1971) in order to determine if Mexican and Black American children experience a greater discrepancy between their real and ideal selves than Anglo American children. Subjects for the study were low socioeconomic class nine- to fourteen-year-olds. The instrument was a modified version of Block's (1964) inventory consisting of two rating scales. One rating scale was used for assessing the real self and the other rating scale for assessment of the ideal self. The results indicated a significantly greater disparity between real-ideal self scores for both Mexican American and Black American than for Anglo American subjects. Sex differences within groups were not found to be significant. Observed feelings of self-rejection and anger were interpreted to be

the result of frustration experienced by minority group members due to social discrimination. In addition, it was noted that the Mexican American may have identity problems due to the "internalization of conflicting sets of values" (p. 26). The finding that Mexican American children had higher discrepancy scores than both Blacks and Anglos on self-rejecting measures (e.g. "dull" and "lazy" items) suggests that they may have internalized common social stereotypes promulgated by the dominant Anglo culture toward Mexicans.

Swartz (1971) found a less optimistic orientation toward the future among Mexican American students. Anthropological reports suggest that this is associated to a fatalistic element inherent in the Mexican American culture; but other reports have suggested that the effects of poverty and failure are the major factors in the interpretation of this finding. A fatalistic orientation, reduced motivation, lowered ambition and expectations, decreased confidence and aspirations as well as feelings of apathy have been associated with low self-conceptualizations among individuals.

Indicative of a low self concept is the high frequency of self-derogation which has been observed among Mexican American students, particularly adolescents. For example, Mexican American high school seniors were found by Coleman et al. (1966) to be more self-depreciating than their Anglo counterparts.

Related findings by Gibby and Gabler (1967) were that Black sixth graders' self-ratings on intelligence were less accurate when compared with intelligence test scores than the intelligence self-ratings obtained from White peers. The Black students' tendency to overrate personal intellectual abilities has also been interpreted by Samuels (1977) to be supportive of the defensiveness point of view.

Healey and DeBlassie (1974) conducted a comparative self concept study in order to determine if differences existed among Black, Anglo and Mexican American adolescents attending the ninth grade in a Southwestern middle school system. Findings based on the TENNESSEE SELF CONCEPT SCALE (TSCS) revealed that Mexican Americans scored higher on the Self-Satisfaction and Moral-Ethical Self scores than both Black and Anglo American subjects. Although no significant differences were found between socioeconomic class and the Total Positive scores, the Social Self scores tended to increase as socioeconomic position increased. In addition, there were significant differences attributed to sex, with male subjects scoring higher; but no sex-ethnicity interaction was found.

#### Self Concept and Defensiveness in Self Report

The Healey and DeBlassie (1974) study noted above revealed that the Total Positive scores did not differ significantly among the three groups. Anglo Americans had the lowest mean score (317.75) and Mexican Americans the highest (328.70). Blacks had a mean score of 321.69. The

Self-Criticism subscores for Blacks (34.40) and Mexican Americans (34.16) in the above study were found to be significantly lower than those obtained by Anglos (37.01) on this scale. The Defensive-Positive subscores for Blacks (57.45) and Mexican Americans (56.21) were also significantly higher than the mean for Anglos (49.40). This was indicative of defensiveness and the authors hypothesized that this factor was responsible for the "artificially elevated" Total Positive scores obtained for Black and Mexican American subjects in the study.

Long's (1969) contention of defensive responding on the part of minority students on self concept instruments so that they may present a more favorable personality profile prompted Samuels (1977) to consider it a potential measurement and research problem. The practice of presenting an overrated self-description in order to hide personal feelings of inadequacy is one of the problems of self-report measures of personality.

Wenland (1968) compared TSCS scores obtained from a sample of almost seven hundred Black and White eighth graders and reported significantly more positive self concepts for the Black group in the sample. Although there was no significant difference in Self-Criticism scores for the two groups, the Black subsample was found to have significantly higher Defensive-Positive, Conflict, and Variability scores. Thompson (1972) reviewed Wenland's study and others making similar comparisons. He concluded that

Blacks "appear to be more defensive in describing themselves than their white peers, and that they present self concept profiles characterized by high Conflict and Variability Scores" (p. 26). Thompson added that it is difficult to evaluate the meaning of a Total Positive score due to the presence of defensiveness; and that in cases where there is no significant difference between Black and White samples on Self-Criticism or Defensive-Positive scores, Blacks have been shown to have lower Total Positive scores than Whites.

With particular reference to Mexican Americans and defensiveness, Thompson (1972) cites only one study--Healey's dissertation at New Mexico State University. Healey (1974) found that both Mexican and Black Americans were significantly more defensive than Whites. The two minority groups obtained significantly lower Self-Criticism and higher Defensive-Positive scores on the TSCS.

The TSCS was also utilized by Williams and Byars (1968) in comparing the self concepts of Black and White high school seniors. They reported that Blacks scores significantly higher on the Defensive-Positive Scale and significantly lower on the Self-Criticism Scale, indicating more defensiveness in self report.

### Self Concept and Related Variables

#### Grade Level

The research literature on the relationship between age and self concept suggests that there is a decline in

self concept scores associated with chronological age, as students progress through school.

Hamachek (1971) contended that self-perceptions of students tend to become progressively more negative with age. Cicirelli's (1977) study reported a decline in self concept scores from grades one to three on the PURDUE SELF CONCEPT SCALE. This particular study controlled the variable of socioeconomic status. Chang (1975) reported that scores on the PIER-HARRIS CHILDREN'S SELF CONCEPT SCALE (PHSCS) declined with age. The findings were based on samples of Black and Korean American third through sixth grade students.

A number of other studies have reported a negative correlation between self concept and age. Among them are those of Piers and Piers (1964), Long and Henderson (1968), Trowbridge (1972), and Klein (1975). Morse (1963) reported that confidence about school work is negatively associated with chronological age. On the other hand, Carpenter and Busse (1969) reported that obtained self concept scores for two samples of elementary school students were significantly lower for first graders than fifth graders. Similar findings were obtained by Rogers (1977).

Thompson's (1972) review on the relationship between the self concept (as measured by the TSCS) and age led him to conclude that "for researchers, these findings mean that age is a variable which must be controlled or accounted for in some fashion" (p. 20).

## Sex

Studies on the relationship between general self concept and sex suggest that females as a group have higher self concepts than males. Hamachek and Conley (1968) found that female adolescents' self-perceptions became more positive from grades six to twelve, while for males the progression from the sixth through the twelfth grade was correlated with declining self concept scores. Campbell's (1966) findings revealed more positive self concepts among females than males; and Perkins (1958) reported that fourth and sixth grade females had greater self-ideal congruence than males.

With reference to achievement and self concept of ability, the effect of sex is not clear. Fink (1962) found a stronger correlation between achievement and self concept for males than for females. A similar finding was reported by Bledsoe (1967) in a sample of fourth and sixth grade students. Using a different measuring instrument, Brookover, Patterson, and Shailer (1962) found that seventh grade female students had significantly higher self concept scores than male counterparts on a self concept of ability measure.

Black males have been reported to have higher self-esteem than Black females (Long and Henderson, 1968). Carpenter and Busse (1969) found that first grade Black females had significantly lower self concept scores than White females in that same grade, and that Black females showed more negative perceptions than White females, indicating an ethnic rather than a sex difference.

The research findings indicate that the variable of sex is one to be taken into account in the design of self concept studies since it can potentially contaminate findings and conclusions.

### Socioeconomic Status

The relationship between self concept and socioeconomic status has not been clearly established. Wylie's (1961) review of the research failed to reach any conclusion regarding the two variables. The author contended that the available studies provided no conclusive evidence of relationship. However, two years later Wylie (1963) reported that self concept differences between Blacks and Whites are no longer present when the factor of socioeconomic status is controlled. This would lead the researcher to think that there is indeed a relationship, and that the socioeconomic variable may even be more important than that of racial or ethnic group membership.

In a chapter entitled "Race, Social Class and Child Self Concept," Samuels (1977) reviewed studies which had at least some degree of control for race and social class. This author concluded that social class appears to be a more significant factor in determining self concept than race.

Kinch (1963) and Gale (1969) have emphasized the relationship between self concept and social, cultural, and economic variables. Leonetti and Muller (1976) stated that



factors such as skin color, language, socioeconomic variables, and cultural characteristics seem to be responsible, at least partially, for distorted self-perceptions in this culturally different group (Mexican Americans." (p. 250)

Cicirelli (1977) administered the PURDUE SELF CONCEPT SCALE in an attempt to determine the relationship between ethnicity, socioeconomic status and self concept. A sample of 345 lower elementary school pupils of low socioeconomic status (about half of whom were Black Americans) was used. The results showed that: 1) Blacks had higher self concept scores than Whites; 2) self concept scores declined with ascending grade levels; 3) children (primarily Black) from families receiving welfare assistance scored significantly higher than non-welfare children; and 4) the self concept scores of non-welfare Blacks were almost precisely the same as for non-welfare Whites.

Cicirelli eliminates the possibility of the often presumed generalized effect of the Black Power Movement on Black pride due to the finding that only welfare status Blacks showed higher self concept scores than Whites. However, it was not possible to determine the effects of welfare status on self concept since there was not a sufficient number of welfare status Whites in the sample. The author also rules out segregation by socioeconomic status as a variable because students in the sample shared residential neighborhoods.

Lower parental and teacher expectations was suggested in the above study as a possible interpretation, but

Cicirelli (1977) added that this must be empirically tested. Results were interpreted in terms of "defensiveness in the testing situation." External locus of control scores generally observed with low socioeconomic status samples was also a factor considered in the interpretation (Ducette and Wolk, 1972). The author further notes that

by holding external forces responsible for their situation, these children are able to defend the self against the negative evaluation which would result if they held themselves responsible for their poor situation and achievement.

A study comparing Black and White elementary school children of welfare mothers on measures of self concept was undertaken by Carpenter and Busse (1969). Subjects were forty first grade children and forty fifth grade children. One-half of each grade sample was White, the other half was Black. Subgroups were equally divided for sex. All subjects were from father-absent, welfare recipient families and lived with their natural mothers (only one child per family was eligible for random selection). The instrument used was the WHERE ARE YOU GAME which is based on a five-point scale and is composed of seven bi-polar dimensions (Engle and Raine, 1963).

Carpenter and Busse (1969) reported that: 1) race differences on overall self concept scores were not significant; 2) in the first grade, Black females had significantly lower self concept scores than White females; 3) Black females had more negative self-perceptions than Black males; 4) self concept scores were significantly lower for students in

grade one than for those in grade five. Results showed that when socioeconomic status is equated, race differences on self concept measures tend to disappear.

Chang (1975) conducted a self concept study using Korean American (U.S. born) children whose parents were first generation immigrants and Black American children of both sexes who were in grades three, four, five and six in a large metropolitan area school system. The sample was drawn from a middle class section of the city and included 151 Korean American and 144 Black American children, with almost equal proportions of males and females. The PHCSCS was the instrument administered.

The results of the above study revealed that Korean children had higher average scores on three of the six measures (Behavior, Intellectual and School Status, and Happiness and Satisfaction). Black children scores higher on two measures (Popularity, and Physical Appearance and Attributes); on the sixth measure (Anxiety), there was no significant difference between the two ethnic groups.

The mean scores of both minority groups in Chang's study exceeded the mean of the norm group (51.84). Korean Americans had a mean score of 62.14 while Black Americans showed an average score of 57.20. The authors interpreted these findings in terms of more favorable attitudes of Korean parents toward education and child rearing practices. They concluded that "Korean American and Black American children do not necessarily suffer from lower self-concept

and a lower sense of personal worth than children in the norm groups" (p. 57).

A study by Davidson and Greenberg (1967) reported the finding that high achieving low socioeconomic status students viewed themselves more positively in terms of personal, social, and academic competence than their low achieving peers.

Wylie (1963) and Long and Henderson (1968) both reported a positive relationship between the socioeconomic status of the family and the self concept of children. They found that children from economically disadvantaged home backgrounds tend to have significantly lower self concept scores than children from more affluent home environments.

Contrary to the above findings, more recent investigations have reported that children of low socioeconomic status were found to have higher self concepts than middle class children. Among them are studies by Soares and Soares (1968, 1970), Green and Rohwer (1971), Zirkel and Moses (1971), and Trowbridge (1972).

The presently available research does not consistently indicate a directional relationship between socioeconomic status and self concept. Nevertheless it is evident that this variable must be taken into account in the design of every study of self concept since there are indications of its potential contribution to results. On the other hand, it is possible that the causes for negative self concept development are, as Purkey (1970) has noted, "more psychological than economic" (p. 19).

## Achievement

The relationship between self concept and academic achievement has been one of considerable interest to educational psychologists during the last two decades. In addressing this particular relationship, Gill (1969) concluded that "the importance of the self concept in the educational process seems to need more emphasis than is presently given to it" (p. 6).

Purkey's (1970) review of the literature pointed out that a positive relationship exists between self concept and academic achievement. Unsuccessful students are more likely to hold negative self concepts than those who are successful in school. Hamachek (1971) asserted that "there is a mounting body of evidence to suggest that a student's performance in an academic setting is influenced in both subtle and obvious ways by his self-concept" (p. 184).

Among the first to relate self concept development to educational achievement were Prescott (1938) and Lecky (1945). Prescott believed that

the best guarantee that we have that a person will be able to deal with the future effectively is that he has been essentially successful in the past. People learn that they are able, not from failure, but from success. (p. 53)

Lecky emphasized students' perceptions of self-confidence and their relationship to achievement in areas such as spelling.

Lecky (1945) indicated that a student's self concept determines his level of achievement in school, and that

early school experiences are important in the development of the self concept and subsequent academic performance. His interpretation suggests that there is a causal relationship, although in actuality the underlying causes are not clear. It is possible that the self concept is a reflection of past achievement (success or failure) or that achievement is at least partially determined or affected by self concept. Most research suggests, however, that the self concept does have at least some effect on future academic performance (Purkey, 1970; Hamachek, 1971).

Purkey (1970) points out that

although the data do not provide clear-cut evidence about which comes first--a positive self-concept or success, a negative self-concept or scholastic failure--it does stress a strong reciprocal relationship and gives us reason to assume that enhancing the self-concept is a vital influence in improving academic performance. (p. 27)

A positive significant correlation between self concept and grade point average (GPA) among third and sixth graders has been reported by Bruck (1958). Using the DRAW-A-PERSON-TEST as the self concept instrument, Bodwin (1957) found a negative and significant relationship between self concept and reading disability in a sample of elementary school subjects.

Underachievers have been found to have lower self concepts than achievers (Shaw, 1961). Shaw, Edison and Bell (1961) reported that male underachievers were found to have lower self concepts than male achievers, although the same phenomenon was not evidenced among females. This finding

was obtained from a sample of high school students and intelligence was a controlled variable.

Fink's (1962) study suggested that among adolescents, achievers have higher self concepts than underachievers, as determined by a number of different self concept measures. A study by Farquhar (1968) reported that in a high school sample of students with junior standing, those students considered high in academic productivity exhibited higher self concepts than those measuring low on this criterion. Irwin (1967) reported a positive relationship between self concept and achievement in a sample of first-year college students.

Research by Campbell (1966) in an elementary school setting also revealed a positive relationship between self-concept and academic achievement; and Dyson (1967) reported that young adolescents who were considered high achievers had higher self concepts than their low achieving counterparts. This same finding, based on a similar sample, was reported by Farls (1967).

The research of Brookover and his associates at Michigan State University has had a significant impact on the study of the relationship between self concept and achievement. Rather than referring to the self concept in general or global terms, they have made a significant advance in defining the self concept as a construct and in clarifying its relationship to academic achievement.

Brookover et al. (1965) defined the self concept of ability as "those definitions a student holds of his ability

to achieve in academic tasks as compared to others" (p. 13) and postulated that the "self-concept-as-a-learner" is a better predictor of achievement than intelligence. More importantly, modification of this construct through positive feedback from others leads to improved achievement in academic work.

Brookover, Erickson and Joiner (1964) found that there is a positive and significant relationship between self concept and academic success. An earlier study (Brookover et al., 1962) reported that the average self concept of ability for high achieving groups was significantly higher than for low achieving groups. In both studies intelligence was a controlled variable.

Brookover has asserted that by enhancing the self concept, achievement can be raised to higher levels for most students, and rejects the notion of fixed limits in student potential or capacity (Brookover et al., 1966). Basing his reasoning on the theoretical orientation of Mead (1934), Sullivan (1947), Combs and Snygg (1959), Kinch (1963), and other theorists, Brookover emphasized the development of a "self-concept of ability acquired in interaction with significant others" (parents, teachers, friends) and "the general hypothesis is that the functional limits of one's ability are in part set by one's self-conception of ability to achieve in academic tasks relative to others" (1966, p. 2).

The research of Brookover and his associates indicates that a student's negative self concept of ability to achieve



academically can detrimentally affect his/her intellectual performance and that directly working with academic significant others (e.g. parents) can lead to self concept enhancement which, in turn, positively affects academic achievement.

Brookover and Gottlieb (1964) have contended that

If the child perceives that he is unable to learn mathematics or some other area of behavior, this self-concept of his ability becomes the functionally limiting factor of his school achievement.  
(p. 469)

The voluminous research of Brookover and his associates suggests that a high self concept of academic ability is a necessary but not sufficient condition for superior academic performance. A large number of those high on self concept of ability do not perform well on achievement measures, and students with low self concepts of ability seldom perform high on achievement measures. Thus, a high or positive self concept of ability will not, in itself, guarantee achievement although it can facilitate it.

A significant number of other studies have consistently indicated a positive relationship between self concept and achievement. Among them are those of Coopersmith (1959), Brookover and Thomas (1963), Coleman (1966), Davidson and Greenberg (1967), Williams and Cole (1968), and Chaplin (1968). The evidence is not totally conclusive, however, Holland (1959) reported that underachievers were found to have more positive self concepts than achievers.

It appears that the self concept of ability is related to factors other than academic achievement. For example, Harding (1966) found that it was an important variable influencing high school drop-out rates for White males.

There have been a small number of published studies which have addressed the relationship between self concept and academic achievement using samples of Mexican American children. A study conducted by Pruneda (1974) compared the upper and lower twenty-seven percent of scores obtained by Mexican American students (in grades six, eight and ten) on the HOW I SEE MYSELF SCALE and found that students with high self concept scores had significantly higher scores on standardized achievement tests than those with low self concept scores. This was true in the sixth and eighth grades but not in the tenth. This author also reports that there was no significant difference between achievement scores and degree of Anglo acculturation, as measured by the ACCULTURATION SCALE.

Zimmerman and Allebrand (1965) reported that low socioeconomic status Mexican American fourth and sixth graders who evidenced low reading achievement had unfavorable self concepts, as determined from profiles of the CALIFORNIA TEST OF PERSONALITY.

A study conducted by Anderson and Johnson (1971) revealed the complex relationship between self concept, achievement outcomes, motivation, and parental practices for Mexican American students. Findings of this study

suggest that the student's self concept of ability, based on perceptions of evaluation from peers (and not parents or teachers) is the most predictive variable in mathematics and English achievement.

The finding reported in the above study is not consistent with those of Brookover et al. (1965) and Thomas (1964). These two studies reported that parental evaluations of academic ability of their children were found to be more important than those of an expert or counselor in affecting self concept of ability and GPA of students. They observed positive outcomes after parental perceptions were positively modified. However, the positive effect no longer operated after the treatment period elapsed.

Kleinfield (1972) studied the relationship between academic self concept and students' perceived evaluation by parents and teachers using a sample of Black and White high school students. She found that for Black students (especially females), the relationship between teachers' perceived evaluation and academic self concept is higher than for Whites. On the other hand, White subjects' perceived evaluation by parents showed a higher correlation with the academic self concept measure. Thus, White students' academic self concept appears to be more related to parental evaluation; while for Blacks, perceived teacher evaluation seems to have a greater effect on the academic self concept. White students may place greater importance on the evaluations of their parents, who, on the whole, have attained

higher levels of education than parents of Black pupils. It was suggested that through positive reinforcement and non-threatening atmosphere, teachers, rather than parents, may be more powerful agents in improving the academic self concept of Black students.

One further study by Coleman et al. (1966) is worthy of note. An important finding was that although the self concept was a good predictor of achievement for White students, this was not the case for Black students in the sample. This indicates that ethnic group membership may influence the relationship between self concept and achievement.

The available research on the relationship between self concept, achievement, and racial/ethnic group membership is inconclusive. There exists the need to examine the relationship between these variables and to determine if there are significant interactions.

### CHAPTER III

#### METHODOLOGY

This chapter defines: 1) the hypotheses to be tested; 2) description of the population; 3) sampling procedure; 4) instrumentation; 5) independent variables; and 6) statistical procedure.

#### Hypotheses

The following major hypotheses are tested in this study:

##### Self Concept (Total Positive)

1. There will be no difference in mean Self Concept scores of Black, Mexican and White American secondary school students ( $p \leq .05$ ).
- 1a. There will be no significant race by sex interaction ( $p \leq .05$ ).
- 1b. There will be no significant race by grade interaction ( $p \leq .05$ ).
- 1c. There will be no significant race by achievement interaction ( $p \leq .05$ ).
- 1d. There will be no significant race by socioeconomic status interaction ( $p \leq .05$ ).

##### Self Criticism

2. There will be no difference in mean Self Criticism scores of Black, Mexican and White American

secondary school students ( $p \leq .05$ ).

- 2a. There will be no significant race by sex interaction ( $p \leq .05$ ).
- 2b. There will be no significant race by grade interaction ( $p \leq .05$ ).
- 2c. There will be no significant race by achievement interaction ( $p \leq .05$ ).
- 2d. There will be no significant race by socio-economic status interaction ( $p \leq .05$ ).

### Defensiveness

- 3. There will be no difference in mean Defensive Positive scores of Black, Mexican and White American secondary school students ( $p \leq .05$ ).
- 3a. There will be no significant race by sex interaction ( $p \leq .05$ ).
- 3b. There will be no significant race by grade interaction ( $p \leq .05$ ).
- 3c. There will be no significant race by achievement interaction ( $p \leq .05$ ).
- 3d. There will be no significant race by socio-economic status interaction ( $p \leq .05$ ).

### Description of Population

The study was conducted in a medium-sized Midwestern, labor-intensive and heavily industrialized metropolitan area. Samples were drawn from the population of Black, Mexican and White American high school students enrolled in that public school system.

The total student population of the above school district is slightly over 18,000 students. The high school population (grades 10 through 12) for the district is 3,741 students. The percentages by grade are: tenth--43 percent, eleventh--30 percent, and twelfth--27 percent.

The ethnic composition of the high school population in the district is as follows: White--48 percent, Black--37.4 percent, Latino (Hispanic) American--8 percent, and other--6.6 percent. It should be noted that the minority enrollment for this district is significantly higher than the total minority proportion for the state.

#### Sampling Procedure

The sample was selected from the population of students in the tenth, eleventh, and twelfth grades during the mid-part of the 1978-1979 academic year. The sampling procedure included both high schools within the school district described above.

The basis for selection of classrooms was aimed at achieving a balanced sample with reference to sex, ethnic group and curriculum. Class lists for each high school classroom in the district were examined and two classrooms from each of the two schools at each of the three grade levels were selected from the population. Particular attention was given to insure adequate representation of Spanish-surnamed students in the sample since in actuality they constituted less than eight percent of the total high school population of the district.

The following classes were selected from the general (mainstream) education curriculum for the district: health (2); science (2); government (2); history (2); economics (2); vocational education (2). Each selected classroom had at least four Latino students formally enrolled.

### Instrumentation

Shavelson, Hubner and Stanton (1976) have addressed the major problems inherent with self-report techniques. Among them were response sets and the unwillingness to reveal private information. Zirkel and Gable (1977) added that there was a lack of reliability and validity data on self concept measures, particularly when used with students who are from different ethnic groups. The authors warned that considerable attention must be given to the selection of self concept evaluation instruments by researchers. Zirkel and Gable also cautioned researchers about cultural considerations.

There are a number of self concept instruments which have been utilized in its assessment. Some are commercially available measures on which psychometric data has been obtained and have to some degree been standardized. Among these are the TENNESSEE SELF CONCEPT SCALE, the CALIFORNIA PSYCHOLOGICAL INVENTORY, the SELF ESTEEM INVENTORY, the THOMAS SELF CONCEPT VALUES TEST, the SELF APPRAISAL SCALE, the HOW I SEE MYSELF SCALE, the WAY I FEEL ABOUT MYSELF SCALE, the PIERS-HARRIS SELF CONCEPT SCALE, and the MICHIGAN STATE SELF CONCEPT OF ABILITY SCALE.



There are also a number of instruments which have been developed "locally" for use in certain research applications or for immediate administration in educational programs. A serious problem with these measures is that they do not provide the user with sufficient pertinent theory or data. In addition to the above there are other methods such as the Q-sort and Semantic Differential Techniques which may be applied for a particular purpose or situation.

A common problem confronting the researcher then becomes one of deciding which of the available instruments will be utilized in a particular study.

#### TENNESSEE SELF CONCEPT SCALE

The TENNESSEE SELF CONCEPT SCALE (Fitts, 1965) is a self-administered instrument consisting of 100 items on which the individual is requested to respond to self-descriptive statements by choosing one of five categories ranging from "completely true" to "completely false." There are two forms of scoring and obtaining scores or profiles: the Counseling Form (C), and the Clinical and Research Form (C&R). The C&R form provides a larger number of scores than does the C form.

This inventory requires approximately ten to twenty minutes of the subject's time to complete (mean time is thirteen minutes). It is intended to be used with individuals twelve years or older, since it requires approximately a sixth-grade reading level. Computer scoring services are available through the publisher.

Peter M. Bentler and Richard M. Suinn have reviewed the TSCS in Buros' The Seventh Mental Measurements Yearbook (1972). Bentler stated that "the various content areas are well-conceived, and the scale yields a vast amount of information" (p. 366). Persons varying in age, sex, race, and socioeconomic status were used in the norming sample, although those aged 12 to 30 years were overrepresented. Test reliability is in the high .80's and Bentler reported that this is "sufficiently large to warrant confidence in individual difference measurement" (p. 366).

Suinn argued that "although the scores seem to have certain content validity, there has been little work directed toward empirical validation of individual scores" (p. 368) and thus, behavioral correlates have not been clearly established. He concluded that the "TSCS ranks among the better measures combining group discrimination with self concept information" (p. 369).

The TENNESSEE SELF CONCEPT SCALE is a particularly useful instrument for the measurement of defensiveness. A measure of overt defensiveness is obtained through a Self Criticism Score. This measure is derived from ten items which are part of the MINNESOTA MULTIPHASIC PERSONALITY INVENTORY's L-Scale. In addition, the TSCS provides a second scale which is purportedly a more subtle measure of defensiveness than the Self Criticism Score (Thompson, 1972). This second scale is referred to as the Defensive Positive Scale (DP), and is based on 29 items. Low Self Criticism

scores and High Defensive Positive scores are both indicative of defensiveness in self-report. There are other scales (e.g. Variability, T/F and Conflict Scores) which are helpful in the interpretation of data. The reader should refer to Appendix A for a listing of scores and their interpretation.

### Information Questionnaire

Each student in every selected classroom was administered an Information Questionnaire which requested the following information:

- 1) I am:    Female        Male        (circle one)
- 2) My age is:    \_\_\_ years \_\_\_ months
- 3) I am in the:    10th grade    11th grade    12th grade  
(circle one)
- 4) My ethnic group membership is:
  - \_\_\_ Black, Afro or Negro American
  - \_\_\_ Spanish, Hispanic, Mexican or Latin American
  - \_\_\_ White, or Anglo American
  - \_\_\_ Please specify (if you cannot classify yourself in above groups)
- 5) I live with my:
  - \_\_\_ mother only
  - \_\_\_ father only
  - \_\_\_ mother and father
  - \_\_\_ guardian--please specify relationship to you:

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- 6) What is the occupation of your: (be as specific as you can)

Father \_\_\_\_\_

Mother \_\_\_\_\_

Guardian \_\_\_\_\_

- 7) The highest school year completed by my father was:  
(circle one)

<u>Elementary School</u>	<u>Middle School</u>	<u>High School</u>
4 5 6	7 8 9	10 11 12
<u>College</u>		
1 2 3 4 5 6 7		

- The highest school year completed by my mother was:  
(circle one)

<u>Elementary School</u>	<u>Middle School</u>	<u>High School</u>
4 5 6	7 8 9	10 11 12
<u>College</u>		
1 2 3 4 5 6 7		

- The highest school year completed by my guardian:  
(circle one)

<u>Elementary School</u>	<u>Middle School</u>	<u>High School</u>
4 5 6	7 8 9	10 11 12
<u>College</u>		
1 2 3 4 5 6 7		

- 8) I plan to complete the following grade: (circle one)

8 9 10 11 12  
 13 Vocational-Technical Degree  
 14 Junior College Degree  
 16 Bachelor's Degree  
 18 Master's Degree  
 20 Ph.D., L1.D., or M.D.

- 9) Grade Point Average (GPA): \_\_\_\_\_

### Variables in the Study

There was a total of five independent variables and 29 dependent variables. The dependent variables were the scores on the TSCS. The three hypothesized dependent variables were:

1. Total Positive Score on the TSCS
2. Self Criticism Scores on the TSCS
3. Defensive Positive Score on the TSCS

The remaining 26 dependent variables were the other scores on the Clinical and Research (C&R) version of the TSCS.

The independent variables were:

1. Racial/Ethnic Group Membership (three classifications)
2. Sex (two classifications)
3. Grade (three classifications)
4. Achievement (eight classifications)
5. Socioeconomic Status (nine classifications)

Students indicated their racial/ethnic group membership, sex, and grade level on the Information Questionnaire.

The achievement measure was obtained from computerized records which indicated career grade point average (GPA) for each student. The district in which this study was conducted has compiled the GPA measure of achievement since the beginning of the seventh grade for each student, or since the student was enrolled in the district. Students in the sample were provided with this information upon having completed the TSCS and the Information Questionnaire

and this measure was entered at a designated location on each Information Questionnaire.

Socioeconomic status was determined through the application of the HOLLINGSHEAD TWO FACTOR INDEX OF SOCIAL POSITION (1956). This measure is also referred to as the INDEX OF SOCIAL POSITION (ISP). The ISP uses the occupational role and formal educational level of the head of the household in determining the social position of an individual or member of a family unit. In cases where both parents were employed outside the home, the head of the household was defined as the parent with the higher score.

The range of obtainable scores on this scale is from 11 to 77. Scores are negatively correlated with socioeconomic status. The score distribution was truncated in intervals of seven score points, yielding a total of nine functional categories. The resulting distribution was negatively skewed due to the narrow range of occupational and educational status of the population under investigation.

### Statistical Procedure

Data for each subject on all dependent and independent variables were punched on computer cards. There were two cards per subject. A Statistical Package for the Social Sciences (SPSS) file was established for convenient access to data for statistical treatment. The analysis was conducted at the computer laboratory facilities of Michigan

State University which uses a Control Data Corporation system (Models 6400 and 6500).

The following statistical procedures were programmed:

1. One-way analysis of variance (ANOVA) between all independent and dependent variables
2. Two-way ANOVA's of all hypothesized relationships between variables.

The results from these analyses are presented in the following chapter.

## CHAPTER IV

### RESULTS<sup>1</sup>

This chapter reports the statistical findings in relation to: 1) the three research hypotheses, and 2) other variables included in the study.

#### Test of Research Hypotheses

Hypothesis 1: There will be no difference in mean Self Concept scores of Black, Mexican and White American secondary school students ( $p < .05$ ).

Table 1 reports the result of a one-way ANOVA procedure between the Total Positive Scores on the TSCS and ethnic group membership. The null hypothesis was thus not rejected on the basis of this statistical analysis. The analysis does not indicate a significant statistical difference between the means obtained by the three groups on Total Positive Scores. However, the reader may note that: 1) the mean score for Mexican Americans was lower than for Blacks or Whites, and 2) the mean scores for all three groups were lower than the normative data ( $\bar{X} = 345.57$ ) provided by the test TSCS publisher in the Manual (see Fitts, 1965, p. 14).

Tests for interaction were conducted using the two-way ANOVA model. Tables 2 through 5 report the result of the

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<sup>1</sup>A complete listing of the nature and meaning of TENNESSEE SELF CONCEPT SCALE scores is found in Appendix A.



TABLE 1.--ANOVA of Total Positive Self Concept Scores and Race.

	N	Mean	SD
Black	100	332.03	27.79
Mexican	49	327.73	35.78
White	152	334.39	30.59
Total	301	332.52	30.60

F=.89                      Sig.=.41                       $e^2=.006$

TABLE 2.--ANOVA of Total Self Concept Scores by Sex and Race.

Source	SS	df	MS	F	Sig
Sex	2884.02	1	2884.02	3.12	.08
Race	1367.04	2	683.52	.74	.48
Sex X Race	3394.67	2	1697.34	1.84	.16
Within	272909.87	295	925.11		
Total	280865.11	300			

TABLE 3.--ANOVA of Total Self Concept Scores by Race and Achievement.

Source	SS	df	MS	F	Sig
Race	397.69	2	198.84	.22	.80
Achievement	19022.36	7	2717.48	3.03	.004*
Race X Ach.	11051.50	14	789.39	.88	.58
Within	247250.50	276	895.84		
Total	278599.28	299	931.77		

TABLE 4.--ANOVA of Total Self Concept Scores by Race and Grade.

Source	SS	df	MS	F	Sig
Race	1344.62	2	672.31	.75	.48
Grade	14671.17	2	7335.58	8.14	.001*
Race X Grade	1238.19	4	309.55	.34	.85
Within	263279.20	292	901.64		
Total	280865.11	300	936.22		

TABLE 5.--ANOVA of Total Self Concept Scores by Race and Socioeconomic Status.

Source	SS	df	MS	F	Sig
Race	736.59	2	368.29	.40	.67
SES	10935.86	8	1366.98	1.50	.16
Race X SES	15755.87	13	1211.99	1.33	.20
Within	252496.83	277	911.54		
Total	280865.11	300	936.22		

analyses of Total Self Concept scores by independent variables. The reader will note that:

1. there were no significant interactions for the four sub-hypotheses;
2. achievement and grade level accounted for a significant proportion of the Total Positive Self Concept score variance, while race and socioeconomic status were not found to be significant main effects.

Hypothesis 2: There will be no difference in mean Self Criticism scores of Black, Mexican and White American secondary school students ( $p < .05$ ).

The result of a one-way ANOVA procedure indicates that there is a significant statistical difference across Self Criticism and races, as reported in Table 6. The mean Self Criticism score for Mexican Americans was lower than the mean scores for Blacks and Whites; the mean scores for Black

and White subjects were not significantly different.

TABLE 6.--ANOVA of Self Criticism Scores by Race.

	N	Mean	SD
Black	100	36.23	5.22
Mexican	49	34.59	6.05
White	152	36.95	5.17
Total	301	36.33	5.39
F=3.63                      Sig.=.021* $e^2=.023$			

Two-way ANOVA analyses (Tables 7-10) revealed that:

1. the variables, race, sex and achievement had a significant effect on Self Criticism scores;
2. there was no significant interaction between race and the other four independent variables;
3. the variables of grade level and socioeconomic status were not found to be significantly associated with Self Criticism scores.

Hypothesis 3: There will be no difference in mean Defensive Positive Scores of Black, Mexican and White American secondary school students ( $p<.05$ ).

A one-way ANOVA of Defensive Positive Scores by race resulted in non-significant F ratios (Table 11). Although Mexican Americans had the highest Defensive Positive Scores (and a higher standard deviation) and Whites the lowest,

the F ratio did not approach significance and the null hypothesis was thus not rejected.

TABLE 7.--ANOVA of Self Criticism Scores by Race and Sex.

Source	SS	df	MS	F	Sig
Race	179.47	2	89.74	4.00	.04*
Sex	186.40	1	186.40	3.18	.01*
Race X Sex	5.63	2	2.82	.10	.91
Within	8313.09	295	28.18		
Total	8712.09	300			

TABLE 8.--ANOVA of Self Criticism Scores by Race and Grade.

Source	SS	df	MS	F	Sig
Race	190.70	2	95.35	3.33	.04*
Grade	76.33	2	38.17	1.33	.27
Race X Grade	71.80	4	17.95	.63	.64
Within	8356.99	292	28.62		
Total	8712.09	300			

TABLE 9.--ANOVA of Self Criticism Scores by Race and Achievement.

Source	SS	df	MS	F	Sig
Race	78.03	2	39.01	1.40	.25
Achievement	402.05	7	57.44	2.06	.05*
Race & Ach.	411.42	14	29.39	1.06	.40
Within	7691.29	276	27.87		
Total	8706.67	299	29.12		

TABLE 10.--ANOVA of Self Criticism Scores by Race and Socio-economic Status.

Source	SS	df	MS	F	Sig
Race	106.78	2	53.39	1.90	.15
SES	360.74	8	45.09	1.61	.12
Race X SES	378.97	13	29.15	1.04	.41
Within	7765.42	277	28.03		
Total	8712.09	300	29.04		

TABLE 11.--ANOVA of Defensive Positive Scores by Race.

	N	Mean	SD
Black	100	56.81	9.62
Mexican	49	58.24	13.52
White	152	54.91	9.99
Total	301	56.08	10.57
<div> <div>F=2.22</div> <div>Sig.=.11</div> <div><math>e^2=.014</math></div> </div>			

The two-way ANOVA procedure (Tables 12-15) revealed the following statistical findings:

1. race was not found to be a significant variable affecting Defensive Positive scores;
2. there was no significant interaction between race and the four other independent variables on the dependent variable measure;
3. none of the four independent variables was found to be significantly related to Defensive Positive scores.

With reference to the relationship between the four remaining independent variables and the three dependent variables above, the findings were:

1. Total Positive scores were found to be significantly related to achievement (Table 3) and grade level (Table 4). In both cases the relationship was positive;

2. Self Criticism scores were significantly related to sex (Table 7) and achievement (Table 9). Scores for males were found to be significantly lower than for females. Self Criticism scores were positively related to grade point average.
3. Defensive Positive scores were not significantly related to any of the four independent variables.

TABLE 12.--ANOVA of Defensive Positive Scores by Race and Sex.

Source	SS	df	MS	F	Sig
Race	434.51	2	217.25	1.97	.14
Sex	263.78	1	263.78	2.40	.12
Race X Sex	280.08	2	140.04	1.27	.28
Within	32465.31	295	110.05		
Total	33500.92	300	111.67		

TABLE 13.--ANOVA of Defensive Positive Scores by Race and Grade.

Source	SS	df	MS	F	Sig
Race	471.67	2	235.83	2.15	.12
Grade	491.11	2	245.56	2.24	.11
Race X Grade	527.44	4	131.86	1.20	.31
Within	31990.61	292	109.56		
Total	33500.92	300	111.67		



TABLE 14.--ANOVA of Defensive Positive Scores by Race and Achievement.

Source	SS	df	MS	F	Sig
Race	613.09	2	306.55	2.82	.06
Achievement	640.73	7	91.53	.82	.55
Race X Ach.	2208.73	14	157.77	1.45	.13
Within	29980.62	276	108.63		
Total	33377.68	299	111.63		

TABLE 15.--ANOVA of Defensive Positive Scores by Race and Socioeconomic Status.

Source	SS	df	MS	F	Sig
Race	479.36	2	239.68	2.15	.12
SES	580.04	8	72.50	0.65	.74
Race X SES	1558.50	13	119.88	1.08	.38
Within	30870.63	277	111.45		
Total	33500.92	300	111.67		

### Relationships Between Other Variables in the Design

As noted in Chapter III, the design involved a total of five independent and 29 dependent variables. The independent-dependent variable matrix yielded a total of 145 cells. Of this total, 113 units are reported in this section and 58 were found to be statistically significant (the overall alpha level was not controlled and thus approximately seven or eight of these could be expected to be significant). Since these relationships were not hypothesized, they are not discussed individually in this chapter. Tables 16 through 18 report the F ratios and significance levels of results obtained through one-way ANOVA procedures for those cells where  $p \leq .05$ .

For purposes of logical organization the findings have been grouped as follows:

1. Self Concept From an Internal Frame of Reference (Table 16);
2. Self Concept From an External Frame of Reference (Table 17);
3. Empirical Scales and Race (Table 18); and
4. Response Characteristics (Tables 19 and 20).

#### Self Concept From an Internal Frame of Reference

The four scales within this category are: Basic Identity, Self Satisfaction, Behavior Perception, and Variation across the three scales. Table 16 reports that race was a significant variable only with regard to Variation (Black students' scores were significantly more variable).

TABLE 16.--ANOVA of Self Concept Scores from an Internal Frame of Reference by Independent Variables.

	Race	Sex	Grade <sup>2</sup>	Achievement	SES
Basic Identity	N.S. <sup>1</sup>	M=121.3 F=126.1 F= 13.28 s= .0003 e2= .043	F=9.22 s= .0001 e2= .058	F=2.73 s= .009 e2= .061 increases with GPA	N.S.
Self-Satisfaction	N.S.	N.S.	F=3.86 s= .022 e2= .025	F=2.12 s= .034 e2= .055 increases with GPA	N.S.
Behavior Perception	N.S.	N.S.	F=5.82 s= .003 e2= .037	F=3.0 s= .003 e2= .075 no meaningful trend	N.S.
Variation	B=27.91 M=20.65 W=19.34 F=10.50 s= .0000 e2= .066	N.S.	N.S.	N.S.	N.S.

<sup>1</sup>Not Significant

<sup>2</sup>For all significant cells, scores increase with grade level.

Basic Identity was the only dependent variable significantly related to sex. Females scored significantly higher than males on this variable.

Grade level was significantly associated with Basic Identity, Self-Satisfaction, and Behavior Perception. In all cases scores increased from grades ten to twelve.

Achievement was found to be associated with Basic Identity, Self-Satisfaction, and Behavior Perception. For the first two dependent variables there was a tendency of scores to increase with the achievement measure (GPA).

No significant difference was found between this group of dependent variables and socioeconomic status.

#### Self Concept From an External Frame of Reference

This grouping of dependent variables includes five personality measures and one measure of variability, as reported in Table 17.

The variable of race was significantly associated with three of the dependent variables. Blacks obtained the highest scores on the Physical Self Scale (Whites had the lowest). On the Moral-Ethical Self Scale Whites had the highest and Mexican Americans the lowest mean scores. For the variable of Social Self Whites had the highest and Mexican Americans had the lowest mean scores. There were no race main effects for the Personal Self, Family Self, or Variation Scores.

Sex was found to be a significant variable affecting TSCS scores in three of the six variables under this

TABLE 17.--ANOVA of Self Concept Scores From an External Frame of Reference by Independent Variables.

	Race	Sex	Grade <sup>2</sup>	Achievement	SES
Physical Self	B=72.9 M=70.4 W=68.8 F=7.64 $\eta^2 = .0006$ $e^2 = .048$	N.S.	F= 6.14 $\eta^2 = .002$ $e^2 = .04$	N.S.	N.S.
Moral-Ethical Self		M=63.2 F=66.6 F=13.9 $\eta^2 = .002$ $e^2 = .04$	F=12.1 $\eta^2 = .0000$ $e^2 = .075$	F=4.85 $\eta^2 = .0000$ $e^2 = .117$ increases with GPA	F=2.62 $\eta^2 = .009$ $e^2 = .067$ increases with SES
Personal Self	N.S. <sup>1</sup>	N.S.	F= 4.02 $\eta^2 = .019$ $e^2 = .026$	N.S.	N.S.
Family Self	N.S.	N.S.	N.S.	N.S.	N.S.
Social Self	B=64.3 M=62.3 W=66.4 F=6.06 $\eta^2 = .0026$ $e^2 = .039$	M=63.4 F=66.4 F=10.72 $\eta^2 = .001$ $e^2 = .034$	F= 4.21 $\eta^2 = .015$ $e^2 = .027$	F=4.8 $\eta^2 = .0000$ $e^2 = .116$ increases with GPA	F=2.32 $\eta^2 = .02$ $e^2 = .059$ increases with SES
Variation	N.S.	M=29.96 F=33.01 F= 8.64 $\eta^2 = .0035$ $e^2 = .028$	N.S.	N.S.	N.S.

<sup>1</sup>Not Significant<sup>2</sup>For all significant cells, scores increase with grade level.

category. Females were found to have significantly higher mean scores than males in all three dependent variables (Moral-Ethical Self, Social Self, and Variation).

Mean scores by grade level were significantly associated with four of the five personality measures (with the exception of Family Self). In all cases scores increased from grade ten through twelve. No significant difference in Variation score by grade was found.

The variable of achievement was found to be significantly related to the Moral Ethical and Social Self scales. In both cases scores increased with GPA. The effect of socioeconomic status on these two dependent variables was similar to that of achievement (Table 17). Socioeconomic status was not significantly related to any other dependent variable in this category.

#### Empirical Scales and Race

Table 18 summarizes the relationship between empirical scales of the TSCS and independent variables. Significance was found in 20 of the 30 cells in the matrix. Due to the large number of significant relationships, only those significant findings associated with the variable of race will be discussed.

Race was found to be a significant variable in five of the six dependent variable categories in this grouping. Neurosis scores were not found to be related to the race variable (or any other independent variable) in this study.

TABLE 18.--ANOVA of Empirical Scales of the TSCS by Independent Variables.

	Race	Sex	Grade	Achievement	SES
General Malad- justment	B=90.8 F= 3.71 M=90.0 S= .0257 W=93.6 e2= .024	N.S. <sup>1</sup>	10=90.2 F= 6.75 11=91.2 S= .001 12=95.0 e2= .043	F=4.27 S= .0001 e2= .105 no meaning- ful trend	F=2.59 S= .009 e2= .066 increases with SES
Psychosis	B=52.1 F= 7.15 M=54.3 S= .0009 W=50.1 e2= .046	M=52.3 F=50.7 F= 3.67 S= .056 e2= .012	N.S.	F=2.32 S= .02 e2= .059 decreases with GPA	N.S.
Personality Disorder	B=65.7 F= 5.37 M=62.6 S= .005 W=67.9 e2= .035	M=65.0 F=67.4 F= 4.21 S= .04 e2= .013	10=63.8 F=11.47 11=65.2 S= .0000 12=70.1 e2= .07	F=4.13 S= .0001 e2= .102 increases with GPA	F=2.42 S= .015 e2= .062 decreases with SES
Neurosis	N.S.	N.S.	N.S.	N.S.	N.S.
Personality Integration	B= 6.5 F=26.02 M= 6.6 S= .0000 W= 9.47 e2= .149	N.S.	10= 7.86 F= 5.17 11= 7.25 S= .006 12= 8.95 e2= .034	F=2.85 S= .0046 e2= .073 increases with GPA	F=3.68 S= .0004 e2= .09 increases with SES
Number of Deviant Signs	B=30.5 F=29.68 M=31.4 S= .0000 W=14.4 e2= .166	N.S.	10=22.9 F= 3.56 11=26.1 S= .029 12=18.5 e2= .023	F=5.12 S= .0000 e2= .123 decreases with GPA	F=4.80 S= .0000 e2= .116 decreases with SES

<sup>1</sup>Not Significant

Table 18 (p. 24) reveals a number of interesting relationships:

1. General Maladjustment. White subjects obtained the highest mean maladjustment score. The mean scores of Black and Mexican American subjects were statistically approximate.
2. Psychosis. The mean score for Mexican Americans was the highest, followed by the means obtained by Black and White subjects, respectively.
3. Personality Disorder. Scores for White subjects were the highest, followed by scores for Blacks and Mexican Americans, respectively.
4. Neurosis. No race main effect was found.
5. Personality Integration. White subjects obtained the highest mean score on this scale. The scores of Mexican Americans and Blacks were approximately equal.
6. Number of Deviant Signs. The score for both Black and Mexican American subjects was over twice as high as the score for White subjects in the sample. The correspondingly high F ratio and significance level for this statistical analysis suggests that this difference is not likely due to chance variation in sampling.

With reference to the three other independent variables, it may be pointed out that:

1. General Maladjustment and Personality Disorder



- scores tended to increase with grade level;
2. Personality Integration and Personality Disorder scores were positively related to achievement level;
  3. Psychosis and Number of Deviant Signs scores decreased with achievement level;
  4. Personality Integration and General Maladjustment scores were positively associated with socioeconomic status;
  5. Personality Disorder and Number of Deviant Signs scores decreased with socioeconomic status.

#### Response Characteristics of Subjects

There are a number of scores on the TSCS which are obtained through analysis of response characteristics or patterns exhibited by subjects and are believed to be of importance to psychometricians. Data for these scales by independent variables are reported in Table 19. The reader with a research interest in these scales is advised to review them.

The results indicate that with reference to the race variable:

1. Black and Mexican American students scored higher than White students on both the Net and Total Conflict scales;
2. Black and Mexican American students scored higher than White students on the three other scales based

TABLE 19.--ANOVA of Subject's Response Characteristics on the TSCS by Independent Variables.

	Race	Sex	Grade	Achievement	SES
T/F Ratio (Response Set)	B=147.01 F= 7.38 M=136.84 s= .0007 W=118.36 e2= .047	M=138.51 F=124.60 F= 4.00 s= .046 e2= .013	N.S.	N.S.	N.S.
Variability (Total)	B= 55.5 F= 5.67 M= 53.2 s= .0038 W= 50.0 e2= .065	M= 50.6 F= 53.8 F= 4.76 s= .029 e2= .016	N.S.	N.S.	N.S.
Response Distribution (Total)	B=126.5 F=10.40 M=120.0 s= .0000 W=111.4 e2= .065	N.S.	10=112.3 F=3.70 11=119.1 s= .026 12=122.3 e2= .024		
Net Conflict	B= 10.69 F= 8.21 M= 11.61 s= .0003 W= 1.87 e2= .052	N.S.	N.S.	N.S.	N.S.
Total Conflict	B= 43.8 F=25.98 M= 39.0 s= .0000 W= 33.5 e2= .148	N.S.	10= 37.7 F=4.08 11= 40.3 s= .018 12= 35.5 e2= .0267	F=3.42 s= .0009 e2= .086 decreases with GPA	F=3.68 s= .0004 e2= .092 decreases with SES

<sup>1</sup>Not Significant

on response patterns (T/F Ratio or Response Set, Total Variability, and Total Response Distribution).

3. the large F ratios and corresponding confidence levels suggest that these differences are not due to chance variation.

Table 20 reports Response Distribution of Subjects by Ethnic Group Membership. These one-way ANOVA (across-rows) results indicate that Blacks and Mexican Americans were more likely than Whites to select the extreme categories in self-report, particularly the "completely true" category. This category indicates total agreement with a self-descriptive statement.

The major results and other statistical data presented above are discussed in terms of meaningful significance in the following chapter.

TABLE 20.--Response Distribution of Subjects by Ethnic Group Membership.<sup>1</sup>

Category	Black	Mexican	White	S <sub>≤</sub> .05*
Completely True	25.00	23.53	16.72	*
Mostly True	21.72	21.39	26.66	*
Partly True-False	20.23	23.29	22.23	
Mostly False	11.30	12.63	17.47	*
Completely False	21.75	19.33	16.91	*
Total	100.00	100.00	100.00	

<sup>1</sup>Mean Number of items answered in each response category.

## CHAPTER V

### DISCUSSION, IMPLICATIONS AND CONCLUSIONS

This chapter is outlined as follows: 1) Discussion of findings (as related to the research hypotheses and other variables in the design; 2) Implications; and 3) Conclusion.

#### Discussion

##### Research Hypotheses

The primary purpose of this research study was to examine the relationship between ethnic group membership (race) and scores on selected scales of the TSCS while taking into account the independent variables of sex, grade, achievement and socioeconomic status in a sample of adolescents.

The three TSCS scores of major interest were:

1. Total Positive Self Concept
2. Self Criticism
3. Defensive Positive

Three null hypotheses were formulated. The minimum alpha level for rejection of the null hypotheses was established at .05.

Hypothesis 1. There will be no difference in Mean Self Concept scores of Black, Mexican and White American secondary school students ( $p \leq .05$ ).

The test of this hypothesis is reported in Chapter IV (pp. 48-51). The statistical test did not provide a basis for rejection. Data in relation to this hypothesis indicates that although there were no race main effects, some interesting findings are worthy of note:

1. The mean Total Positive scores for all three groups were lower than the normative data provided by the TSCS publisher.
2. There were no significant interactions between race and the four independent variables in the research design.
3. Achievement and grade level accounted for a significant proportion of the Total Positive Self Concept score variance, while race and socioeconomic status did not.

The finding of no significant difference in mean self concept between the three racial groups is consistent with the results reported by Clark et al. (1967), Carter (1968), DeBlassie and Healey (1970), Klein (1975), and Little and Ramirez (1976), but not consistent with the results obtained by other investigators (see Chapter II).

The above finding is also in congruence with those of Maldonado and Cross (1972). These investigators concluded that "a major change appears to be taking place in the life of the young Mexican American" (p. 151). They argued that today's Mexican American student suffers less from the effects of discrimination and cultural marginality than the

previous generation and added that:

Apparently the schools have not failed to the extent that they were previously credited in helping the Mexican American child rebuild or regain a positive self image. (p. 151)

Muller and Leonetti (1974) have also noted that "the school experience seems to have a positive effect on the self concept of the Spanish-surnamed child" (pp. 58-59).

The lack of a significant difference between the three racial groups on this criterion does not necessarily indicate that such a difference may not actually exist in the general population of American adolescents. The reader must keep in mind the nature of this sample and the possibility that these subjects may have been more similar with reference to the dependent variable than adolescents in other settings.

Hypothesis 2. There will be no difference in mean Self Criticism scores of Black, Mexican and White American secondary school students ( $p < .05$ ).

This hypothesis was rejected based on the analysis of the data. A significant statistical difference was found between Self Criticism scores and race (Chapter IV, pp. 51-52). As noted in the earlier chapter, the mean Self Criticism score for Mexican Americans was lower than for Blacks or Whites. There was no significant interaction between race and any of the four independent variables.

This finding has been supported by previous research. Other investigators (Healey, 1969; Long, 1969; Greenberg,

1970; Williams and Byars, 1968; DeBlassie and Healey, 1970; Healey and DeBlassie, 1974) have reported a similar relationship between Self Criticism and race. However, this finding is not congruent with those of Wenland (1968).

It may be noted that the variables of sex and achievement accounted for a significant proportion of the Self Criticism score variance. The statistical evidence in relation to this hypothesis suggests that the relationship between Self Criticism scores and other important variables is not clear and must be subjected to further empirical testing.

Hypothesis 3. There will be no difference in mean Defensive Positive scores of Black, Mexican and White American secondary school students ( $p \leq .05$ ).

Results indicate that no significant proportion of the variance in Defensive Positive scores was found to be accounted for by the variable of race. The null hypothesis was thus not rejected in this study. The data indicate that although Mexican Americans had the highest (and Whites the lowest) scores, the difference was not statistically significant.

None of the other four independent variables were found to be significantly associated with the dependent variable; and there was no significant interaction between the dependent variable and independent variables.

It may be pointed out that the finding related to this third hypothesis is not consistent with the findings obtained

by other investigators (Williams and Byars, 1968; Healey, 1970; DeBlassie and Healey, 1970; Healey and DeBlassie, 1974). While this does not directly cast doubt on the validity of those studies, it does suggest that the relationship between defensiveness and race should not be stated in simple terms. The evidence suggests that the purported relationship should be subjected to further examination.

#### Relationships Between Other Variables in the Design

This study has revealed a number of additional significant relationships that, although not incorporated in a hypothetical framework, are worthy of consideration. Salient relationships with reference to race in relation to other dependent variables in the study are discussed below.

The variable of race was found to be significantly associated with the following TSCS scores: 1) Variation; 2) Physical Self; 3) Moral-Ethical Self; 4) Social Self; 5) General Maladjustment; 6) Psychosis; 7) Personality Disorder; 8) Personality Integration; 9) Number of Deviant Signs; and 10) all five scores listed under Response Characteristics (Table 19).

These findings indicate that for three scales listed under Internal Frame of Reference, the mean Variation score for Black subjects was higher than for the other two groups. Nevertheless race was not significantly related to those three scales.



The scores on five of the six empirical scales were found to be significantly associated with race. These were: 1) General Maladjustment; 2) Psychosis; 3) Personality Disorder; 4) Personality Integration; and 5) Number of Deviant Signs. The Neurosis scale did not reveal significant differences due to race.

An overall race profile based on these empirical scales may not be parsimoniously described since Whites scored more favorably in three scales (Psychosis, Personality Integration, Number of Deviant Signs), but less favorably in two (General Maladjustment, Personality Disorder). In one scale (Neurosis), there was no significant difference. These relationships are of potential significance in future personality research and theory.

The variable of race was significantly related to all five TSCS scales based on response characteristics of subjects (Tables 19 and 20). In all scales the mean scores for White subjects were the lowest; and in all but one scale (Net Conflict), mean scores for Blacks were the highest. In all cases the F ratios and corresponding p values were sufficiently large to warrant a high degree of confidence.

It is possible that reading level may have accounted for group differences in response characteristics. This hypothesis was not tested because reading measures were not made available to the researcher. The possibility that students may have misinterpreted the items on the TSCS is not likely since only a sixth-grade reading level is required (Fitts, 1965).

Of the five External Frame of Reference scales, three were found to be significantly associated with race. On the Physical Self scale, Blacks obtained the highest and Whites the lowest mean score. This phenomenon has been frequently observed in the literature and does not require further comment.

Mexican American subjects obtained the lowest Moral-Ethical Self scores and Whites the highest. This finding is in direct contradiction to those reported by Healey (1974) and thus should be interpreted with caution.

The Social Self scores were found to be highest for Whites and lowest for Mexican Americans. While this finding may appear to have practical implications, the reader may note that Mexican Americans constituted the smallest numerical minority in both schools indicated in the sample. Reports from school personnel and seating arrangements in sampled classes suggested that Mexican American students tended to associate closer with members of their own ethnic group than with either Blacks or Whites in the research setting.

A number of interesting findings were obtained with reference to the relationship between race and the empirical scales of the TSCS. The six empirical scales are measures of personality functioning or adjustment and are considered of primary importance to counselors and psychologists in the areas of clinical work and/or personality theory.

The response characteristics clearly indicate that minority group subjects in this study responded significantly different to items on the TSCS than White subjects in all scales under this category. This is considered a major finding of this research study.

The following were limitations of this study:

1. The study was limited to secondary school students from a working class community which is categorized as heavy industrial and labor-intensive in a central metropolitan area. The students were predominantly from homes in which the head of household was employed in semi-skilled or unskilled labor and had completed no more than secondary school.
2. The TSCS is designed to be administered to individuals with reading abilities at or above sixth grade. Students in the sample were from grades 10, 11 and 12. No reading scores were available for these students. There is a possibility that some were below sixth-grade reading level and thus there is no assurance that all students met this requirement.
3. The sample was drawn from a school district with two large secondary schools, one predominantly Black and one predominantly White. The school variable was not included in the analysis of variance.

### Implications

The findings reported in this study have implications for educators, counselors and practicing psychologists as well as researchers, psychometricians and methodologists.

First, it should be noted that with reference to Total Positive Self Concept scores, Blacks, Mexican Americans and Whites were not found to differ significantly in this study. This finding questions the validity of the assertion that minority group adolescents have lower self conceptualizations than White adolescents.

The contention that members of minority group status exhibit symptoms of self-derogation, self-depreciation, and self-hate (e.g. Daniels and Kitano, 1970; Carter, 1970) which are manifested in negative self concept scores was challenged by the findings of this study.

Second, the finding that there were significant racial differences in Self Criticism scores should be interpreted with caution. Although a race main effect and an absence of interaction with independent variables were found, the variables of sex and achievement were also found to account for a significant proportion of the Self Criticism score variance.

Third, the absence of significant difference between Defensive Positive scores and race suggests that minority group subjects are no more defensive than White subjects.

In view of the data presented in this study, the author questions the validity of the assertion that minority group

adolescents have lower self concepts, are more defensive, and are less willing to report genuine feelings than their White counterparts.

It is important to note, however, that the absence of a statistically significant difference between the mean scores on dependent variables and the race variable does not indicate that such differences may not exist in the larger population.

Findings pertaining to the empirical scales, especially the scales of Personality Integration and Number of Deviant Signs, should be carefully reviewed by those in personality research and theory as well as by specialists in the areas of race relations, cultural assimilation, anthropology, and sociology.

This study also found highly significant differences between race and response characteristics of subjects. These findings should be noted by test-users, psychometricians and researchers since response patterns of subjects can seriously affect the technical qualities of inventories such as the TSCS.

### Conclusions

During the past decade, there have been a number of studies attempting to determine if there is a relationship between self concept, defensiveness, and ethnic group membership. The majority of these studies have made comparisons between samples of Black and White Americans. Research

designs have seldom included samples of individuals from other racial/ethnic groups.

This study was designed to test whether a significant difference due to race existed in samples of Black, Mexican and White American adolescents, while taking into account the variables of sex, grade level, achievement, and socioeconomic status.

The Clinical and Research form of the TSCS was defined as the dependent variable. Three selected subscales of the TSCS (Total Positive, Self Criticism, and Defensive Positive) were used in the formulation of research hypotheses. The remaining 26 scales of this instrument were also examined in the study.

Based on the analyses of the data, the following conclusions were reached:

1. There was no significant difference between the mean Total Positive Self Concept scores obtained by Black, Mexican and White American subjects.
2. There was a significant difference between the mean Self Criticism scores obtained by Black, Mexican and White American subjects.
3. There was no significant difference between the mean Defensive Positive scores obtained by Black, Mexican and White American subjects.

Other significant relationships were found. There were significant race main effects in relation to the following subscale scores: 1) Variation; 2) Physical Self;

3) Moral-Ethical Self; 4) Social Self; 5) General Maladjustment; 6) Psychosis; 7) Personality Disorder; 8) Personality Integration; and 9) Number of Deviant Signs. White subjects did not score more favorably on all these scales.

A further set of findings based on subjects' response characteristics clearly indicated racial group differences which were considered of psychometric importance.

## APPENDICES



## APPENDIX A

### NATURE AND MEANING OF TENNESSEE SELF CONCEPT SCALE SCORES<sup>1</sup>

Individuals who expect to use only the Counseling Form may wish to read only the first part of the following section. However, those who want to use the Clinical and Research Form should read the entire section because all scores in the Counseling Form appear also in the Clinical and Research Form.

#### I. Counseling Form

- A. The Self Criticism Score (SC). This scale is composed of 10 items<sup>2</sup>. These are all mildly derogatory statements that most people admit as being true for them. Individuals who deny most of these statements most often are being defensive and making a deliberate effort to present a favorable picture of themselves. High scores generally indicate a normal, healthy openness and capacity for self-criticism. Extremely high scores (above the 99th percentile) indicate that the individual may be lacking in defenses and may in fact be pathologically undefended. Low scores indicate defensiveness, and suggest that the Positive Scores are probably artificially elevated by this defensiveness.
- B. The Positive Scores (P). These scores derive directly from the phenomenological classification scheme already mentioned. In the original analysis of the item pool the statements seemed to be conveying three primary messages: (1) This is what I am, (2) This is how I feel about myself,

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<sup>1</sup>Fitts, 1965.

<sup>2</sup>These items have been taken from the L-Scale of the Minnesota Multiphasic Personality Inventory (1951), Copyright 1943, the University of Minnesota. Published by the Psychological Corporation. Reproduced by special arrangements.

and (3) This is what I do. On the basis of these three types of statements the three horizontal categories were formed. They appear on the Score Sheet as Row 1, Row 2, and Row 3 and are hereafter referred to by those labels. The Row Scores thus comprise three sub-scores which, when added, constitute the Total Positive or Total P Score. These scores represent an internal frame of reference within which the individual is describing himself. Further study of the original items indicated that they also varied considerably in terms of a more external frame of reference. Even within the same row category the statements might vary widely in content. For example, with Row 1 (the What I am category) the statements refer to what I am physically, morally, socially, etc. Therefore, the pool of items was sorted again according to these new vertical categories, which are the five Column Scores of the Score Sheet. Thus the whole set of items is divided two ways, vertically into columns (external frame of reference) and horizontally into rows (internal frame of reference) with each item and each cell contributing to two different scores.

1. Total P Score. This is the most important single score on the Counseling Form. It reflects the overall level of self esteem. Persons with high scores tend to like themselves, and act accordingly. People with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious, depressed, and unhappy; and have little faith or confidence in themselves.

If the Self Criticism (SC) Score is low, high P Scores become suspect and are probably the result of defensive distortion. Extremely high scores (generally above the 99th percentile) are deviant and are usually found only in such disturbed people as paranoid schizophrenics who as a group show many extreme scores, both high and low.

On the Counseling Form the Positive Scores are simply designated as P Scores, while on the Score Sheet of the C and R Form they are referred to as P + N Scores in order to clarify the computations involved.

2. Row 1 P Score--Identity. These are the "what I am" items. Here the individual is describing his basic identity--what he is as he sees himself.

3. Row 2 P Score--Self Satisfaction. This score comes from those items where the individual describes how he feels about the self he perceives. In general this score reflects the level of self satisfaction or self acceptance. An individual may have very high scores on Row 1 and Row 3 yet still score low on Row 2 because of very high standards and expectations for himself. Or vice versa, he may have a low opinion of himself as indicated by the Row 1 and Row 3 Scores yet still have a high Self Satisfaction Score on Row 2. The sub-scores are therefore best interpreted in comparison with each other and with the Total P Score.
4. Row 3 P Score--Behavior. This score comes from those items that say "this is what I do, or this is the way I act." Thus this score measures the individual's perception of his own behavior or the way he functions.
5. Column A--Physical Self. Here the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality.
6. Column B--Moral-Ethical Self. This score describes the self from a moral-ethical frame of reference--moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it.
7. Column C--Personal Self. This score reflects the individual's sense of personal worth, his feeling of adequacy as a person and his evaluation of his personality apart from his body or his relationships to others.
8. Column D--Family Self. This score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.
9. Column E--Social Self. This is another "self as perceived in relation to others" category but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general.

C. The Variability Scores (V). The V scores provide a simple measure of the amount of variability, or inconsistency, from one area of self perception to another. High scores mean that the subject is quite variable in this respect while low scores indicate low variability which may even approach rigidity if extremely low (below the first percentile).

1. Total V. This represents the total amount of variability for the entire record. High scores mean that the person's self concept is so variable from one area to another as to reflect little unity or integration. High scoring persons tend to compartmentalize certain areas of self and view these areas quite apart from the remainder of self. Well integrated people generally score below the mean on these scores but above the first percentile.
2. Column Total V. This score measures and summarizes the variations within the columns.
3. Row Total V. This score is the sum of the variations across the rows.

D. The Distribution Score (D). This score is a summary of the way one distributes his answers across the five available choices in responding to the items of the Scale. It is also interpreted as a measure of still another aspect of self perception: certainty about the way one sees himself. High scores indicate that the subject is very definite and certain in what he says about himself while low scores mean just the opposite. Low scores are found also at times with people who are being defensive and guarded. They hedge and avoid really committing themselves by employing "3" responses on the Answer Sheet.

Extreme scores on this variable are undesirable in either direction and are most often obtained from disturbed people. For example, schizophrenic patients often use "5" and "1" answers almost exclusively, thus creating very high D Scores. Other disturbed patients are extremely certain and non-committal in their self descriptions with a predominance of "2", "3" and "4" responses and very low D Scores.

E. The Time Score. This score is simply a measure of the time, to the nearest minute, that the subject requires to complete the Scale. The author has

only recently made any study of this variable, and at this point little is known as to its meaning or significance. It correlates significantly with only one of the many other scores of the Scale (Net Conflict sub-score for Column C where  $r = .32$ , significant at the .05 level). Therefore, any validity it may prove to have with other criteria should add to the total validity of the Scale.

The data do indicate that, provided the individual has sufficient education, intelligence, and reading ability to handle this task, the majority of subjects complete the Scale in less than 20 minutes. These qualifications are quite important; if they are not met, the Time Score obviously has little meaning. It has been found that psychiatric patients in general take longer than non-patients. This is particularly true of those who are overly compulsive, paranoid or depressed.

## II. The Clinical and Research Form

The following additional scores of the C and R Form are presented in the order in which they appear on the Profile Sheet. Readers interested only in the Counseling Form may omit this section.

- A. The True-False Ratio (T/F). This is a measure of response set or response bias, an indication of whether the subject's approach to the task involves any strong tendency to agree or disagree regardless of item content (Fitts, 1961).

The actual meaning of T/F can be approached in three ways. (1) It can be considered solely as a measure of response set and interpreted in terms of the findings about the meaning of deviant response sets. (2) It can be treated purely as a task approach or behavioral measure which has meaning only in terms of empirical validity. In this sense the T/F Ratio differentiates patients from non-patients and correlates significantly with other tests. (3) It can also be considered from the framework of self theory. From this approach, high T/F Scores indicate the individual is achieving self definition of self description by focusing on what he is and is relatively unable to accomplish the same thing by eliminating or rejecting what he is not. Low T/F Scores would mean the exact opposite, and scores in the middle ranges would indicate that the subject achieves self definition by a more balanced employment of both tendencies--affirming what is self and eliminating what is not self.

- B. Net Conflict Scores. These scores are highly correlated with the T/F Score. More directly, however, they measure the extent to which an individual's responses to positive items differ from, or conflict with, his responses to negative items in the same area of self perception. Thus this is a limited and purely operational definition and application of the term "conflict." On the C and R Score Sheet separate scores are computed within each cell for the positive and negative items. The difference between these scores, the P-N Score, is an operational measure of conflict. Since the responses on the negative items are reversed on the Score Sheet, the P Scores and the N Scores have equivalent meanings. Thus any differences between P and N reflects contradiction or conflict.

There are two different kinds of conflict, as follows:

1. Acquiescence Conflict. This phenomenon occurs when the P Scores are greater than the N Scores (P-N yields a positive score or number). This means that the subject is over-affirming his positive attributes.
  2. Denial Conflict. This is the opposite of acquiescence conflict. Here the N Scores for the cells are higher than the P Scores (P-N yields minus scores). This means that the subject is over-denying his negative attributes in relation to the way he affirms his positive characteristics. He concentrates on "eliminating the negative."
- C. Total Conflict Scores. The foregoing Net Conflict Scores were concerned only with directional trends in our P-N measure of conflict. However, some individuals have high P-N differences which cancel each other out because they are so variable in direction. It is of equal interest to determine the total amount of P-N conflict in a subject's self concept as well as the net or directional amount of conflict. The Total Conflict Score does this by summing P-N discrepancies regardless of sign. High scores indicate confusion, contradiction, and general conflict in self perception. Low scores have the opposite interpretation, but extremely low scores (below the red line on the Profile Sheet) have a different meaning. The person with such low scores is presenting such an extremely tight and rigid self description that it becomes suspect as an artificial, defensive stereotype rather than his true self image. Disturbed people generally score

high on this variable, but some also have deviantly low scores depending on the nature and degree of their disorder.

The conflict scores are reflections of conflicting responses to positive and negative items within the same area of self perception. These scores are not to be confused with the variability scores, which reflect fluctuations from one area of self perception to another.

- D. The Empirical Scales. These six scales were all derived by item analysis, with a resulting selection of those items which differentiated one group of subjects from all other groups. The scores on these scales are purely empirical, and cut across the basic classification scheme of the Scale.

These scales were derived from an analysis of item responses with the following groups:

<u>Group</u>	<u>Size of Group</u>
Norm Group	626
Psychotic Group (Psy)	100
Neurotic Group (N)	100
Personality Disorder Group (PD)	100
Defensive Positive Group (DP)	100
Personality Integration Group (PI)	75

The comparative item responses for these groups were studied and analyzed by Chi Square tests. Those items which differentiated one group from all other groups were then used to compose a specific scale for that group. There is some overlapping of items, since a number of items are used on more than one scale.

The six empirical scales derived by this method, in order of their appearance on the Profile Sheet, are as follows:

1. The Defensive Positive Scale (DP). This is a more subtle measure of defensiveness than the SC Score. One might think of SC as an obvious defensiveness score and DP as a subtle defensiveness score. The DP Score stems from a basic hypothesis of self theory: that individuals with established psychiatric difficulties do have negative self concepts at some level of awareness, regardless of how positively they describe themselves on an instrument of this type.

With this basic assumption, the author collected data on 100 psychiatric patients whose Total P Scores were above the mean for the Norm Group. The item analysis then identified 29 items which differentiated this DP Group from the other groups.

The DP Score has significance at both extremes. A high DP Score indicates a positive self description stemming from defensive distortion. A significantly low DP Score means that the person is lacking in the usual defenses for maintaining even minimal self esteem.

2. The General Maladjustment Scale (GM). This scale is composed of 24 items which differentiate psychiatric patients from non-patients but do not differentiate one patient group from another. Thus it serves as a general index of adjustment-maladjustment but provides no clues as to the nature of the pathology. Note that this is an inverse Scale on the Profile Sheet. Low raw scores result in high T-Scores, and vice versa.
3. The Psychosis Scale (Psy). The Psy Scale is based on 23 items which best differentiate psychotic patients from other groups.
4. The Personality Disorder Scale (PD). The 27 items of this scale are those that differentiate this broad diagnostic category from the other groups. This category pertains to people with basic personality defects and weaknesses in contrast to psychotic states or the various neurotic reactions. The PD Scale is again an inverse one.
5. The Neurosis Scale (N). This is an inverse scale composed of 27 items. As with the other inverse scales, high T-Scores on the Profile Sheet still mean high similarity to the group from which the scale was derived--in this case neurotic patients.
6. The Personality Integration Scale (PI). The scale consists of the 25 items that differentiate the PI Group from other groups. The scoring is slightly different for this scale and is explained on the special template for scoring this scale. This group was composed of 75 people who, by a variety of criteria, were judged as average or better in terms of level of adjustment or degree of personality integration.



- E. The Number of Deviant Signs Score (NDS). The NDS Score is a purely empirical measure, and is simply a count of the number of deviant features on all other scores. This score is based upon the theoretical position of Berg (1957) as stated in his "deviation hypothesis." This hypothesis states that individuals who deviate sharply from the norm in minor behaviors are likely to be deviant in more major aspects of behavior. The findings with the NDS Score substantiate this hypothesis. Disturbed persons often obtain extreme scores on either end of the continuum. Consequently, a system which sets appropriate cut-off points for each score on the Scale will identify disturbed persons with considerable accuracy.

The NDS Score is the Scale's best index of psychological disturbance. This score alone identifies deviant individuals with about 80% accuracy.

## APPENDIX B

### HOLLINGSHEAD TWO FACTOR INDEX OF SOCIAL POSITION

#### I. The Scale Scores

To determine the social position of an individual or of a household, two items are essential: (1) the precise occupational role the head of the household performs in the economy; and (2) the amount of formal schooling he has received. Each of these factors is then scaled according to the following system of scores:

##### A. The Occupational Scale

##### 1. Higher Executives, Proprietors of Large Concerns, and the Major Professionals

##### a. Higher Executives

Bank Presidents, Vice Presidents  
Judges (Superior Courts)  
Large Businesses, e.g., Directors, Presidents, Vice Presidents, Asst. Vice Presidents, Executive Secretary, Treasurer  
Military, Commissioned Officers, Major and above  
Officials of the Executive Branch of Government, Federal, State, Local, e.g., Mayor, City Manager, City Plan Director, Internal Revenue Directors  
Research Directors, Large Firms

##### b. Large Proprietors (Value over \$100,000)

Brokers	Dairy Owners
Contractors	Lumber Dealers

##### c. Major Professionals

Accountants (C.P.A.)	Artists, Portrait
Actuaries	Astronomers
Agronomists	Auditors
Architects	Bacteriologists

Chemical Engineers  
 Chemists  
 Clergy (Professionally trained)  
 Dentists  
 Economists  
 Engineers (College Graduate)  
 Foresters  
 Geologists  
 Lawyers  
 Metallurgists  
 Physicians  
 Physicists, Research  
 Psychologists, Practicing  
 Symphony Conductor  
 Teachers, University, College  
 Veterinarians (Veterinary Surgeon)

2. Business Managers, Proprietors of Medium Sized Businesses, and Lesser Professionals

a. Business Managers in Large Concerns

Advertising Directors  
 Branch Managers  
 District Managers  
 Brokerage Salesmen  
 Executive Assistants  
 Executive Managers  
     Government Officials minor, e.g.,  
     Internal Revenue Agents  
 Farm Managers  
 Office Managers  
 Personnel Managers  
 Police Chief; Sheriff  
 Postmaster  
 Production Manager  
 Sales Engineers  
 Sales Managers, National Concerns  
 Sales Managers (over \$100,000)

b. Proprietors of Medium Business (Value \$35,000 to \$100,000)

Advertising Owners (\$100,000)  
 Clothing Store Owners (\$100,000)  
 Contractors (\$100,000)  
 Express Company Owners (\$100,000)  
 Fruits, Wholesale (\$100,000)  
 Furniture Business (\$100,000)  
 Jewelers (\$100,000)  
 Labor Relations Consultants  
 Manufacturer's Representatives  
 Poultry Business (\$100,000)

Purchasing Managers  
 Real Estate Brokers (\$100,000)  
 Rug Business (\$100,000)  
 Store Owners (\$100,000)  
 Theater Owners (\$100,000)

c. Lesser Professionals

Accountants (not C.P.A.)  
 Chiropodists  
 Chiropractors  
 Correction Officers  
 Director of Community House  
 Engineers (not College Graduate)  
 Finance Writers  
 Health Educators  
 Librarians  
 Military, Commissioner  
     Officers, Lts. Cpts.  
 Musicians (Symphony Orchestra)  
 Nurses  
 Opticians  
 Pharmacists  
 Public Health Officers (M.P.H.)  
 Research Assistants, University (full-time)  
 Social Workers  
 Teachers (elementary and high)

3. Administrative Personnel, Small Independent  
 Businesses, and Minor Professionals

a. Administrative Personnel

Advertising Agents  
 Chief Clerks  
 Credit Managers  
 Insurance Agents  
 Managers, Department Stores  
 Passenger Agents--R.R.  
 Private Secretaries  
 Purchasing Agents  
 Sales Representatives  
 Section Heads, Federal, State, and Local  
     Government Offices  
 Section Heads, Large Businesses and Industries  
 Service Managers  
 Shop Managers  
 Store Managers (chain)  
 Traffic Managers

b. Small Business Owners (\$6,000 to \$35,000)

Art Gallery                      Auto Accessories

Awnings	Dog Supplies
Bakery	Dry Goods
Beauty Shop	Engraving Business
Boatyard	Monuments
Brokerage, Insurance	Package Store (Liquor)
Car Dealers	Painting Contracting
Cattle Dealers	Plumbing
Feed	Poultry Producers
Finance Company, Local	Publicity & Public
Fire Extinguishers	Relations
5 & 10	Real Estate
Florist	Records and Radios
Food Equipment	Restaurant
Food Products	Roofing Contractor
Foundry	Shoe
Funeral Directors	Signs
Furniture	Tavern
Garage	Taxi Company
Gas Station	Tire Shop
Glassware	Hotel Proprietors
Grocery--General	Institute of Music
Cigarette Machines	Jewelry
Cleaning Shops	Machinery Brokers
Clothing	Manufacturing
Coal Business	Trucking
Convalescent Homes	Trucks and Tractors
Decorating	Upholstery
	Wholesale Outlets
	Window Shades

c. Semi Professionals

Actors and Showmen  
 Army M/Sgt.; Navy C.P.O.  
 Artists, Commercial  
 Appraisers (Estimators)  
 Clergymen (not professionally trained)  
 Concern Managers  
 Deputy Sheriffs  
 Dispatchers, R.R. Train  
 Interior Decorators  
 Interpreters, Court  
 Laboratory Assistants  
 Landscape Planners  
 Morticians  
 Oral Hygienists  
 Photographers  
 Physio-therapists  
 Piano Teachers  
 Radio, T.V. Announcers  
 Reporters, Court  
 Reporters, Newspaper  
 Surveyors

Title Searchers  
 Tool Designers  
 Travel Agents  
 Yard Masters, R.R.

d. Farmers

Farm Owners (\$25,000 to \$35,000)

4. Clerical and Sales Workers, Technicians, and  
 Owners of Little Businesses (Value under \$6,000)

a. Clerical and Sales Workers

Bank Clerks and Tellers  
 Bill Collectors  
 Bookkeepers  
 Business Machine Operators, Offices  
 Claims Examiners  
 Clerical or Stenographic  
 Conductors, R.R.  
 Employment Interviewers  
 Factory Storekeeper  
 Factory Supervisor  
 Route Managers  
 Sales Clerks  
 Shipping Clerks  
 Supervisors, Utilities, Factories  
 Toll Station Supervisors  
 Warehouse Clerks

b. Technicians

Dental Technicians  
 Draftsmen  
 Driving Teachers  
 Expeditor, Factory  
 Experimental Tester  
 Instructors, Telephone Co., Factory  
 Inspectors, Weights, Sanitary, R.R., Factory  
 Investigators  
 Laboratory Technicians  
 Locomotive Engineers  
 Operators, P.B.X.  
 Proofreaders  
 Safety Supervisors  
 Supervisors, Maintenance  
 Technical Assistants  
 Telephone Co. Supervisors  
 Timekeepers  
 Tower Operators, R.R.  
 Truck Dispatchers  
 Window Trimmers (Store)

c. Owners of Little Businesses

Flower Shop (\$3,000-\$6,000)

Newsstand (\$3,000-\$6,000)

Tailor Shop (\$3,000-\$6,000)

d. Farmers

Owners (\$10,000-\$20,000)

5. Skilled Manual Employees

Auto Body Repairers	Linotype Operators
Bakers	Lithographers
Barbers	Locksmiths
Blacksmiths	Loom Fixers
Bookbinders	Machinists (Trained)
Boilermakers	Maintenance Foremen
Brakemen, R.R.	Installers, Electrical Appliances
Brewers	Masons
Bulldozer Operators	Masseurs
Butchers	Mechanics (Trained)
Cabinet Makers	Millwrights
Carpenters	Moulders (Trained)
Casters (Founders)	Painters
Cement Finishers	Paperhangers
Cheese Makers	Patrolmen, R.R.
Chefs	Pattern and Model Makers
Compositors	Piano Builders
Diemakers	Piano Tuners
Diesel Engine Repair and Maintenance (Trained)	Plumbers
Diesel Shovel Operators	Policemen, City
Electricians	Postmen
Electrotypists	Printers
Engravers	Radio, T.V., Maintenance
Exterminators	Repairmen, Home Appliances
Fitters, Gas, Steam	Rope Splicers
Firemen, City	Sheetmetal Workers (Trained)
Firemen, R.R.	Shipsmiths
Foremen, Construction, Dairy	Shoe Repairmen (Trained)
Gardeners, Landscape (Trained)	Stationary Engineers (Licensed)
Gauge Makers	Stewards, Club
Glassblowers	Switchmen, R.R.
Glaziers	Tailors (Trained)
Hair Stylists	Teletype Operators
Heat Treatments	Toolmakers
Horticulturists	
Linemen, Utility	
Linoleum Layers (Trained)	

Track Supervisors, R.R.	Watchmakers
Tractor-Trailer Trans.	Weavers
Typographers	Welders
Upholsterers (Trained)	Yard Supervisors, R.R.

### Small Farms

Owners (under \$10,000)  
Tenants who own farm equipment

## 6. Machine Operators and Semi-Skilled Employees

Aides, Hospital  
Apprentices, Electricians  
Printers, Steamfitters,  
Toolmakers  
Assembly Line Workers  
Bartenders  
Bingo Tenders  
Building Superintendents (Cust.)  
Bus Drivers  
Checkers  
Coin Machine Fillers  
Cooks, Short Order  
Delivery Men  
Dressmakers, Machine  
Elevator Operators  
Enlisted Men, Military Services  
Filers, Benders, Buffers  
Foundry Workers  
Garage and Gas Station Assistants  
Greenhouse Workers  
Guards, Doorkeepers, Watchmen  
Hairdressers  
Housekeepers  
Meat Cutters and Packers  
Meter Readers  
Operators, Factory Machines  
Oilers, R.R.  
Practical Nurses  
Pressers, Clothing  
Pump Operators  
Receivers and Checkers  
Roofers  
Set-up Men, Factories  
Shapers  
Signalmen, R.R.  
Solderers, Factory  
Sprayers, Pain  
Steelworkers (not Skilled)  
Stranders, Wire Machines  
Strippers, Rubber Factory  
Taxi Drivers



Testers  
 Timers  
 Tire Moulders  
 Trainmen, R.R.  
 Truck Drivers, General  
 Waiters-Waitresses ("Better Places")  
 Weighers  
 Welders, Spot  
 Winders, Machine  
 Wire drawers, Machine  
 Wine Bottlers  
 Wood Workers, Machine  
 Wrappers, Stores and Factories

#### Farmers

Small tenants who own little equipment

### 7. Unskilled Employees

Amusement Park Workers (Bowling Alley, Pool Rooms)  
 Ash Removers  
 Attendants, Parking Lots  
 Cafeteria Workers  
 Car Cleaners, R.R.  
 Car Helpers, R.R.  
 Carriers, Coal  
 Countermen  
 Dairy Workers  
 Deck Hands  
 Domestics  
 Farm Helpers  
 Fishermen (Clam Diggers)  
 Freight Handlers  
 Garbage Collectors  
 Grave Diggers  
 Hod Carriers  
 Hog Killers  
 Hospital Workers (Unspecified)  
 Hostler, R.R.  
 Janitors, Sweepers  
 Laborers, Construction  
 Laborers, Unspecified  
 Laundry Workers  
 Messengers  
 Platform Men, R.R.  
 Peddlers  
 Porters  
 Roofer's Helpers  
 Shirt Folders  
 Shoe Shiners  
 Sorters, Rag and Salvage

Stagehands  
 Stevedores  
 Stock Handlers  
 Street Cleaners  
 Unskilled Factory Workers  
 Truckmen, R.R.  
 Waitresses ("Hash Houses")  
 Washers, Cars  
 Woodchoppers

Relief, Public, Private

Unemployed (No Occupation)

Farmers

Share Croppers

This scale is premised upon the assumption that occupations have different values attached to them by the members of our society. The hierarchy ranges from the low evaluation of unskilled physical labor toward the more prestigious use of skill, through the creative talents of ideas, and the manipulation of men. The ranking of occupation functions implies that some men exercise control over the occupational pursuits of other men. Normally, a person who possesses highly trained skills has control over several other people. This is exemplified in a highly developed form by an executive in a large business enterprise who may be responsible for decisions affecting thousands of employees.

#### B. The Educational Scale

The educational scale is premised upon the assumption that men and women who possess similar educations will tend to have similar tastes and similar attitudes, and they will also tend to exhibit similar behavior patterns. The educational scale is divided into seven positions: (1) Graduate Professional Training (persons who complete a recognized professional course leading to a graduate degree are given scores 1). (2) Standard College or University (all individuals who complete a four-year college or university course leading to a recognized college degree are assigned to the same scores. No differentiation is made between state universities or private colleges). (3) Partial College Training (individuals who complete at least one year but not a full college course are assigned this position. Most individuals in this category complete from one to three years of college). (4) High School Graduates (all secondary school graduates, whether from a private preparatory school, a public high school, a trade school, or a parochial high school, are assigned the same scale value). (5) Partial High School (individuals who complete the tenth

or the eleventh grades, but do not complete high school are given this score). (6) Junior High School (individuals who complete the seventh grade through the ninth grade are given this position). (7) Less Than Seven Years of School (individuals who do not complete the seventh grade are given the same scores, irrespective of the amount of education they receive).

## II. Integration of Two Factors

The factors of Occupation and Education are combined by weighting the individual scores obtained from the scale positions. The weights for each factor were determined by multiple correlation techniques. The weight for each factor is:

<u>Factor</u>	<u>Factor Weight</u>
Occupation	7
Education	4

To calculate the Index of Social Position score for an individual, the scale value for Occupation is multiplied by the factor weight for Occupation, and the scale value for Education is multiplied by the factor weight for Education. For example, John Smith is the manager of a chain supermarket. He completed high school and one year of business college. His Index of Social Position score is computed as follows:

<u>Factor</u>	<u>Scale Score</u>	<u>Factor Weight</u>	<u>Score x Weight</u>
Occupation	3	7	21
Education	3	4	<u>12</u>

Index of Social Position Score: 33

## III. Index of Social Position Scores

The Two Factor Index of Social Position Scores may be arranged on a continuum, or divided into groups of scores. The range of scores on a continuum is from a low of 11 to a high of 77. For some purposes a researcher may desire to work with a continuum of scores. For other purposes he may desire to break the continuum into a hierarchy of score groups.

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