A Study Of High School Students' Educational Values: Implications For Counselors

Mary P. Allen

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A STUDY OF HIGH SCHOOL STUDENTS' EDUCATIONAL
VALUES: IMPLICATIONS FOR COUNSELORS

A Dissertation
Presented to
The Faculty of the Graduate School
University of the Pacific

In Partial Fulfillment
of the Requirement for the Degree
Doctor of Education

by
Mary P. Allen
August 1980
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Dated *July 11, 1980*
A STUDY OF HIGH SCHOOL STUDENTS' EDUCATIONAL VALUES: IMPLICATIONS FOR COUNSELORS

Abstract of the Dissertation

The purpose of this study was to investigate the educational value orientations of high school students, and the relationship of these values to demographic variables, such as ethnic group, sex, birth order, and social class. There are many conflicting educational values in American society. It seems that a greater understanding by counselors of the values of the pluralistic group with which they are dealing, would enable them to better plan their counseling programs.

The target population was high school students with the sample being 500 high school juniors and seniors from four locations in the U.S.A.: the San Francisco Bay area, the San Joaquin valley, a Southeastern location, and a Southwestern location. The random sample of approximately 500 high school juniors and seniors were given the "Educational Values and Practices Questionnaire." The questionnaire was first tested with a random sample of 25 students, and the results analyzed for consistency and possible question ambiguity. The survey questionnaire consisted of 37 items: Part I, 12 questions based on emphases of high school education; Part II, 12 questions based on objectives of high school education; Part III, 6 questions on educational practices; and Part IV, 9 questions on biographical items (sex, ordinal position in the family, socioeconomic status, estimated G.P.A., age, ethnic group). The survey questionnaire was based on the Allport-Vernon-Lindzey Study of Values, which taps theoretical, economic, aesthetic, social, political, and religious values. The questionnaire is scored on six variables: Aesthetic Value, Leadership Value, Philosophical Value, Scientific Value, Social Value, and Vocational Value. It was hypothesized that answers to questions on the Educational Values and Practices Questionnaire would differ as a function of sex, social class, ethnic group, birth order, and professed achievement in school. The results were computer analyzed in terms of frequency distributions of responses to the value categories and the biographical values. Statistical treatment of the data included analysis of variance, Scheffe pairwise comparison, and Chi square analysis.

Results showed that in the Vocational and Aesthetic Values, girls' mean scores were significantly higher than boys (p=.001).
There was also a significant interaction between Vocational Value, sex, and grade point average (p=.05). With regard to birth order, the oldest girl showed a higher mean score for Social Value and for Vocational Value. Students with B grade point averages in this study scored significantly higher on the Scientific Value (p=.05) than did those with C grade point averages.

It is hoped that the results of this comparative survey will be useful in educational decision-making, in helping counselors to become more aware of the attitudes, values, and aspirations of students, and the interaction of these with other student characteristics. It is also hoped that knowledge of the students' goals, aspirations and achievement level may assist the counselor to guide students to their highest level of potential in educational and career decision-making.
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Finally, the author is grateful for the support and patience of her family and friends.

M.P.A.
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CHAPTER 1
INTRODUCTION

Educational researchers agree that in the latter part of adolescence, youths make many important decisions which set the course of their future lives. During these years, adolescents face the dual problem of finding a meaningful individual identity (Erikson, 1959; Mead, 1969) and of determining future career identity (Josselyn, 1961). It is during this period that values are adopted that will guide the person's future behavior (National Spiritual Assembly of the Baha'is of the United States, 1973). Many of these important life decisions are made in the high school setting. One of the members of the high school staff who can be very influential in this decision-making process is the guidance counselor.

The guidance counselor is charged with the responsibility of enabling youths to reach to their highest potential level of educational or career achievement. Counselors should make students aware of the relationship between their values, the educational experience, and their future careers or lifestyles (Muskat, 1979).

Another goal of counseling is to assist the student in adjusting to various aspects in the environment which
influence his or her psychological well-being (Vontress, 1976). In fulfilling this goal it should be remembered that counseling serves a connective function. It serves as a bridge between the demands of school and society and the needs of the individual. In order to meet students' educational, social, and emotional needs, counselors advise students on the selection of courses; assist in career or college choice; supply financial aid information; offer guidance to those with personal adjustment problems; and maintain contact with parents and refer families to community services when necessary (U. S. Commission on Civil Rights, 1974). In carrying out these responsibilities, the counselor's role is to create an accepting atmosphere and to develop rapport so that academic and social problems can be freely discussed (Vontress, 1976).

The counselor in a pluralistic society faces a special challenge. He or she must be aware of the many conflicting educational values existing in American society. With the current emphasis on integration of the schools, multicultural and bilingual education, and programs for the handicapped and disadvantaged have come new programs and new kinds of students with values which may be different from traditional norms. For example, one aim of multicultural education is to reduce students' personal and interpersonal conflicts. However, having to select new and different values from those
already learned is inherently a source of conflict (Baker, 1976; Dahlke, 1958).

In the past traditional values or middle-class norms emerging from church, school, and home were relatively uniform. Currently, however, youth are bombarded from all sides with many different kinds of value choices. There is a conflict of values being promoted by the home, on the streets, at church, and by the media. Teachers are fearful that imparting specific values may offend parents. Counseling, the largest helping profession in this country, has also been affected by the values confusion. Given this situation, how is the counselor to help students to reach the stated goals of self-, educational, and career identity?

First, counselors themselves must acknowledge the fact that they are not culture or value free. Sue (1977) warned counselors against becoming encapsulated in their own cultural assumptions and values.

Secondly, most educational personnel, including counselors, have their origins in the middle class. The middle class social structure is usually held up as the standard in education (Becker, 1961). Nevertheless, there are numerous subcultures in the United States from which minorities acquire language patterns, customs, values, and world views that are foreign to members of the dominant cultural group (Vontress, 1976). These value differences may be due to differences of sex, socioeconomic status, or ethnic group
and may vary from the middle-class norms reflected in most school situations.

With the many conflicting educational goals and values in American society, guidance counselors have the challenging task of assessing students' values and goals. Counselors can then use this information to assist students from a variety of backgrounds to develop to their fullest potential level of achievement. In fact it seems that a more accurate understanding by counselors of the values of the pluralistic group with which they are dealing, would enable them to plan their academic and career counseling programs more effectively.

Indeed, the guidance function of the schools is expected to guide students' activities toward society's goals and purposes (Peters & Shertzer, 1974). Therefore, so that a counselor can fill both students' and society's needs, an assessment of students' values could be included in the guidance program. This knowledge would not only assist the individual student's development, but would in turn answer some of society's demands on the schools. The process of making value choices to the individual student is an important step in his or her healthy psychological development into adulthood (Coleman & Sherrick, 1979). This value clarifying process and development of self-awareness is "crucial to becoming a morally educated human" (Wilson, Williams, & Sugarman, 1967, p. 112).
The process of making value choices and decisions assists older adolescents in making important future plans. With regard to achievement in higher education, results of assessment of educational goals in the senior year of high school were found to be very significant. Educational goals measured during the senior year of high school were the strongest independent influence on continuing attendance in college (Sewell & Shah, 1968).

Research findings of a survey of college freshmen showed that students who did not persist in college were less likely to have decided on their academic and career goals (Muskat, 1979). Taking part in a value survey can start the process of developing awareness in the older high school student of his or her interests, attitudes and values which in turn may facilitate future decision-making and educational and career choices. The results of such a survey could be useful to schools in planning academic guidance programs and in curriculum planning.

Statement of the Problem

For the counselor, there is a need for greater understanding of educational values and attitudes that are currently extant among students. Is there a relationship between educational values and demographic variables such as sex, social class, ethnic group, birth order, and grade point average? In a multicultural society, if educational
guidance is to be relevant for both sexes and for all social and ethnic groups, an accurate inventory of student attitudes concerning the purposes and practices of high school education would be helpful. This information could assist the counselor in educational guidance and the student in career-decision-making. Results from such a survey could give useful insight to the counselor in encouraging the highest potential level of achievement on the part of student counselees. It might assist the counselor to have such information in order to guide students toward courses which would help them attain their educational and career goals more effectively. Findings from such a study might also aid the counselor in placing students in classes wherein the teaching methods used would be most compatible with student needs for optimum learning conditions.

In order to meet the afore-mentioned needs this survey was undertaken. The sample in this study was limited to high school students, juniors and seniors, who were currently enrolled in high schools in Northern California in two different geographical areas, and in two other areas in the United States, one in the Southeast and one in the Southwest.

It was hypothesized that answers to questions on the Educational Values and Practices Questionnaire would differ
as a function of sex, social class, ethnic group, birth order, and professed achievement in school. The purpose of this study was to meet the following set of objectives:

(1) to determine values toward education as measured by the Educational Values and Practices Questionnaire of eleventh and twelfth graders in high school

(2) to discover what relationship, if any, these values might have to such demographic factors as grade, sex, social class, ethnic group, birth order, professed grade point average, and geographical region.

**Significance of the Study**

It is hoped that the results of such a comparative survey will be useful to the counselor in academic guidance, and to the student in educational decision-making. The information gathered should help counselors become more aware of the attitudes, values, and educational goals of students, and the interaction of these with other student characteristics such as sex, social class, ethnic group, and grade point average. Furthermore, the data that are generated in this investigation of educational values, could serve as a comparison to other groups of students both in the United States and in international settings.

High schools and their personnel have a tri-faceted responsibility--to the individual students, to the community, and to the enterprise of education itself. Because of the many alternative educational values influencing the individual, from the home, the society and the school, it is very
difficult to "guess" which values are currently operative on the diverse clientele that the counselor is trying to serve. Therefore, a survey of high school students' values might be helpful to the counselor in his or her role of academic and career advisor.

**Description of the Sample Used**

The sample used in this study was approximately 500 high school juniors and seniors currently enrolled in high schools in Northern California, in the Southwest and in the Southeastern United States. These included four schools in the suburban Bay area, a school in a relatively small semi-rural town in the San Joaquin Valley, a medium-sized Southwestern city in Arizona and a large Southeastern city in Virginia. The geographic areas to be sampled were chosen because they represented a diversity of ethnic and socioeconomic populations. The particular age group of eleventh and twelfth grade students was selected, because at this stage of life, students are making important life decisions with far-reaching implications. This period is a major transition point in an individual's life cycle, in which a student is confronted by decisions of real consequence (Turner, 1967; Rehberg, 1978).

However, it should be remembered that this is a select group, due to the fact that some students have already withdrawn from school in the lower grades. A study of tenth
graders might have eliminated the drop-out bias; however, this researcher agreed with another author's conclusion that relatively few tenth graders would be able to make responsible statements about their vocational values (Turner, 1964). Unfortunately, after tenth grade, substantial drop-outs from school begin, the rate increasing with each semester. The U. S. Commission on Civil Rights (1971) reported that in California, "36 percent of the Mexican Americans and 33 percent of blacks... are gone by grade 12 because of low school holding power" (p. 28). Therefore, in this study eleventh graders were included to partially compensate for the drop-out bias inherent in an all senior group. Nevertheless, the sample was less representative in terms of social class and ethnicity than a younger age group, and generally less influenced by home values.

Researchers have found that educational plans measured during the senior year of high school were the strongest independent influence on staying in a college program (Sewell & Shah, 1968). Some considered the tenth grade to be a year of commitment to either an academic or to a vocational future.

The twelfth grade, however, is a year during which alternative paths, whether educational or occupational, must be considered, preferences established, and decisions implemented. "Decisions about education made by students in the twelfth grade are decisions of consequence" (Rehberg, 1978, p. 173).
These decisions or educational goal orientations affect the students' future social class. Research has shown that the guidance counselor's encouragement has a great effect in shaping the educational decisions of twelfth grade students. The counselor's encouragement in the senior year was based mostly on the student's academic achievement records in the ninth, tenth, and eleventh grades.

Educational decisions reported by high school students toward the end of their senior year are determined more by their own scholastic ability and educational ambition than by their social class. The overall causal role of social class in the formation and maintenance of educational goal orientations declines during the years of secondary school. For males, the causal role of ability increases (Rehberg, 1978).

In summary, eleventh and twelfth grade students' educational values were surveyed in this study, because this age group is in an important stage of life in which major decisions are to be made. These decisions will affect their future life styles. These decisions are known to be influenced by the amount and kind of encouragement given to them by the high school guidance counselor.
Research Design and Rationale

The Educational Values and Practices Questionnaire used in this study, like Allport's Study of Values (1960), is based on Edouard Spranger's (1928) value types. The typology is based on pure values, not on actual persons. The reason for this particular type of value categorization is that presented in this manner, the values lend themselves to measurement (Allport, 1964).

Scores on the Educational Values and Practices Questionnaire were collected and computer analyzed, using the Analysis of Variance statistical test, as well as frequency distributions, percentages, Chi square analysis, and Pearson Correlation. The dependent variable was the student's score on a scale of importance of educational values and practices. The independent variables were grade, sex, social class, ethnic group, professed grade point average, birth order, and geographical region. Independent variables were compared with their relationship to the educational values and practices preferred.
Student counseling services should use the Educational Values and Practices Questionnaire (EVP) to obtain an initial impression of the interests of the student and as a basis for subsequent interviews. The values measured are much broader than specific occupational interests. Therefore, the questionnaire can be used, with discretion, as a basis for vocational and educational advising.

Some of the limitations of the Educational Values and Practices Questionnaire are that the six values are not wholly independent. There is some interrelationship between philosophical and aesthetic values and between scientific and vocational values (Asrari, Abedi & Aiken, 1977). It also may be objected that the values tested are too idealistic. Nevertheless, researchers agree on the need for values in the adolescent’s life (Haslip, 1974). With an apathetic adolescent, "...every counselor knows...that a persistent problem lies in a state of valuelessness" (Allport, 1955, p. 77).

Since this study was a survey form of research, no cause-and-effect relationships were reported (McAshan, 1963), nor could null hypotheses be stated (Krathwohl, 1977). The purpose of the study was to discover significant differences between the demographic factors (the independent variables) and educational values (dependent variables) if indeed, these did exist.
Assumptions and Limitations

Assumptions

The assumptions upon which this was based were as follows:

1. High school education serves many purposes.
2. There are many conflicting values in high school education.
3. Each young person attending brings a need for educational, occupational and personal counseling.
4. Self-awareness on the part of the student will assist in attainment of educational and vocational goals. Guidance leading toward self-understanding will aid the student in educational achievement.
5. It is assumed that the data collected will be valid, and that the sample is representative of high school students in the geographical areas sampled.

Limitations

This study may be subject to certain limitations as follows:

1. The limitations inherent in the instrument itself, since it has had little use in educational counseling heretofore.
2. The limitations with the research settings, which varied in location and in examiners.
3. The limitations in selection of subjects, since it was impossible to sample all high school students in every major city in the United States.

Definition of Terms Used

The following definitions of terms were used throughout the study:

Achievement: the desire to succeed (McClelland, 1961).

"The achievement motive is conceived as an enduring
personality disposition to strive for success in situations where performance is to be evaluated in terms of some standard of excellence" (McClelland, Atkinson, & Clark, 1953, p. 183). It is assumed that this disposition is learned, so that its strength may vary between individuals. Achievement in this study will be measured by professed grade point average (GPA).

**Attitude:** A more or less permanently enduring state of readiness of mental organization which predisposes an individual to react in a characteristic way to any object or situation with which it is related (Fishbein, 1967).

**Value:** "A conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action" (Kluckhohn, 1951, p. 395). Values are conceived as having three elements in dynamic relationship: the affective (what one finds most desirable), the cognitive (knowledge of what is right and wrong), and the intentional (what one would do) (Kluckhohn, 1951).

**Value System:** "Value systems are...assumed to function as general plans that can be used to resolve conflicts and as a basis for decision-making" (Rokeach, 1968, p. 8). In agreement with a value system, the individual, selects his perceptions, consults his conscience, inhibits contrary or irrelevant or contrary lines of conduct, drops and forms subsystems of habit according as they are dissonant or harmonious with his commitments (Allport, 1955, p. 76).
The value system exerts a dynamic influence on the person's specific choices (Allport, 1955). As long as the individual's generalizations and categorization keep close to first-hand experiences, they are relatively rational. However, personal value systems can develop into love-prejudice and hate-prejudice categories. These unwarranted prejudgements contain attitudes of favor or disfavor and can lead to erroneous beliefs (Allport, 1954).

**Moral Education:** The concept of moral education involves the disposition, the state of mind of the individual "from which reasons, motives and ultimately behavior will flow" (Wilson, Williams, & Sugarman, 1967, p. 67). "A 'morally educated' person is someone who considers the interests of others, knows what they feel, makes up moral rules appropriate to the situation, and abides by those rules" (Wilson, et al., p. 138).

**Values Education:** A process by which an individual advances from an egocentric being, to a self-directed, but socially responsive and responsible person (Simon, Howe, & Kirschenbaum, 1972; Kohlberg, 1968).

**Demographic characteristics:** biographical factors such as age, sex, birth order, and ethnic group. Also included are environmental factors such as social class and individual measures of achievement such as grade point average.

**Objectives of Education:** purposes and practices of high school education or other high or lower levels of education, such as college or elementary education.
Independent Variable: "An independent variable is the presumed cause of the dependent variable, the presumed effect" (Kerlinger, 1973, p. 35). "The variable whose changes or differences are associated with changes or differences in the dependent variable in any lawful fashion. Observations of the independent variable thus afford a basis for prediction" (Gould & Kolb, 1964, p. 747). This will be the demographic characteristics in this study.

Dependent Variable: "The dependent variable is the variable predicted to, whereas the independent variable is predicted from" (Kerlinger, 1973, p. 35). The educational values of the students sampled will be the dependent variable in this study.

Ethnic Group: "The term denotes a social group which within a larger cultural and social system, claims or is accorded a special status in terms of a complex of traits (ethnic traits) which it exhibits or is believed to exhibit" (Gould & Kolb, 1964, p. 243). These traits include religious and linguistic characteristics of the social groups, the distinctive skin-pigmentation of its members, their national or geographic origins or those of their ancestors (Gould & Kolb, 1964).

Vocational: This term is used in relation to acquiring education which will be useful to a future career.

Likert or Summated Rating Scale: These contain a set of items, all of which are considered approximately equal in attitude or value loading. The subject responds with
varying degrees of intensity on a scale ranging between extremes on agree-disagree, like-dislike, accept-reject. The scores of the position are summed, or summed and averaged, to yield an individual's attitude score. (Isaac & Michael, 1971).

**Status:** An individual's or family's position in the social system (Gould & Kolb, 1964)

**Social Class:** A term used to denote all those individuals (or families) who possess within the framework of some society or community, relatively the same amounts of power, income, wealth or prestige or some loosely formulated combination of these elements. "More strictly, class has denoted those holding a common position along some continuum of the economy" such as wealth, income, occupations (p. 648). The working class consists of those who work with their hands (Gould & Kolb, 1964).

**Summary**

By having a better understanding of the relationship of student values to student characteristics, it is hoped that educational and career decision-making will be facilitated for students and counselors in this culturally diverse society. It is also hoped that implications for future research in other areas in California or in other geographical locations in the United States may arise. It is presumed that knowledge of students' goals and values may assist the counselor to guide students to their highest potential level
of achievement. It would be desirable if information obtained through this survey could be used in individual educational and career counseling, and as an aid in student self-awareness leading to self-determination of goals.

Chapter 1 of this report has stated the problem, noted the significance of the study, specified its purpose, listed some assumptions and limitations, and defined important terms used in the report.

Four additional chapters complete the remainder of the study. These are as follows: Chapter 2 reviews the related literature; Chapter 3 is a description of the sample, design, and procedure of the study; Chapter 4 is a presentation of the collected data; and Chapter 5 is a discussion of the findings and conclusions.
CHAPTER 2
REVIEW OF RELATED LITERATURE

The review of the literature is concerned with research relevant to a study of educational values. The first part of the chapter traces the concept of values in American education to the present time. The central portion deals with the dependent variables in this study, which are specifically, the six educational values surveyed: Vocational, Scientific, Leadership, Social, Aesthetic, and Philosophical values. Next the independent variables, which in this case are the demographic factors, are examined: sex, ethnic group, social class, grade point average, and birth order. The final part of the chapter deals with the role of the high school guidance counselor in his or her role of facilitating value clarification and decision-making for students.

Values in American Education

In the early years of United States education, religion was a highly influential force. Religion was actually the motive power behind reading instruction. Moral problems were considered to be the basis of formal schooling (Sizer & Sizer, 1970). The traditional education went back to the Puritans'
desire to protect and advance the Bible state (Meyer, 1965).

The Protestant beginnings of the United States and its culture, with its stress on self-reliance, rather than on reliance on the institutional church fostered the entrepreneurial attitude. Since the individual did not have to depend exclusively on more learned experts, he could read his Bible for himself and find divine guidance directly.

For exactly this reason, there was a greater stress on literacy among Protestants (McClelland, 1961).

As a consequence of this attitude of individual initiative, achievement became an important aspect of the Protestant work ethic. McClelland (1961) called this "drive which focuses on the goal of efficiency" by the term "n Achievement." He proposed the hypothesis that economic growth is based on the need for achievement.

The Protestant work ethic, with its emphasis on individual achievement survived. Increasingly, however, the separation of church and state was advocated as an American ideal. Values instruction was disallowed for fear that teaching values would be construed as "religious" instruction (Brubaker, 1944).

Many writers have attempted to analyze the basic American value system. Most of them concur that one of the influential, traditional American values was that of individual achievement. People considered that those who were highly motivated to achieve would be more successful contributors
in life. They would tend to do well in school, and to be more self-reliant and less dependent on others in later life. Those with low achievement were expected to dissipate their energies and to lead unproductive lives (Kluckhohn, 1961; Williams, 1970; Lipset, 1970; Stewart, 1972; Gardner, 1978).

Allport and Gillespie (1955) found that the qualities often ascribed to Americans—competitiveness, desire for success, and personal ambition are mentioned more often in autobiographies by students in countries of newer nationalism, where aspirations for achievement are high, such as Mexico, Egypt, and among the Bantu of South Africa. Therefore, achievement as a highly valued item may not be inherently an "American" ideal. It may represent a stage of development of a national group.

Achievement Motivation Studies

Numerous studies of achievement motivation have been made (Murray, 1938; Murray & Morgan, 1943; Burris, 1958; Weiner, 1973; McClelland, 1973; Atkinson, 1978). Weiner (1973) found through his studies of achievement motivation that the high achievement motivated person initiates achievement activities for his or her own sake, prefers intermediate risks, persists at achievement behaviors when repeated action is realistic, and responds positively to failure. On the other hand, the low achievement motivated person does not undertake achievement activities unless other motivations
are operative. He or she prefers tasks which are reasonably easy or difficult, persists at achievement behaviors when continuation is not warranted by the situation, and cannot tolerate failure.

Expectancy of success influenced achievement motivation according to Atkinson (1978). That is, subsequent to success or failure, there is a motivational change in the strength of the tendency to engage in the same or similar activities. That is, when there is an increase in the expectancy of success, there is an increase in the incentive value of success.

Women and Achievement Motivation

Regarding research in the area of women's achievement motivation, women were found to be more motivated by internal rather than by external rewards. Parsons and Goff (1978) designed a study to investigate variables that might influence women's career aspirations. They discovered that women appeared to be more motivated by intrinsic considerations, such as an opportunity to contribute to society, or to express one's identity. Men were more motivated by extrinsic considerations such as high salaries, prestige, or advancement.

The part that the motive to affiliate plays in the development of women's self-esteem has been noted by several researchers (Douvan & Adelson, 1966; Hoffman, 1972). Hoffman proposed that affiliation was seen as success to women, and furthermore, was an affirmation of the self. The women's perceived value of social behavior was related to achievement motivation (Stein & Bailey, 1973).
A fear of success was also found to affect women's achievement level. According to Horner's (1968) conclusions, women have a higher fear of success than men. Fear of success does interfere with women's achievement behavior in some settings. Atkinson's achievement model predicted men's career aspirations, but it did not predict reliably either women's adult achievement behavior or their career aspirations. Horner's efforts were an attempt to account for the failure of Atkinson's model to predict female adult achievement patterns.

Achievement motivation was found to be related to social class and to occupational mobility (Crockett, 1973). Beliefs and values conducive to achievement striving in the occupational sphere are found more typically in the middle class than in the working class. However, identification with beliefs and values of another class is said to account for persons acquiring motivations either more or less conducive to achievement striving. That is, either middle class or working class may internalize the values of the other class by psychologically identifying with that other class (Hyman, 1953).

Achievement values seem to be shifting. Bardwick (1971) found that recently the values and goals of both males and females have been changing. Women have become more willing to embrace success, less fearful of advancing to meet challenges. At the same time, and perhaps as a complement, males
have become less enamoured of high achievement, and possibly less pressured to achieve (Hoffman, 1972). As a consequence, the patterns of achievement motivation may also be changing (Romer, 1975). Males and females may become more similar in their attitudes toward achievement (Gardner, 1978). Next, consideration will be given to the measurement of achievement.

Measuring Achievement

Maslow (1971) spoke of achievement motivation in terms of the "self-actualized" individual. Self-actualizing individuals were considered more matured, more fully human, and already gratified in their basic needs. Unfortunately, self-actualization is too intangible a concept to measure. At the present time, achievement behavior in school is measured by standardized tests and/or grade point averages. Both methods have come under criticism (Ohmer & Edgerly, 1976). However, high school grades are considered to be approximately twice as accurate as the Standardized Achievement Test (SAT) in predicting grades of college freshmen (Fields & Jacobson, 1980).

The other measure, standardized testing, has been criticized as inadequate, unreliable in predicting college performance, biased against minorities and the lower social classes (Fields & Jacobson, 1980). Counter arguments state that the tests did not create the differences in students' scores, but merely reveal the differences. Caution should
be used in assuming that test scores and grades constitute an adequate basis for defining relative merit. The technology is too limited at this time to accurately measure human diversity (Turnbull, 1974).

New awareness of cultural diversity in cognitive and motivational styles opens the door to new challenges for counselors. Counselors can play an important role in facilitating the school success of minority students. There is a value shift, especially in the non-traditional student population from the Protestant work ethic. There is evidence of dissatisfaction with the meaninglessness of many jobs today. The incompatibility between human values and the limited psychological rewards most jobs were able to return was most dramatically seen in the behavior of youth in the 1960's (Borow, 1974). Work for many students no longer provides a sense of achievement. Therefore, to be successful, vocational guidance counseling must be based upon occupational concepts which start from this new frame of reference about work (Wrenn, 1962).

Many school practices used to measure achievement such as standardized testing, grading, and tests to measure students' basic skills are being criticized by the public. At the same time, education is being called upon to be vocationally relevant. In the 1980's youth unemployment, especially of disadvantaged minorities, will be a major domestic problem in the United States (Guidepost, 1979).
Counselors may be increasingly called upon to help meet the individual students' needs for effective education and vocational decision-making. The counselor must recognize society's need to utilize the potential human resources resident in the youth he or she is counseling.

Educational Values

Categorization of values has been accomplished by social scientists (Spranger, 1928; Dahlke, 1958). Spranger's (1928) six types of values were described in terms of "types of men": Economic, Theoretical, Political, Social, Aesthetic, and Religious. Each of these values will be examined in relation to education.

Economic Value

The Economic Value is equated with Vocational Value in this study.

The economic man characteristically values what is useful and practical, especially the practical affairs of the business world. He judges things primarily by their tangible utility (Feldman, 1969, p. 7-8).

Historically, by the middle of the 19th century in the United States, a new "stream of educational thought underscored the need for a practical, utilitarian emphasis in ...instruction." There was a shift in the direction of "emphasizing vocational education, preparation for 'real life'; utilitarian ends in the sense of useful service to the larger community..." (Lau, 1978, p. 2, 3). With regard to counseling, the first attempts at an organized plan of guidance occurred in the early 1900's. The early emphasis
was on vocational placement and occupational adjustment (Peters & Shertzer, 1974).

In the present day educational personnel are called upon to assist youth in vocational planning.

Increasingly, teachers and counselors are being asked to take an active part in helping young people become more aware of their value orientations, the processes by which values are shaped, and the integration of these into consideration of work plans (Hales & Fenner, 1972, p. 199).

Since values are considered to be important elements in personal decision-making, students' exploration and examination of values should be of prime concern for guidance.

Values and vocational goals are interrelated. "Locating oneself vocationally in the future, however defined, must be predicated upon coming to terms with one's values and life purposes, with one's personal characteristics..." (Herr & Cramer, 1973, p. 3). With relation to minorities and disadvantaged groups, Gordon (1973) felt that value selection and development were extremely important.

Some educators believe that the traditional American work ethic is no longer a motivating force among the young. They believe that a large and growing number of today's school-age population have values that differ radically from those of past generations. One suggested difference in values concerns a change in the importance of 'success'; in particular, a shift in the meaning associated with one's job. Rejection of traditional economic definitions of life's
purposes is most frequent among those youths whose families have been economically the most comfortable and secure (Herr, 1972). As material well-being is increasingly taken for granted, the search for economic security ceases to be a central task of life (Hales & Fenner, 1972; Herr, 1972). The Scientific Value will be considered next.

Theoretical Value

The Theoretical Value was labeled the Scientific Value in this study of educational values.

The dominant value of the theoretical man is the discovery of truth. His interests are empirical, critical, and rational. His chief aim in life is to order and systematize his knowledge (Feldman, 1969, p. 7-8).

After the launching of the first Sputnik in the 1950's, the value climate changed from an emphasis on adjustment to concern with achievement in education (Bronfenbrenner (1969). This need for achievement was especially emphasized in the areas of science and mathematics. It was thought by many observers that U. S. education in these areas must be lagging behind the Russian technology. Currently, four years of high school mathematics is considered to be vitally important for students, especially for girls, who wish to go on to scientific and other non-traditional careers. Counselors should be aware of the academic preparation needed by students in order to qualify for these kinds of occupational futures (Westoff, 1979).
The Leadership Value will be considered in the next section.

**Political Value**

In this study the Political Value was called the Leadership Value, since these qualities were emphasized in Spranger's (1928) description.

The political man primarily values power and influence. Leadership, competition, and struggle are important aspects of his interests (Feldman, 1969, p. 7-8).

Leadership and competition seem to be inherent in a situation wherein high value is placed on individual achievement. Individual personality development, privatistic goals, and competitive success were all reported as characteristic of American values (Williams, 1970; Stewart, 1972; Allport & Gillespie, 1955). Stewart (1972) stated that current American values no longer reflected the pursuit of success through change, instead they revealed a concern with love, identity and power. The next value to be examined will be the Social Value.

**Social Value**

Social success and popularity are a necessary part of achievement for many Americans (Stewart, 1972). The Social Value includes concern for others in a humanitarian manner.

The highest value for the social man is other human beings in terms of love in its altruistic or philanthropic aspects. He prizes other persons as ends, and is therefore himself kind, sympathetic and unselfish (Feldman, 1969, p. 7-8).
Some observers feel that America is moving from a job-minded society to a people-minded society. Peer group influence may now be predominating (Riesman, 1970). The Aesthetic Value will now be examined.

**Aesthetic Value**

Aesthetic values are common to all societies. Although there are variations in style and taste across centuries and civilizations, the love of beauty itself is inherent, and all-pervasive (Drews, 1970).

The aesthetic man sees his highest value in beauty and in form and harmony. Each experience is judged from the standpoint of grace, symmetry, or fitness. He finds his chief interest in the artistic episodes of life (Feldman, 1969, p. 7-8).

Both values and the arts are allied as records of mankind's achievements. History records the tremendous impact that the arts have had on man's developing cultures. The values and beliefs of a people are uniquely manifested in the art forms they have created (Walker, 1979). The visual arts contain a record of the achievements of mankind. They, at the same time, provide opportunities "to gain personal satisfaction through individual accomplishment and disciplined participation in the creative process" (Walker, 1979, p. 1). The last value to be analyzed will be the Religious Value.

**Religious Value**

The historical importance of religious values in United States education has been discussed previously. Protestantism
has influenced the ways of thinking and behavior in our economic and ethical system. This is evidenced by the relationship between religion and values. Values are the things that matter, what people believe in strongly enough to live by, fight for, even die for (Fichter (1961)).

In this particular study Religious Values are covered under the name of Philosophical Values, or views on life.

The highest value of the religious man is unity. He is mystical, and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality (Feldman, 1969, p. 7-8).

**Current Surveys of Educational Values**

A recent study was made to determine who succeeds economically in American society today. Factors analyzed included family background, mental ability, personality traits, schooling and job experience. The conclusions reached in the study were:

As far as we can tell, there is no less reason to go to college if you are not so smart than there is if you are smart—if all you care about is income and occupational status (Jencks, 1979, p. 36).

These findings have important implications for counselors. The author summarized the findings as follows:

That means if I were a counselor and were talking to somebody with low scores and high ambition, I'd tell them the same thing I'd tell somebody with high scores and high ambition; namely, if you want to end up in a high-status occupation, you should get a B.A. (Jencks, 1979, p. 36).

Another recent research project surveyed 17,000 graduating high school seniors. About half were planning to go to college. The results showed that they placed "good
personal relationships" at the top of their life goals. The questionnaires covered a wide range of personal, social, and political issues, including the students' plans and aspirations, their attitudes toward work and material possessions, their perspectives on national problems and their views about politics and the system. "Having a good marriage and family life" was the second choice on the list. Two-thirds considered "finding steady work and being successful at it as very important." Only one in four freshmen considered "making a contribution to society" extremely important to his or her life and only ten percent gave that rating to "being a leader in my community." However, two-thirds of the freshmen considered "finding purpose and meaning in my life" as important. Both the college and non-college group were similar on this choice.

Since 1975, there has been some increase in the degree of importance that both college and non-college groups attach to such job related qualities as money, prestige, and chance for advancement. The preferred work settings were those that provided the greatest independence and the least external control. Being self-employed was high on the list. Among females sampled, only four percent entering college expected to be full-time homemakers at age 30. "Both groups (college and non-college) rejected a long-term role of full-time homemaker which almost certainly reflects the impact of the women's movement" (Bachman & Johnston, 1979, p. 84).
Today's new students, just out of twelfth grade, compared to 1969 when previously surveyed, demonstrated that females are more vocationally ambitious than men and less interested in personal development (Magarrell, 1980). Goals cited as very important or essential by twelfth-year graduates in 1979 compared with 1969 showed a significantly higher percentage of women choosing the following values: being well-off financially; recognition among peers; making a contribution to scientific theory; becoming an authority in one's field. A countertrend of declining interest in public affairs and personal development was also found in the survey. Again, women were in the forefront of change from 1969 to 1979. Significantly fewer women chose: developing a philosophy of life; keeping up with political affairs; raising a family. The director of the annual survey stated, "The increasingly materialistic goals of students have been accompanied by changes in their career plans" (Magarrell, 1980, p. 3). Business careers are planned by 15 percent of the women and by 18 percent of the men compared with 4 percent of the women and 17 percent of the men 10 years ago.

In another study, students' value patterns were followed through a twenty year span. The main trend since the 1930's had been a rise-and-fall pattern in traditional conservative values. In several respects the 1970's continued trends found throughout the 1960's:
Church attendance and felt need for religion continued to drop
Interest in careers in corporate business continued to drop
Alienation from the military and from nationalist ideology continued to rise
Support for equal opportunity employment and for minimum wage continued to rise
Emphasis on collegiate extracurricular activities continued to drop (Hoge, 1976, p. 157).

In three respects, however, trends reversed after 1969 and there was a move toward a return to the conservatism of the 1950's: (1) Privatism gained at the expense of political commitments and (2) Educational goals turned away from liberal toward more vocational and practical pursuits. Some attitudes about economics and government became more conservative (Hoge, 1976).

With regard to educational goals, plans made during the last years of high school were the strongest independent influence on college persistence (Sewell & Shah, 1968). Muskat (1979) reported that a follow-up study of 9,778 high school seniors revealed that persistence in college is a function of three factors:

(1) the importance undergraduates themselves assign to a degree
(2) their having decided by the second year of high school or earlier that they would go on to college
(3) the fact that their parents had definitely wanted them to attend (p. 20).

Most surveys show that current trends in value orientation have shifted to an emphasis on career. Although for a brief period in the late sixties students' attitudes seemed to change radically, the dominant orientation was careerist.
This was true even among the more socially involved middle class students (M. Maccoby, 1976). Maccoby in 1971 described high-school students in an affluent suburb as "careerists." "The demands of career will continue to take precedence; career will be the dominant value" (M. Maccoby, 1976, p. 192).

On the basis of national survey results, Yankelovich (1974) reported that student interest had shifted away from social reform to focus on the self and its private vicissitudes. Today's youth have little emotional commitment to changing society and are instead preoccupied with their own career planning and personal fulfillment. Most young people are heading straight for the "upper-level niches, their eyes fixed on the goal marked 'successful career'" (Yankelovich, 1974, p. 22).

The focus on vocational values is not limited to the middle class. Careerism has emerged as the dominant national orientation of high school youth. While in the past, careerism was a characteristically middle-class preoccupation, increasingly, working-class youth are also becoming careerists. There is a great deal of anxiety and fear of failure involved in careerism. There is also a need for emotional detachment which may cut the person off from his or her inner feelings (M. Maccoby, 1976).

Muskat (1979) concluded that more counseling personnel are needed to facilitate this potentially anxious decision-making stage for the high school student.
More professionally and para-professionally staffed counseling and testing services are needed. Their purpose would be to assist students to systematically assess, develop and clarify how their feelings, values and needs relate to career objectives and to the academic offerings of the school (p. 21).

Further objectives would be to improve decision-making skills, and to appreciate individual vocational potential and limitations.

"Careerism" is having its effect on educational institutions (San Francisco Chronicle, 1978; Stanford Daily, 1978; Stanford Observer, 1979), as well as on the individual student. Institutions of higher learning are conducting their own investigations of the educational values of their student bodies and faculties (Hand, 1978). A period of self-appraisal has come to many private colleges. Some private colleges and universities are beginning to re-examine the changes they have made in their curricula, educational philosophies and admissions policies in order to attract students and to increase the institution's chance for survival (Maeroff, 1979). Some of the areas that are being reassessed are the impact of career-type programs, tipping the curricular balance away from the liberal arts, proficiency in basic skills, and the role of religious values in higher education.

The dean of a liberal arts college stated,

We are interested in proficiency in communication and research skills... Beyond this we are committed to educating our students for life-long learning and the capacity to make decisions based on values (The Pacific Review, 1980, p. 12).
Some other factors influencing students' values are the mass media, especially television.

Values and the Television Medium

The effects of television on value orientations are far-reaching. Television has broadcasted oversimplified views of how the world "is" and "ought to be" ever since the 1950's when TV became a mass medium. Television is the primary source of information, values, entertainment and diversion for our whole society. Children learn that problems have simplistic causes that can be conquered with "instant relief" solutions, thereby short-circuiting sustained effort (Weingartner, 1979). New role models are offered. Children learn that celebrities such as singers, actors, and athletes are the most noble models to follow.

Minority writers (Cortes, 1971) have criticized television advertising and its prejudicial effects. They have contended that societal prejudice has been created and fostered by television, advertising, comic strips, and motion pictures. For instance, "from the time he is born an American is bombarded by anti-Mexican impulses, including those spread by the mass media" (Cortes, 1971, p. 319). They believe that American society faces an enormous task in eradicating prejudice and stereotypes because of the influences of the mass media.

The independent variables which in this study are the demographic factors of sex, ethnic group, social class, grade point average, and birth order will now be examined.
Sex Differences in Value Orientations

Many investigations have shown differences between the sexes in value orientations. One study found a high rating of the social value by girls. Girls seemed to have a higher need for affiliation than boys in a high school study in Australia. Girls also reported more satisfaction with peers (Feather, 1975). Girls who had high achievement values in the past had to sacrifice some amount of peer acceptance in exchange. Of the high school senior girls studied, the most popular girls planned to combine homemaking and a career; those next in popularity planned on being housewives only, and the least popular contemplated careers only (Turner, 1964).

In addition to differences in value orientations, researchers have found that there are also some biological differences in various abilities between the sexes. Girls exceeded boys in language abilities, and these early linguistic skills seem to prevail throughout life. "Girls read sooner, learn foreign languages more easily, and as a result, are more likely to enter occupations involving language mastery" (Restak, 1979, p. 212). In contrast, boys demonstrate an early visual superiority. They are clumsier, performing poorly at tasks requiring manual dexterity, but they excel in activities calling on total body coordination. Test results show that girls have increased skin sensitivity, especially in the fingertips, and are more proficient at fine motor performance.
"Females are also generally more attentive to social contexts--faces, speech patterns, and subtle vocal cues" (p. 212). Boys are more interested in exploring their environment and are better at manipulating three-dimensional space. A boy will react to an inanimate object as quickly as he will to a person (Restak, 1979).

The largest effect of sex difference in school achievement is the advantage for girls of higher grade point average. Girls' class standing is about one-fifth of a standard deviation higher than boys with similar ability, class background, and parental encouragement (Rehberg, 1978).

However, different social pressures affect actual female achievement. "Girls are often given double messages, one of the most common being achieve--don't achieve." (Bart, 1974, p. 42). Greater anxiety in the area of achievement is experienced by the female. The female has greater anxiety over aggressive and competitive behavior than the male. She, therefore, experiences greater conflict over intellectual competition. This in turn leads to inhibition of intense strivings for academic excellence (Kagan & Moss, 1962). Indeed, women have been described as having a motive to avoid success. The data in Horner's (1973) study suggested that the psychological barrier to achievement in women remains despite greater outward freedom. This barrier, labeled "the motive to avoid success," is an important variable to be considered in addition to the achievement motive and the motive to avoid failure. Remembering this "motive to avoid
success," is helpful when trying to understand the direction and persistence of achievement-related performance and behavior in women. Horner (1973) concluded that women will explore their intellectual potential to the fullest only when they are in a noncompetitive setting. The data suggest that females high in anxiety about success probably inhibit expression of achievement motivation.

Social conditions have different impacts upon different girls. Lesser (1973) concluded that the girl who retains a perception of the female role as including intellectual achievement goals succeeds intellectually under conditions of strong academic competition with other girls. In contrast, the girl who accepts the social prescription that intellectual achievement strivings are relevant to the male role and not to the female role, does not succeed as well in intellectual competition with other girls.

Some studies of sex differences in job values have been used to support the lack of interest in counseling girls vocationally. The researchers found that male high school seniors desired jobs that offered extrinsic rewards such as power, profit, and independence. The senior girls were drawn toward jobs characterized by intrinsic rewards such as interesting experiences and social service (Matthews, 1973). However, a good counselor may be able to prevent problems that a student may encounter later on in her life cycle. The challenge for the counselor comes from
the steadily increasing numbers of women who want to begin or re-enter occupations after a lapse of time. "Moving directly and prematurely into vocational choice (in high school) is bound to create difficulties later on" (Matthews, 1973, p. 445).

Some writers explain women's lower achievement level in the professions by saying that females may not value high-level professional roles because they do not coincide with their image of appropriate feminine behavior. Also, some women may fear criticism if they enter nontraditional roles. As a result, they keep their ambitions within their perception of acceptable feminine boundaries (Peterson-Hardt & Burlin, 1979). For the counselor, the data suggest that counseling women on role management techniques or even providing information on community resources, such as child care facilities, might not be the sole solution for sex differences in career advancement. "Further research is needed to clarify the relationship between structural barriers and social-cultural barriers and women's unequal achievement" (Peterson-Hardt & Burlin, 1979, p. 313).

Counselors can become obstacles or facilitators in a girl's career path. Counselors from the social science background often do not realize the importance of advising certain curriculum choices such as four years of math for girls. A good math background opens up the full area of courses including the hard sciences, business, and engineering. Some counselors regret "spoiling" a girl's academic
record, especially in her senior year, by encouraging her to take an advanced math course. Others felt that women should not go into math or science because there are not enough jobs for both men and women. The women might displace men in those fields (Westoff, 1979).

In general, counselors do not advise high educational goals for girls. However, girls take the counselors advice more seriously than do boys when arriving at educational decisions. Parents of boys are more likely to emphasize the importance of higher education to them. But a boy is less likely than a girl to respond to parental and counselor encouragement in making his educational decisions (Rehberg, 1978). Ability, peer influence, social class and grades operate with about the same strength for both sexes. Therefore, the counselor's encouragement to a girl high school student has a direct impact on her future education and career. Ethnic group will be studied next.

**Ethnic Group**

Two forms of accounting for racial and ethnic differences emerged in the eighteenth century: monogenesis and polygenesis. The monogenists based their theory on the Genesis story of creation. They explained racial differences in terms of an evolutionary process involving rather rapid environmental feedback (Harris, 1968). Race, they believed, was the result of exposure to differing environmental conditions. The polygenists rejected the validity of the account
of Genesis. They attributed racial differences to acts of special creation. They believed that there were other ancestral lineages who had inherited specific behavioral traits. Those who advocated the polygenist's point of view tended to be racial determinists. Monogenists advocated racial equality while many polygenists did not. The threads of these two theories can be traced through many scientific and philosophical theories throughout the nineteenth and early twentieth centuries.

Currently the emphasis is on "multiculturalism" when writing about different ethnic groups. Multiculturalism is a term used to denote a state wherein individuals in the society are given the freedom to determine which ethnic or cultural beliefs, values, and life-styles they choose to support.

Although encouraging freedom of choice, multiculturalism does impose a responsibility on each person for maintaining the beliefs and values of a common culture. This means that some people may support one or more cultural systems (Gilbert, 1978, p. 204).

The 'melting pot' syndrome, which existed during periods of immigration was no longer tenable. The minority subcultures were no longer satisfied to be assimilated (Gilbert, 1978).

Tremendous societal changes have had their effect on society and on school systems as well. In the Law of 1647 the term "children" with regard to teaching them, was narrowly
defined by most townspeople as meaning boys only. Girls were to be tutored at home. Now "children" means everyone—both sexes, all races, socioeconomic strata, ethnic groups, and nationalities. This pluralistic clientele led Ramirez & Castañeda (1974) to coin a new term—cultural democracy.

Cultural democracy is a philosophical precept which recognizes that the way a person communicates, relates to others, seeks support and recognition from his environment and thinks and learns is a product of the value system of his home and community (p. 23).

The counselor must remember that within the culture there are still individuals. "Values may be seen as the products of cultural, institutional and personal forces acting upon the individual...one's culture provides value priorities" (Rokeach in Feather, 1975, p. 11). Although the cultural approach yields valuable facts, personal integration is a more basic fact (Allport, 1955). Many controversies have arisen over what values or value-system education should use as its basis. In a pluralistic society there must be various kinds of values and consequently various kinds of education available (Kane, 1961; Kitwood, 1977).

**Hispanic Students and Values**

In the Hispanic ethnic group, family background is related to achievement. The attitudinal item that was most highly related to achievement test scores at all grade levels was students' belief about their ability to control or influence their environment. Family background was the most important factor for achievement, and this did
not diminish over the years (Mayeske, 1967). The student's self-concept was also a factor.

A study of seventh and eighth grade Hispanic students confirmed that the most consistent predictor of academic success for all students in the sample was the students' self-concept, a measure of acculturative stress (Baral, 1977). The native born students attained higher levels of academic achievement than recent Mexican immigrants. Although this appeared to be due to the native born's greater fluency in the English language, there was a significant pattern which emerged. This pattern was related to sex differences. The father's education level and occupational status were positively related to achievement of males, but not to females in both groups. Home usage of English was positively associated with female achievement in both groups, but not with males' achievement (Baral, 1977). Carter (1970) found a number of similar results.

The Coleman Report (1966) found that with regard to attitudinal variables, Mexican-American children: (1) strongly desired to stay in school, be good students, and attend regularly; (2) held high occupational aspirations. However, they: (1) planned to go to college less commonly than did Anglos; (2) seemed to be more self-deprecating than Anglos or Negroes; (3) indicated feelings of poor ability to control their environment.

Nevertheless, by the time the student reaches high school, his or her achievement is often less than the parents
and student hoped for. The Mexican-American teenager who cannot or will not conform to the norm of achievement is pushed out of school early in the junior or senior high years (Anderson & Johnson, 1968).

As insight for the counselor, Pollack and Menacker (1971) put forward the theory that the Mexican American student may often have two different sets of values, those of the school and those of home, which are in direct conflict. The student may eventually be faced with the choice of dropping out of school or defying the parents. Peers are very important in Mexican-American students' lives, especially if they are caught between conflicting cultures. At this time, school often becomes a low-order priority for members of such peer groups, leading to low grades, poor achievement, and low school aspirational levels for member students (Pollack & Menacker, 1971).

Facts about performance of Mexican-American or Hispanic children have been duly reported. Mexican-American children start out fairly close to Anglos in measured achievement of all kinds. The two groups remain in the same relative position until the third or fourth grade, when Mexican-Americans generally fall slightly behind, and the gap from that point on gets increasingly wider between the groups. The average Mexican American child in the Southwest has only a seventh grade education. The dropout rate in Texas is 89 percent, while in California 50 percent of the Hispanic youngsters attending high school drop out somewhere between the tenth
and eleventh grade. In academic performance, as measured by standardized tests, Mexican-Americans do not do as well as Anglos, especially in the area of language arts. There are two areas which are exceptions—spelling and the fundamentals of grammar. In these subjects Hispanic children do better, some approaching local and national norms. Arithmetic achievement is higher than language arts, but here, too, Mexican-Americans fall below the norms, probably due to the reading comprehension which is involved in mathematical problem-solving (Carter, 1970).

Ramirez and Castañeda (1974) contended that Mexican-American children experience difficulty in school because school personnel are not aware of differences between traditional Mexican-American and mainstream American middle class cultures. More research is needed in this area.

A study of Mexican-American college students' educational values (Aiken, 1978) revealed only one difference between the samples when compared with Anglo-American values, that of mean Leadership Value score. Mean score on Vocational Value was the highest for all four groups, followed by Social Value in second place. These finding were quite similar to those obtained in Iran (Asrari, Abedi, & Aiken, 1977). They were consistent with the frequent observation that today's college students are more concerned with the economic value of their education than with the humanistic concerns observed in students a decade ago (Aiken, 1978). The significantly higher Leadership Value mean of the Mexican-American
students is consistent with findings of greater authoritarianism in Mexican-American college students (Ramirez, 1967). The most significant difference in means were those between men and women on Aesthetic Value and Social Value scores, which were significant for both Anglo-Americans and Mexican-Americans, were consistent with measured differences in interests between the sexes (Aiken, 1978).

Counselors should be aware of differences in cognitive style between members of non-Anglo and white ethnic groups. Researchers have hypothesized that differences in cultural values are reflected in socialization practices, which have in turn resulted in differences in cognitive style between Mexican-American and Anglo-American children. Findings have shown that Mexican-American and Anglo-American students perform differently on cognitive tasks as well as on tasks reflecting incentive-motivational and human-relational styles. These results can be explained by the conceptual framework of field sensitivity/field independence. That is, "Mexican-American children are relatively more field sensitive" (dependent on environmental influences), "and Anglo-American children more field independent" (independent of environmental factors) in cognitive style (Ramirez & Castañeda, 1974).

Beneficial results in school adjustment can be brought about by fostering the Mexican-American language and culture. Four goals may be achieved through the educational components of language and heritage, and values. These goals are enhanced self-esteem, improved academic achievement, intercultural
understanding, and bicultural identity (Ramirez & Castañeda, 1974).

Counselors can facilitate the school success of Chicano students. In spite of a heavy workload, counselors must be alert to the fact that standardized achievement tests carry a cultural and language bias and are inadequate for validly assessing Hispanic students' actual abilities. If standardized tests are used, Spanish-speaking personnel should administer the tests in small groups in an informal atmosphere (U. S. Commission on Civil Rights, 1974; Pollack & Menacker, 1971).

Guidance should be a total process which involves members of the students' family and community. This is particularly important for the guidance of Spanish-speaking youth, because of the very important and esteemed position of the family in their culture. Each individual family member, especially the younger ones, have obligations to the family that take precedence over their own personal desires, ambitions, or outside responsibilities. As a result, it is often the case that a Mexican-American boy must abandon thoughts of going on to college, because of the financial burden that this would place on the family (Cervantes, 1970).

Group counseling techniques would be the most effective for the counselor to employ.

The gaps of culture and language that generally exist between even the best intentioned and prepared middle-class Anglo counselor and his Latin-American clients, suggest the superiority of group guidance and counseling practices over individual techniques (Pollack & Menacker, 1971, p. 65).
These group methods could include psycho-drama and family conferences where three or four counselors meet with all the members of three or four families. The ideal counselor for Latin-American youth would be a guidance generalist, overseeing a guidance team composed of counselors and specialists in testing, evaluation, occupational information, job placement, and college admissions. Efforts should be made to employ community persons as teacher aides and other school paraprofessionals. When conflicts arise over Anglo and Latin cultural values, the best role for the counselor is to contribute a clear view of standard middle-class Anglo values (Pollack & Menacker, 1971).

The counselor should try to provide role models for the student. The counselor can also aid students in securing part-time employment. In vocational guidance, just as in educational guidance, it is important for Spanish-speaking students to involve the family. In most cases the situation will not be that the parents do not share a high goal aspiration with the student and counselor. It will be more likely that the parents do not understand how they can meet the necessary requirements to help the child fulfill his or her aspirations (Pollack & Menacker, 1971).

The very low college attendance figures for Hispanic youth show that less than two percent of the students in Southwestern colleges are Mexican American, despite the fact that they constitute almost 20 percent of the college-age
population in that area. This fact points to the need for counselors to give guidance on ways and means of achieving goals of higher education. The counselor can aid the Hispanic student by securing firm offers of financial aid. Then the family should be involved and shown the benefit that higher education would have for the student, the family, and the Hispanic people. More interaction between the counselor and the community outside the school building proper, would make counseling more effective in the Hispanic group.

**Black Students and Values**

Values might be assumed to express basic human needs. Values are the conceptual tools and weapons that all people use in order to maintain and enhance self-esteem (Feather, 1975). With regard to the black ethnic group, the literature reports that blacks are more likely to have lower self-esteem than are whites (Powell, 1974). Self-esteem and achievement have been shown to have a relationship to each other.

One survey studied 2,625 school pupils from third to twelfth grade in Baltimore (Rosenberg & Simmons, 1968). The black children, like their white counterparts, tended to internalize the general American value system. At an early age, black children indicated they wanted to become rich, famous, and successful. They also wanted to go to college to the same extent as indicated by whites. However, as the black children grew older, they adjusted to the limitations of reality.
There is an "erosion of aspirations" among black children relative to whites. Although it seems black children's aspirations are not lower than those of whites, they show a declining aspiration level with age.

The chief difference is that black children are perceptibly less likely to actually apply for admission (to college) and still less likely to report that they have been accepted (Rosenberg & Simmons, 1968, p. 124).

Tests comparing performance of minority and majority children have shown that differences increase with age. Data from a large number of studies comparing performance of minority and white children on standardized admissions or other similar tests demonstrate differences which suggest that by the twelfth grade, average scores for black students are a little less than one standard deviation below the average of white students. Bayley (1965) found that no differences could be measured between blacks and whites at any period of development between birth and fifteen months in mental ability. There was a slight superiority for black children in motor development throughout the first year. However, mental test score differences did exist by the start of schooling.

The relative disadvantage of black and other minority children accumulates over time as a consequence of the differential school, family, cultural, and environmental milieu accompanying segregation, poverty, and slums seems compelling in view of what we know about the effects of social and environmental factors on intellectual growth (Manning, 1976, p. 30).
According to many researchers, the need to achieve may be very high among black youth (Coleman, 1966; Katz, 1963; Pouissant, 1974). High goals in schooling and occupational choice are shared by the parents; however, all the sources agree that actual achievement does not match either the youths' own aspirations or those of their parents.

Counselors' efforts to stimulate the desire of black seniors to finish high school and to go on to college may be misdirected. Researchers recommended that the efforts should be focused at the observed dropoff points of black students. More effective counseling goals would be:

1. to reduce the number of high-school dropouts
2. to convince lack children that they can get into college
3. to encourage them in the simple act of sending off applications
4. to help them to get accepted and to provide them necessary financial support (Rosenberg & Simmons, 1968, p. 123).

It was proposed that studies should be made of self-assertion and achievement as motivators of black youths' behavior. Pouissaint (1974) maintained, "Self-expression, goal achievement and fate control are three major reasons for individual self-assertion" (p. 65). He reviewed Coleman's (1966) findings that of three attitudes measured, sense of control over environment showed the strongest relationship to achievement. He also discovered that blacks have a much lower sense of control over their environment than do whites, but that this sense of control increased in proportion
These findings indicate that for blacks, a realistic inability for meaningful self-assertion is a greater inhibitor of ability to achieve than is any other variable (Poussaint, 1974, p. 65).

"Self-image" seems to be a determinant factor in the behavior of minority youth, however. One study was made of the relationship between chronic social stress and personality, motivation, and school achievement. It was concluded that one of the influences affecting the ability of the minority child is the knowledge that society at large perceives him or her as inferior and anticipates inferior performance from that young person (Deutsch, 1960).

School personnel attitudes are seen as crucial to the minority youth. Most educational employees are of the middle class or are oriented toward middle-class values, while most of the children in the urban public schools are from low-income families. In addition, many of these children are from minority ethnic groups. Students' cultural orientations are present wherever they present themselves. Teachers and counselors' attitudes can affect a student's self-esteem and achievement motivation.

Results reported by Coleman (1966) and others provided strong support for the argument that changes in the educational environment of Negro students, especially in the social class composition of the student body, would prove more effective than programs designed to change the personal characteristics of students. "Negro students attending
school with whites have higher achievement test scores than Negro students in segregated schools" (Epps, 1967, p. 9). After one year of desegregation, findings suggested that achievement motivation of Negro boys was more likely to be affected by these environmental changes than that of girls. "It is possible that successful competition in a biracial environment increases Negro students' sense of control over the environment" (Epps, 1967, p. 8). There are dangers, however, in assuming that the motivational patterns that lead to success among whites would be equally effective for members of a subordinate ethnic group.

Experimental results suggested that an empirically based "achiever personality" was a potentially powerful predictor of academic success among disadvantaged students. One "Upward Bound" experimental study found that there were statistically significant increases for both the experimental and control groups on measures of self-esteem and internal control. These two factors did not appear to increase with age for culturally disadvantaged high school students. Since both self-esteem and internal control had been tentatively linked with better academic achievement, it seemed possible that such increases might later produce improved academic achievement. Both the Upward Bound Negro group and its control group decreased significantly in the two factors of self-esteem and internal control, so that the task of improving the academic achievement of culturally disadvantaged Negro high school students was seen as
considerably more difficult than for culturally disadvan-
taged white high school students (Hunt & Hardt, 1969).

The relationship of race, sex, and socioeconomic status
to certain values held by junior college students was mea-
sured by the Survey of Interpersonal Values (SIV). The
findings indicated that there were no race differences on
any of the six scales. However, whites tended to score
higher on support, recognition, independence, and leader-
ship. Negro students tended to score higher on conformity
and benevolence. Significant sex differences were found to
exist only on benevolence and leadership. Female students
valued "sharing with others" and "helping the unfortunate"
more than male students. Male students, however, valued
"having authority over others" more than female students.
"Differences based on socioeconomic level tended to show
the importance of socioeconomic status rather than race as
a key variable in determining an individual's values"
(Sherman, 1971, p. 356).

Locus of Control Studies

Related both to ethnic group, and social class and
achievement, is the "locus of control" factor. One defini-
tion of "locus of control" would be how effective an indi-
vidual feels over directing his or her own destiny. The
self-directed American has been an ideal traditionally. "From
the earliest age, the American child is encouraged to decide
for himself--to make up his own mind....The American locus
of decision-making is the individual" (Stewart, 1972, p. 29).
One study of high school students from different ethnic groups found that there were important variations in "locus of control" attitudes among the various groups represented. The study concluded that although there were differences between ethnic groups, the similarities were far greater. All students were convinced of the value of good grades and had an idea of how they were obtained. There appeared to be some differences between ethnic groups in terms of level of aspiration. Counselors especially should be aware of these differences.

In all ethnic groups, over 90% of the respondents said that good grades meant a great deal to them. Both Hispanics and blacks have been said to have a low sense of control over the environment. On what might be termed "fatalism", only among blacks did a majority believe that some people were born lucky. Only among whites did a majority disagree with the statement that, "When you do something wrong, there is little you can do to make it right." More Asians than other groups felt that they could change what might happen tomorrow by what they did today. At the other end of the scale were blacks and American Indians. Whites and Asians were the least likely to believe that when bad things were going to happen it would be impossible to stop them. Hispanics and blacks were the most fatalistic. A majority in all groups agreed that when good things happened it was because of hard work. Agreement was less pronounced among
Hispanics than among other groups. The belief that people are mean to others for no reason was held more strongly by American Indians than by any other group (Bloomberg & Soneson, 1976).

Counselors should be aware of this tendency toward fatalism when counseling minority students.

Particularly among Mexican-Americans, there is often this attitude of fatalistic resignation; the feeling that they are subject to the vicissitudes of natural forces over which they have no control (Pollack & Menacker, 1971, p. 53).

In guiding minority students, counselors need to take a leadership position. Differences in racial or ethnic backgrounds, in socioeconomic class, and in language patterns create problems in establishing the necessary rapport in the counseling relationship (Vontress, 1976).

When human groups exist apart for whatever reason, they, in time, develop different language habits and nuances, personalities, perceptions of themselves and others, and values and norms that guide their behavior (Vontress, 1976, p. 44).

Many articles have been written criticizing the traditional counseling approach as being ineffective. Black youths have experienced many educational innovations which some pupil personnel workers feel have been useless (MacFarland, 1974). Extensive research has been done based on descriptions of differences between black and white students, especially in the area of IQ. Many educators are calling for some prescriptive techniques now.
In general, however, disadvantaged minority group students have had limited experience with counselors. There are psycho-social barriers which may interfere with achieving counseling goals, such as fear of self-disclosure (especially among people of African descent), self-hatred, (due to the effects of prejudice), machismo, (a Spanish term for male pride), and personalism (personalizing relationships). There is also a "fear of achievement" which is pervasive among disadvantaged minorities. This phenomenon, upon closer inspection, is essentially fear of the envy of one's racial and ethnic fellow members. All these factors must be considered by the guidance counselor when entering into a counseling relationship with a student from a minority culture. In order to be effective, the counselor should focus on the similarities of humanity rather than dwell excessively on cultural differences (Vontress, 1976).

Social Class and Educational Values

A great deal of the literature covers the importance of social class and school achievement relationships. There are two major schools of thought with regard to social class and educational decisions: the revisionist concept and the meritocratic concept. The revisionist theory is that educational decisions or values are based on social class of origin. The meritocratic conception believes that educational decisions or value orientations are based on ability, ambition, or achievement.
The meritocratic theorists claim that the real impact on educational values is less one of social class and more that of ability and ambition. Curriculum location, whether academic or vocational, is determined by the end of tenth grade. Location in the academic program rather than in the nonacademic program continues to depend on variables that determined ninth grade placement. These variables are social class, scholastic ability and parental influence. It is more likely that a tenth grader is in an academic program if he or she as a ninth grader was already in the academic program, had college-bound friends, and had educational ambitions for college.

In tenth grade as in ninth, students from more privileged class origins were more likely to be preparing for college than those from less privileged origins. However, ability has a greater influence on boys and girls' placement. Class background did have a greater effect on girls' placement in the academic program than it did on boys. School personnel may be more influenced by the occupational and educational attainments of the parents in placing tenth grade girls in the academic program (Rehberg, 1978).

Ability and ambition also have an impact on the counselor. This impact is for the most part independent of social class. Educational ambition also correlates indirectly with social class and encouragement from the guidance counselor. There is a tendency for middle-class students
to be more ambitious, and therefore, for the counselors to encourage more of them to go on to college than working class students.

In summary, merit rather than social class directly affects the students' commitment to an academic path. Ability and parental encouragement are more influential than social class. Being in a college preparatory program by the end of tenth grade is more a function of scholastic ability and ambition than social class. However, for girls, social class is a stronger determinant than ambition.

According to the meritocratic researchers, merit more than class is the basis of academic achievement. Academic achievement depends primarily on scholastic ability, ambition, and counselor encouragement; not on social class (Rehberg, 1978; Sewell et al., 1976; Coleman, 1959). Course grades were not strongly affected by student social class (Rehberg, 1978). Although boys from white collar families registered a higher level of achievement than boys from working class families, there were greater differences registered in amounts of scholastic ability, independent of social class.

During the twelfth grade, alternative educational or career preferences are decided upon and preparations are made for implementing those decisions. Decisions made by twelfth grade students are "decisions of consequence" (Turner, 1964;
Decisions about educational goals are responsive to significant others in the students' life: parents, peers, counselors. The most influential significant other with regard to the students' educational decisions were the students' perceptions of educational encouragement received from the high school guidance counselor. Those who reported college-level encouragement from the counselor as seniors were already tending in that direction because of social class, scholastic ability, parents, peers, curriculum location, educational ambition, and academic achievement. Nevertheless, the counselor's encouragement had a considerable impact, slightly greater for girls than for boys.

For twelfth grade males, counselor encouragement was equal with academic achievement. For twelfth grade females, counselor encouragement ranked above both academic achievement and social class. Moreover, just as in the tenth grade, the counselor based educational encouragement more on student merit (ability) than on student social class (Rehberg, 1978). The effects of social class were slightly more powerful for girls than for boys in predicting educational decisions.

Many writers have acknowledged the importance of parental encouragement in the adolescents' attainments of their goals. In a study of Wisconsin high school seniors, it was found that where parental encouragement was low, relatively few students, regardless of their intelligence or socioeconomic status levels, planned to go to college. On the other
hand, where parental encouragement was high, the proportion of students planning on college was also high, even when socioeconomic status and intelligence level were relatively low (Sewell & Shah, 1968).

Parental encouragement is positively related to the occupational and educational plans of high school students and is considered a critical factor in the child's performance (Luckey, 1973; Sewell et al., 1976; Rehberg, 1978). In addition, high socioeconomic status of parents is related to certain socialization practices, such as providing enriching activities and pressuring children into achieving, so that adolescents of the higher socioeconomic classes are more oriented toward high achievement goals. This factor of encouragement accounts for the positive correlation found between social class and occupational aspiration. Also, mothers' educational ambitions for their children had a strong, positive relationship to the students' educational plans (Luckey, 1973).

Peer groups, as well as parents, form part of the significant others who influence students' educational value orientations. The youth subculture may perform an essential function in freeing the individual from the excessive dependency ties brought about by the nuclear family system (Parsons, 1974). The school environment was thought to have a pronounced effect on adolescent achievement and values.
Related to this finding that school environment has an effect on adolescent values, Coleman's (1966) major survey of equality of educational opportunity found that differences in the socioeconomic composition of the student body were more highly related to school achievement than any other school characteristic. However, in a study in 1959, Coleman found that social class by itself does not predict adolescent social relationships in school, since these youth did not always reflect the values and attitudes of their parents.

High adolescent popularity was not conducive to school achievement (Sugarman, 1967). High teenage commitment measured in twelfth grade by such criteria as smoking, dating, and wearing fashionable clothes, were associated with unfavorable attitudes to school, poor conduct according to teachers' ratings and to under-achievement relative to IQ scores. A replication of this study (Sugarman, 1967) a few years later in an American setting came to substantially the same conclusions.

According to the meritocratists' view, the effects of social class are not large, but are indirect effects which permeate the educational system. Even they admit that the most obvious link between social class and educational goals is individual ambition, since this has been called a middle-class value (Turner, 1964; Stewart, 1972). As a determinant of educational decision, class ranks just below ability and
ambition, achievement and counselor encouragement for females. Educational decisions made by high school seniors affect their social class of destination. These goal orientations are determined more by scholastic ability and educational ambition, than by social class of origin.

The total causal role of social class in forming and maintaining educational goal orientations declines with each year in high school. For males, the causal role of ability increases with high school grade level. Therefore, according to meritocratists, merit, not social class, is the most influential factor in twelfth grade educational decisions (Rehberg, 1978).

The revisionist view is that the direct effects of socioeconomic background variables persist in every stage of the achievement process (Della Fave, 1974). The direct effects of social class background is larger on curriculum placement than on grades. There does appear to be some social class discrimination in the allotting of school grades, however, according to some researchers. Parental encouragement to attend college has the greatest effect on senior plans, and this is biased by the effects of social class (Sewell et al., 1976).

Many studies have been conducted which have shown the relationship of social class to value preferences. Malpass and Symonds (1972) used a preference scale for 92 values with two separate, geographically distant sets of groups.
Five major value preferences were found to be shared by these two sets of groups. These were: (1) the good life; (2) pleasant working conditions; (3) balance and adjustment; (4) artistic creativity; and (5) religiousness. When the groups of subjects were combined according to race, sex or class, class was found to differentiate groups more than race or sex on all values but religiousness. Middle-class groups showed significantly higher preferences for the first three values and black groups showed significantly higher preference for the fifth. However, the black middle class population was of insufficient size to include any data.

Work values were studied for social class effect. Job security as a work value was associated with youth whose parents were in low-skilled occupations. Compared to children whose parents were in professional and managerial occupations, these youths tended to place more value on rewards that were extrinsic in nature such as money, prestige, and security, than they did on intrinsic satisfactions, such as self-realization and helping others. They also placed a low value on manual labor. This was ascribed to white-collar aspirations held by blue-collar parents for their offspring (Hales & Fenner, 1972).

Regarding social class and values, a warning note was sounded for school counselors. Children of higher social classes may give comparatively greater valuation to
intrinsic occupational rewards, but counseling personnel should remember that youth from lower social classes are also interested in work that can offer intrinsic satisfaction, as well (Hales & Fenner, 1972).

In Turner's (1964) study of mobility, the values surveyed were those which had links to socioeconomic status. Approximately half of the sample of 3000 seniors in Los Angeles area high schools was drawn from the working class. Values, such as success, individualism, and self-reliance, considered middle-class values, were tested. Turner hypothesized that social classes differed not so much in the values they espoused, but in the extent they regarded these values as applicable to themselves. Regarding class and values, he found, "It appears that in some instances the lower classes are forced to adopt goals not fully in keeping with their values" (Turner, 1964, p. 107; Banks, 1976).

Another study of high school seniors concluded that lower-class boys had lower occupational aspirations than those from a higher class; however, their ambitions were not limited to their fathers' status. In fact they were as ambitious, if not more so than boys of higher status (Empey, 1956). Another researcher found that upper-middle class boys choose occupations which involve the exercise of authority and responsibility more often than do working-class boys (E. Maccoby, 1969).
The schools hold the key to social mobility. Becker (1961) proposed that in Western culture, education is at the same time a symbol of social position and a means by which a higher position may be achieved. The amount of access to education is one of the measures of the amount of mobility possible in a society.

For the bright working-class youth an ironic and difficult problem arises. If he or she abandons individual achievement as a goal, the bright working-class student gives up a reasonably secure route to a sense of competence. The sense of competency may later be undermined by the ambivalence of having left one's original community and friends behind (Sennett & Cobb, 1972).

A study which focused on "bright" adolescents (based on IQ scores) in their senior year of high school, found that students' need to define and work toward personal goals greatly overshadowed their concern with societal issues (Steinitz, 1973).

Some of the earliest research in values concluded that the relationship between values and social-class position, was positive but low (Hartshorne & May, 1927). A more recent inquiry into the value orientations of pupils in different urban high schools found that, "Values may emerge as a clearer predictor of school experiences than the widely employed, but more limited concept of social class" (Ryan, 1969, p. 159). In other studies, greater affluence
was associated with the assigning of greater importance to values concerning accomplishment, love, and competence. Lower income was particularly associated with higher ranking given to cleanliness (Kohn, 1969; Feather, 1975).

Distinct relationships exist between social background and career choice. There is a tendency for students coming from high status families to go into higher status occupations such as medicine and law while students from lower status families tend to go into careers such as engineering, education, accounting, and government which appear to be more accessible avenues for social mobility. However, an individual's interests, attitudes, values and needs also bear closely on his career preferences and ultimately on his job effectiveness (Davis, 1961).

The revisionists would argue that parents of students have a significant effect on the students' educational values. Part of that influence is due to social class characteristics of the parents. The tendency to aspire to attend college appeared more often among sons of parents who valued "getting ahead" (a middle-class trait), than among sons of parents content with their status (Kahl, 1953).

Kohn (1977) wrote extensively about social class and parental values. He asserted that middle class parents are more likely to emphasize children's self-direction, and working class parents to emphasize the children's conformity to external authority. This insistence on compliance is precisely
what makes the working class child fitted for the life of a factory worker. Although middle class mothers value the same characteristics for both sexes, working class mothers value more masculine traits for boys, more feminine traits for girls.

There do appear to be definite sex differences related to values and social class. Girls seem to excel boys in such areas as responsibility and social acceptance at the higher socioeconomic levels. However, boys surpass girls on such characteristics as leadership, level of aspiration, and competitiveness almost entirely in the lower middle class. With a rise in family social position, girls tend to excel boys. The gap between social classes in their goals and methods of child rearing appears to be narrowing. Working-class parents are beginning to adopt both the values and techniques of the middle class (Bronfenbrenner, 1969).

There appear to be differences in cognitive style between social classes, as well as between cultural groups (Stewart, 1972; Ramirez, 1974; Cohen, 1969). Children from low-income homes attending school in a Pennsylvania city, were found to have two different conceptual styles. One was called "analytical", corresponding to the dominant American pattern of thinking. The other style was called "relational" and was less abstract and more sensitive to the total concept. The study concluded that the schools which Americans have
created are particularly suited to the analytical style of thinking. The social organizations, curricula, teaching and discipline in the schools provide unfavorable environments for the relational style thinker which members of the lower social groups may tend to be (Cohen, 1969).

Another revisionist view is the theory of linguistic codes which differs with relationship to social class. Bernstein (1961) studied this relationship between social class and language. He stated that people who were confined to a restricted linguistic code were to be found mainly in the lower working class. He said that where children were limited to a restricted code, there would be a major problem of educability (Bernstein, 1971).

Linguistic performance is basic to educational success; therefore, the working class child is at a distinct disadvantage. Bernstein (1961) described two possible types of language: the restricted code or public language in which the content, the structure and syntax were highly predictable, and change and individual selection were restricted; and the elaborated code or formal language in which the speaker was able to make highly individual selection and change. The formal language was much more flexible. The speech mode of the lower working class was limited to "public" language. The middle class child was capable of using "formal" language. "This greater complexity of
possible relationships are made available to the middle class child which permits conceptualizing activity of a high order" (Bernstein, 1961, p. 308).

It seems that both the meritocratic and revisionist points of view are interrelated. Ability, ambition, achievement, curricular placement, and parental, peer, and counselor encouragement all have significant effects on educational values. However, these factors are subtly affected by social class background impacting on experiences inside and outside of the home, on the students' linguistic level, on the sex of the student, on expectations of the family for the student and on role models available to the student. Although social class per se is not the most direct determinant of how far a person will go in school, actual entry into college was influenced by social class indirectly (Rehberg, 1978). Social class pervades many of the other existing student characteristics such as ambition, achievement motivation, and family background.

Grade-Point Average and Achievement

Grades students receive for their schoolwork can be defined as symbols resulting from a bargaining relationship between teacher and student (Rehberg, 1978). There have been many criticisms in the literature about the assignment of letter grades as a measurement of achievement. Charges have been leveled that grades give insufficient feedback to the student (Ohmer & Edgerly, 1976). Grades are normative
or relative standards of achievement, rather than absolute. They are time-bound. That is, regardless of individual differences all students have the same period of finite time in which to learn a subject (Rehberg, 1978). One of the drawbacks of letter grades has been a lack of an agreed upon standard of measurement at different institutions. Other arguments have concerned the predictive validity of letter grades. In fact, it has been hard for researchers to demonstrate that grades in school are related to any other important behavior outside of them (McClelland, 1973). Nevertheless, high school grade point averages have been thought to be considerably more accurate in predicting college grades than standardized achievement tests (Field & Jacobsen, 1980).

Indeed, in recent years achievement tests, even more severely criticized than grades, have come under fire from those who feel they are unfair measures of achievement for some of the diverse cultural groups. Those who have studied culturally diverse cognitive learning styles have stated:

Schools must seek to discover the unique communication, human-relational, learning and motivational patterns that are produced in children coming from sociocultural systems different from that of the mainstream American middle class (Ramirez & Castañeda, 1974, p. 5).

In any case, high school grade point average seemed to be the most effective way to measure relative achievement for the purposes of this study. Students' academic
achievement affects the kind and amount of educational encouragement given to them by the guidance counselor in high school. That is, boys and girls who had records of high academic achievement as tenth graders were encouraged to go on to four year colleges. Students with lower achievement records were encouraged to seek technical training or employment. Educational encouragement by counselors seemed to have measurable effects on students' achievement behavior.

The largest sex difference in grade point average is that girls' class standing is about one-fifth of a standard deviation higher than boys with similar ability, class background, and parental encouragement to continue education. Eleventh grade boys who as tenth graders were guided to the college preparatory track had a grade-point average two scale points above those guided toward vocational goals. Junior girls guided toward higher academic careers in tenth grade were about 1.76 scale points above those guided toward completing high school only (Rehberg, 1978).

Academic achievement in this study depended on scholastic ability, educational ambition, and counselor encouragement. Ambition in this study was defined as realistic educational expectations of the student as a ninth grader (Rehberg, 1978).

The counselor emerged as exerting a fairly sizable effect on student academic achievement. For boys, counselor
encouragement was the third most influential effect after ability and ambition. For girls, the counselor's effect was second most important, coming only after ability. Ambition was third most important for girls.

In crystallizing the educational decisions of twelfth grade students, counselor encouragement during the senior year is about equal in influence to the students' records of academic achievement accumulated during ninth, tenth, and eleventh grades (Rehberg, 1978).

Other researchers have reported that there is more variability in social background and achievement variables within, rather than among high schools. Within schools, the major influences on grades are mental ability and sex, in that order. Women obtain grades that are about 10 points higher than do men. Nevertheless, while boys obtain lower grades than girls, they have a likelihood 10 percentage points higher of completing a college preparatory program at any given level of socioeconomic background or ability (Sewell et al., 1976).

In conclusion, it can be readily observed that counselor encouragement, especially for girls, can be very influential to their future educational and career plans. The role of birth order, achievement and educational values is addressed in the next section of this study.

Birth Order and Educational Values

Researchers have linked birth order and achievement.
As family size increased, level of ability declined. As birth order position became greater, the level of ability declined (Belmont & Marolla, 1973; Belmont et al., 1978; Davis, 1977). First-born children are often found to be high achievers (Horn, 1976). The oldest child in the family usually achieves a higher level of education and better school records than later-born children. However, younger children tend to be relatively relaxed and passive in their relationships. They are often not driven as are their oldest brothers and oldest sisters by a need for domination and achievement (Forer, 1969). There is evidence that first-born females in the United States might have an even higher need for achievement than their male counterparts. Evidence has been collected that first-born girls made higher grades than boys and girls in other family positions (Forer, 1969).

Higher academic achievement on the part of first-borns may be due to their proficiency in verbal skills. Possibly as a result of more verbal communication between parents and their one child, first-borns tend to develop better verbal skills overall than do later-born children. First-born children are found to make higher grades in language-related courses throughout high school and college than do later-born children. No corresponding superiority has been found for the mathematical aptitude of first-borns (Forer, 1969).

First-born children seem to have a pattern of social and personal characteristics. In personality, first-borns
seem to be more fearful and anxious than later-born children. Parents seem to treat their first-born children with more restrictiveness and more interference than they do their later children. More obsessive-compulsives, a personality disorder due to excessive superego or conscience, were reported to be first-borns. Socially, the first-born tends to be more conforming. First-born students tended to follow the "rules" more rigidly than did later-borns (Forer, 1969).

The characteristics and attitudes described for the oldest child suggested that he or she might not be very comfortable in close relationships. His or her seriousness, adherence to relatively strict standards of behavior, and imposition of these on others, tendencies to take charge of situations and give orders to others might not make the first-born popular with peers. First-born males indicated their interest in group membership by being members of social groups more than later-borns. However, the first-born was no more likely to be a leader in such groups than the later-borns. In such groups personal likeability may be more important than leadership in obtaining peer popularity. Thus the oldest child may not be elected despite interest in belonging (Forer, 1969).

In studying affiliation needs, first-borns (both only children and oldest) tended to select as preferred contacts persons who were socially desirable on the basis of popularity,
wealth and social class. On the other hand, the later-borns were found to be considerably more popular than first-borns. This discrepancy between the relationships first-borns wish to have, and those they actually may have, suggests considerable discomfort in interpersonal relationships for the oldest and only children (Forer, 1969).

Cultural role expectations of specific family positions and the individual's birth order have an effect on behavior. In some families the oldest male is expected to take over the occupation of the father and to assume his responsibilities when the father must give them up. The oldest girl in such families is made responsible for taking on the role of mother substitute and helper. The first child of its sex in any family may assume many of the responsibilities and characteristics of an oldest child. The intensity of the effect of place in the family increases when all the children are of the same sex (Forer, 1969).

The Role of the Guidance Counselor

The role of the guidance counselor originated as a giver of vocational advice. Now counselors have been called sorters, selectors, gatekeepers, schedulers of courses, test-givers. At the same time, there has been a shift in educational philosophy in this century (Gilpatrick, 1977). In the early 1900's, educators such as Clark (1911) and later Dewey (1959) discussed education in terms of "building character." Educators in more recent
times have been overwhelmed with the task of imparting empirical knowledge, facts, and data. Emerging in the 1940's was the goal to help a child "maximize his potential, to provide students with tools to live in their contemporary world" (Brubacker, 1944). These were goals which required more extensive counseling and guidance for the student than just vocational planning alone.

The guidance program has now come to encompass all normal problems of youth and educational, vocational, and personality development, based on a point of view that the individual functions as a bio-social organismic whole. It includes examining decisions made and to be made, determining courses of action, and resolving concerns and problems (Peters & Shertzer, 1974).

The role of the counselor as one who interrelates student, parents, school, and community is emerging. The counselor can act as a valuable link between the school and community by interpreting the school's expectations to parents and students, and translating the needs and expectations of the parents and students to the school (U. S. Commission on Civil Rights, 1974).

The counselor's role as test-giver can be beneficial to students. The counselor's role in testing students can aid them in value and career awareness. "Tests constitute a vehicle for exploring the self, the outside world, and self in relation to that world" (Prediger, 1974, p. 338).
The most important role of the counselor in testing is to help students transform information from tests into experience where it can be integrated into the self-concept, and eventually to career development. For the disadvantaged, the counselor can use results of tests to transform possibilities into probabilities (Gordon, 1974).

The purpose of testing by guidance counselors should be to assist the student in self-awareness of interests, values, and career and occupational goals. This valuing process is very relevant for today's students, who are confronted with innumerable and confusing alternatives (Toffler, 1974). In a recent study of college freshmen, 85% recognized the need for better self-understanding in terms of their values, goals, and life-style preferences in order to plan their futures (Walters & Saddlemire, 1974).

Being allowed to make choices from a set of alternative values helps to define one's preferences (Feather, 1975). This valuing process has been called "prizing" by some writers (Anderson, 1977) and values clarification by others (Kirschenbaum, 1976; Hart, 1975; Harmin, 1973; Korschgen, et al., 1978).

In the last few years there has been a growing feeling among many educators that values clarification is a vital part of the counseling process, and that schools have a responsibility to exercise a leadership role in the presentation of a values process for decision-making. Some leaders in the values field in recent times are Raths, Harmin, and Simon
(1973) with their theme of "Values Clarification." They suggested that since the development of society and its people was best seen as dynamic, perhaps it was wiser to focus on the process of *valuing* than upon any particular values themselves.

Values clarification theory recognizes the multiplicity of values in American society. The theorists believe that when students are faced with conflicting sets of values, an individual value crisis may occur which could produce confusion, apathy, hostility or other negative results which are destructive to personal growth and the teaching-learning process. The basic theory focused on seven processes of helping students toward developing and clarifying their own values. These seven processes were: "choosing freely, choosing from alternatives, choosing after consideration of the consequences, prizing one's choice, publicly affirming these choices, acting on choices and incorporating these choices into a pattern of life" (Yanker, 1976, p. 136).

Skills useful to students' ability to make decisions for the future are being learned by means of values clarification. "Students are learning the process of self-understanding, values clarification, and communication which will continue to serve them twenty and forty years hence..." (Kirschenbaum & Simon, 1974, p. 270; McDaniel, 1974).

The problem facing students today is not one of lack of choice, but one of "overchoice." Many educators feel
that the person who lacks a clear understanding of his or her own values will be increasingly handicapped (Williams, 1961; Maslow, 1964; Drucker, 1969; Toffler, 1970; Allen & Dede, 1979). Values tests can serve the function of assessing needs and values and assisting them in their important educational and vocational choices. Counselors can, through an effective testing program, provide the data which may help curriculum experts shape needed courses of study (McDaniel & Shaftel, 1956; Taba, 1962; Katz, 1963).

An example of a useful test of values would be *A Study of Values* (SV) by Allport, Vernon, and Lindzey (1960), which has been widely used to assess values in accordance with Spranger's (1928) model. It can be used for Grade 10 and above. According to Buros' *Seventh Mental Measurement Yearbook* (1974), the *Study of Values* (1960) is a surprisingly viable test, and provides dependable and pertinent information. It has continuing usefulness as a research device. Other researchers such as Dahlke (1958) have suggested a similar typology of value orientations. Feldman and Newcomb (1969) used the *Study of Values* in a well-known study of college students' change in attitudes as they passed through college. They found that aesthetic values were of higher relative importance to seniors than to freshmen, while religious values were of lower importance to seniors than to freshmen.
The value of interest tests in increasing self-awareness of values and future vocational interests was reported by Coleman and Sherrick (1979) with tests given to eleventh graders. Information obtained on these interest tests can give the counselor ammunition for assisting the student to understand the nature of his or her own motivation. The findings facilitate the establishment of rapport in the conference between counselor and student. Since most young adolescents have had little work experience outside the home, the first time they answer an interest inventory may also be the first time they have thought hard about liking or disliking certain activities. Once the implications of their interests have been talked over with them, many students develop a growing alertness about which activities they like or dislike. This facilitates clarification of career direction. It was not predicted that career interest testing solved all problems of counseling high school students. However, the authors stated, "Our observations convince us that encouraging this kind of self-discovery is at the heart of self-actualization" (Coleman & Sherrick, 1979, p. 304).

In this particular study, the author used a questionnaire called a survey of Educational Values and Practices (EVP) in order to tap educational values of high school students. A similar survey was given in Iran in 1976 (Asrari, Abedi, & Aiken, 1977) to students in a teachers' college. Again it was administered to four groups of
undergraduate college students, Anglo-American men and women, and Mexican-American men and women, in Texas and California (Aiken, 1978). It was used to assess student attitudes with regard to expectations and goals, and to relate information to students' backgrounds with regard to their educational values. (Other tests which were studied for possible use were the Rokeach Value Survey, The California F. Test, Val-Ed, one of the Firo B series, and the Work Values Inventory (Buros, 1974). The Educational Values and Practices survey seemed to be the most effective instrument for measuring educational values of high school students.

In summary, knowledge about a student's educational values and goals are useful to the guidance counselor in facilitating student self-awareness. Counselor encouragement does have a significant influence on the educational decisions of high school seniors, especially for girls. In one study 83% of all senior females and approximately 91% of the males who reported being counseled to enter a four-year college made the decision to do so. For males, this represented more than 40% and for females approximately 50% of the total association between counselor encouragement and educational decision. Therefore, the counselor's role was significantly correlated to the educational decisions which students make at the end of the senior year. The
influence exerted by the guidance counselor during the students' senior year has the greatest effect on whether the students actually enter college the year after high school graduation.

Summary

Many factors have influenced high school students' educational values. Most chroniclers of American history considered individual achievement as a traditional American value. Achievement motivation has been studied by many researchers. It is a quality which seemed to vary with both sex and social class. Women seemed to exhibit a fear of success. Achievement motivation was found to be related to social class, with the middle class demonstrating a higher level than the working class.

Traditional measurements of achievement, such as standardized testing and grades are being criticized on many counts at present. Both have been called biased against ethnic minorities and lower social classes. No effective replacement for measurement purposes has been found, however.

Most current surveys showed that trends in value orientations have shifted to an emphasis on career. Females appeared to be more vocationally ambitious than males. Females seemed to rank social or altruistic values higher than did males. High school girls consistently have had higher grade point averages than do high school boys. Boys tended to value extrinsic rewards, girls intrinsic rewards.
In addition, membership in a minority ethnic group has influenced educational values. The ethnic group's values may be at cross purposes with the dominant middle class majority's value standards, existent in most schools. Locus of control studies have shown a "fatalistic" tendency toward the future in many minority students. This fatalism is not in harmony with the traditional ideal of the individual achiever who can overcome all obstacles and carve his or her own future.

Researchers who consider social class a major influencing factor, "revisionists," stated that educational values were based on social class of origin. Meritocratic writers believed educational values were based on ability, ambition, or achievement. They acknowledged social class as a minor, but indirect influence.

Both revisionists and those of the meritocratic school of thought agreed that decisions made in twelfth grade were consequential. Significant others affected these educational decisions: peers, parents and guidance counselors. Counselor encouragement at this point had a great effect on future educational and career plans, especially for girls. Revisionists claimed that parental and peer influence were related to social class. They claimed that even the working class child's linguistic ability, an important factor in school achievement, was more limited than that of the middle class child.
Birth order and educational values were also linked by researchers. First-born children tended to have higher achievement than later-borns. This may be due to the first-borns greater proficiency in language skills.

The role of the guidance counselor has many facets. The most important role seemed to be to help the students through tests and counseling to attain self-awareness of goals and value clarification. The main objective of the counselor's role was to assist all students to reach to their highest potential level of educational and career achievement. In working with counselees in a multicultural setting, the counselor must keep in mind that there are variations within ethnic or social groups as well as between them. In addition, individual differences must not be forgotten.
CHAPTER 3
DESCRIPTION OF THE DESIGN AND PROCEDURE OF THE STUDY

In order to collect data on the educational values of juniors and seniors in high school, the research design was developed and proceeded as described in this chapter.

Research Design

The target population was high school, with the sample size consisting of 500 high school juniors and seniors in four different geographical locations. These included Northern California in the suburban Bay area and a small, semi-rural San Joaquin Valley town; a medium-sized Southwestern city; and a large, urban, Southeastern city.

The schools to be sampled were chosen because they represented a diversity of ethnic and socioeconomic populations. These populations tended to be upper middle class in the suburban areas (the Peninsula Bay area); a small semi-rural town with middle and working class families, the San Joaquin valley town; a medium-sized Southwestern city; and a large, urban, Southeastern city (World Almanac, 1980).

This random sample of approximately 500 high school juniors and seniors were given the Educational Values and Practices Questionnaire. The test was analyzed by the Flesch scale for reading grade level, to ensure that the level of
reading difficulty was appropriate for the selected age group to be tested (Flesch, 1949). The questionnaire was first field tested with a random sample of 25 high school students, and the results analyzed for consistency and possible question ambiguity. Three judges, a high school teacher, a college professor, and a school psychologist were consulted for their input on clarity and specificity of the questions. This survey questionnaire was based on the Allport-Vernon-Lindzey Study of Values, (1960) which taps theoretical, economic, aesthetic, social, political, and religious values.

Uniform directions were given before the test was administered (see Appendix A). The survey questionnaire consists of 37 items: Part I, 12 questions based on emphases of high school education; Part II, 12 questions based on objectives of high school education; Part III, 6 questions on educational practices; and Part IV, 7 questions on biographical items: sex, ordinal position in the family, social class (SES), estimated grade point average (GPA), age, ethnic group. The survey was administered to the sample of high school students. The students were selected by the random sampling method. In Parts I and II, the same theoretical constructs presented in the first six questions are asked again in the form of differently worded questions.

The Educational Values and Practices Questionnaire (EVP) allows the student to make choices of educational values on
a Likert type of scale. Part I, which refers to possible important educational goals, ranging from (1) unimportant to (5) extremely important. Part II raises questions about preferences on types of high school subjects, ranging from (1) not at all valuable to (5) extremely valuable. Part III measures the amount of attention which the student perceives should be given to certain high school courses ranging from (1) no attention at all to (5) above average attention. Part III tests the degree of agreement on statements regarding educational practices or teaching methods in American high schools, ranging from (1) strongly disagree to (5) strongly agree. The questionnaire is designed on a five degrees of intensity scale and is scored on six variables: Aesthetic Value, Leadership Value, Philosophical Value, Scientific Value, Social Value, and Vocational Value.

Part IV of the EVP Questionnaire asks the student to identify his or her age, sex, class in school, position in the family, approximate overall grade point average, ethnic background, perceived standard of living, and occupation of head of household. An added research question was added with interest in future studies and a place for comments was provided. Duncan's (1961) classification of head of household was used as the criterion for socioeconomic status (see Appendices C, D, E).
Sample Description

The 500 students sampled were juniors and seniors in four different geographical locations in the United States. Each group will be described in the following paragraphs.

San Francisco Bay Area

The sample of 167 students was drawn from four suburban high schools in the Bay area. Approximately half the sample were boys, half girls. A little more than half were 17 to 18 years old. In terms of social class, about 87% were in the upper middle to average level, while almost 11% were in the upper class. About 76% had B or C grade point averages; 16% had A averages. The white ethnic group was the largest at 67.7% of the total. In the area of birth order almost 20% of the sample were oldest boys, with only children being the least represented.

San Joaquin Valley

The sample of 118 in this relatively small semi-rural town was approximately half boys, half girls. More of them were in the 17-18 year age group. Most (93%) were either in the upper middle or average social class, and most (86%) had B or C averages. In terms of ethnic group, there were no black students in this sample, while 86% were in the white ethnic group. In the area of birth order, almost 29% were oldest girls, with only children being least represented.
Southeastern United States

The sample of 94 high school students from a large city in Virginia were not quite evenly split according to sex, with a slightly larger percentage of girls. A few more (59%) 17 to 18 year olds were represented. More (55%) were in the average social class. Most (87%) had B or C grade point averages. The most dramatic difference in this sample was that 61% were in the black ethnic group and only 1% were in the Hispanic group. In terms of birth order, many students marked "Other," which tended to indicate that more were middle children in larger families than present in other samples. Oldest girl (22%) was the next largest category.

Southwestern United States

The sample of 85 students from a medium-sized city in Arizona were approximately divided into half male, half female sex categories. A larger percentage (78%) were 17 to 18 year olds or seniors. A larger percentage (58%) were in the upper middle class category. In grade point average a greater percentage (38%) were in the A grade point average group, with 42% in the B average group. The ethnic groups were predominantly white (77%) with the largest Hispanic (8.2%) representation of any of the four samples.
Descriptive Variable Frequencies for Each Group

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<tr>
<th>Variable</th>
<th>%Bay Area</th>
<th>%San Joaquin</th>
<th>%Southeast</th>
<th>%Southwest</th>
<th>%Total</th>
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<tr>
<td>Sex</td>
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<td>41.5 (39)</td>
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<td>51.7 (61)</td>
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<td>17-18</td>
<td>54.5 (91)</td>
<td>57.6 (68)</td>
<td>55.3 (52)</td>
<td>77.6 (66)</td>
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<td>42.4 (50)</td>
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<td>Grade Point Average</td>
<td>%Bay Area</td>
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<td>%Southeast</td>
<td>%Southwest</td>
<td>%Total</td>
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<tr>
<td>A</td>
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<td>4.2 (5)</td>
<td>1.1 (1)</td>
<td>2.4 (2)</td>
<td>4.5 (21)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>%Bay Area</th>
<th>%San Joaquin</th>
<th>%Southeast</th>
<th>%Southwest</th>
<th>%Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>67.7 (113)</td>
<td>86.4 (102)</td>
<td>31.9 (30)</td>
<td>76.5 (65)</td>
<td>66.8 (310)</td>
</tr>
<tr>
<td>Black</td>
<td>13.2 (22)</td>
<td>0.0 (0)</td>
<td>60.6 (57)</td>
<td>3.5 (3)</td>
<td>17.7 (82)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.2 (12)</td>
<td>5.9 (7)</td>
<td>1.1 (1)</td>
<td>8.2 (7)</td>
<td>5.8 (27)</td>
</tr>
<tr>
<td>Other</td>
<td>12.0 (20)</td>
<td>7.6 (9)</td>
<td>6.4 (6)</td>
<td>11.8 (10)</td>
<td>9.7 (45)</td>
</tr>
</tbody>
</table>

100% (464)
<table>
<thead>
<tr>
<th>Birth Order</th>
<th>%Bay Area</th>
<th>%San Joaquin</th>
<th>%Southeast</th>
<th>%Southwest</th>
<th>%Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only Child</td>
<td>6.0 (10)</td>
<td>0.8 (1)</td>
<td>4.3 (4)</td>
<td>2.4 (2)</td>
<td>3.7 (17)</td>
</tr>
<tr>
<td>Youngest Girl</td>
<td>18.0 (30)</td>
<td>11.9 (14)</td>
<td>18.1 (17)</td>
<td>17.6 (15)</td>
<td>16.8 (78)</td>
</tr>
<tr>
<td>Youngest Boy</td>
<td>16.8 (28)</td>
<td>17.8 (21)</td>
<td>16.0 (15)</td>
<td>14.1 (12)</td>
<td>16.4 (76)</td>
</tr>
<tr>
<td>Oldest Girl</td>
<td>18.6 (31)</td>
<td>28.8 (34)</td>
<td>22.3 (21)</td>
<td>22.4 (19)</td>
<td>22.8 (106)</td>
</tr>
<tr>
<td>Oldest Boy</td>
<td>19.8 (33)</td>
<td>16.1 (19)</td>
<td>11.7 (11)</td>
<td>21.1 (18)</td>
<td>18.1 (84)</td>
</tr>
<tr>
<td>Other</td>
<td>20.8 (35)</td>
<td>24.6 (29)</td>
<td>27.6 (26)</td>
<td>22.4 (19)</td>
<td>22.2 (103)</td>
</tr>
</tbody>
</table>

100% (464)

Bay Area      N = 167
San Joaquin   N = 118
Southeast     N = 94
Southwest     N = 85
Total         N = 464
Data Collection Procedures and Personnel

The survey was conducted by this researcher. Assistance was asked of members of college faculties focusing on urban education, members of research teams in other cities, and from district and high school administrators. Students in approximately seven high schools in four different geographical locations were given the twenty minute questionnaire. The surveys were collected and answers tabulated. Usable responses were 93% of those who were sampled or 464 of the 500 students surveyed. Results were computer analyzed.

Treatment of Computed Data

The data were analyzed in terms of frequency distributions of responses to kinds of educational goals preferred, educational practices considered useful, and demographic factors. The statistical technique known as the analysis of variance (ANOVA) was used to determine whether the differences among two or more items were greater than would be expected by chance alone (Hopkins & Glass, 1978). The Scheffe Pairwise Comparison test was used to arrive at critical differences between means of the various groups, where significant differences were found. The Scheffe was considered appropriate for examination of all possible linear combinations of group means. It was considered stricter than other a posteriori tests, and usable for unequal group sizes. Chi square analyses were also used.
The computed data were treated in accordance with the analysis of variance research design, whereby two or more independent variables may vary independently or interact with each other to produce variation in the dependent variable. The dependent variable was educational values, and the independent variables were grade, sex, socioeconomic status or social class (SES), ethnic group, birth order, professed grade point average (GPA) and geographical region. Geographic areas were analyzed separately. Since in most cases there were no significant differences between areas, the data were presented for the total sample. In the case of significant differences in a few of the values, the results were reported in Chapter 4, Statistical Findings. Since this study was a survey form of research, no cause-and-effect relationship could be established (McAshan, 1963) nor were null hypotheses stated (Krathwohl, 1977).

**Summary**

Chapter III has discussed the design of the study and presented the procedures used. It has dealt with the sources from which the data were gathered and the method used in collecting them. The manner of treating and analysing the data has also been outlined. Chapter 4 will discuss the analysis and findings of the collected data. Chapter 5 will discuss the findings and conclusions of the study.
CHAPTER 4
STATISTICAL FINDINGS

This study involved junior and senior high school students. The students were drawn from selected schools in four different geographical areas. Usable responses were 464 or 93% of the students surveyed (See Appendix E).

The independent variables were the demographic factors of sex, age, social class, grade point average, ethnic group and birth order. The dependent variables were the six educational values of vocational and scientific values, leadership, social, aesthetic, and philosophical values. The second group of dependent variables were students' opinions on six educational practices. The dependent variables, the six educational values, are analyzed in Tables 1 through 17. The second group of Tables, 18 through 26, show the significant differences between demographic variables and educational practices or operative values. The final portion of the chapter concerns itself with the relationship of area to educational values, reports the nonsignificant findings, and ends with a short summary of the limitations of the study.

Descriptive Statistics

The educational values studied seemed, for the most part, to be evenly distributed throughout the population.

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Each value assessed by the Educational Values and Practices questionnaire will be described as stated in the survey instrument, followed by relevant statistical tables and discussion. The educational values will be discussed in the following order: Vocational, Scientific, Social, Aesthetic, Philosophical and Leadership.

**Vocational Value: Use of education toward a vocation**

The Vocational Value consisted of questions 1 + 7 + 13 + 19. They were presented as follows:

(1) Preparation for a vocation or profession of one's choice.
(7) Learning how to succeed in a chosen occupation.
(13) Courses in your chosen vocational or professional field.
(19) Courses in the job or career field of your choice.

There was a significant difference at the $p = .001$ level with regard to the Vocational Value and sex. The Vocational Value mean for males was 15.84 and for females 16.80.

**TABLE 1**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Vocational Value and Sex

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>107.25</td>
<td>11.23*</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>462</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$N = 464$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .001 level for statistical significance is 11.0.*
Another interesting finding was the two-way interaction between sex (male, female) and Grade Point Average (GPA) which was significant at the $p = .05$ level.

**TABLE 2**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to Vocational Value, Sex, and Grade Point Average

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (Male, Female)</td>
<td>1</td>
<td>103.81</td>
<td>11.17*&lt;.001</td>
<td></td>
</tr>
<tr>
<td>GPA (Grade Point Average)</td>
<td>3</td>
<td>28.30</td>
<td>3.04*&lt;.05</td>
<td></td>
</tr>
<tr>
<td>2-way interaction (Sex,GPA)</td>
<td>3</td>
<td>29.27</td>
<td>3.15*&lt;.05</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$*$Critical value of F at the .001 level for statistical significance is 11.0 and at the .05 level is 2.62.

The mean score for females on the Vocational Value was significantly higher than the mean score for males at the .001 level. Females ranked the Vocational Value as significantly higher than did male students.

A Chi Square analysis showed $x^2 = 27.53$, df = 16, with a $p = .05$ level of significance, and a Gamma of .22. There did appear to be a significant relationship between sex and choice of the Vocational Value. Girls seemed to rank the Vocational Value as having greater importance than did boys.
The following table shows the results with regard to the Vocational Value and Birth Order.

TABLE 3
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Vocational Value and Birth Order

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5</td>
<td>21.28</td>
<td>2.21*</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>Within Groups</td>
<td>458</td>
<td>9.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .10 level for statistical significance is 1.88.

The analysis of variance showed a significant difference, $p = .10$, with regard to the Vocational Value and birth order. This result was very close to the .05 level of significance. It was included for possible future research into values as related to birth order. The "oldest girl" had the highest mean (17.07). The group with the lowest mean score for the Vocational Value was the "youngest boy" with the mean score being 15.75. The Chi Square relationship was not significant between Vocational Value and Birth Order.
Using the Scheffe' pairwise comparison test, there was no significant difference at the .05 level between groups according to birth order. However, since the mean score for the oldest girl was higher than for all the other family positions, it could be interpreted that with relationship to birth order, there is a weak relationship to the Vocational Value.

**Scientific Value: Use of science as part of education**

The Scientific Value was composed of questions \(2 + 8 + 14 + 20\). The questions were written as follows:

1. Understanding of scientific theory and the laws of nature.
2. Learning to think logically and to solve problems.
3. Courses in reading, science and mathematics.
4. Courses in science, mathematics, and reading skills.

The following table showed the results with regard to the Scientific Value and Grade Point Average.

**TABLE 4**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Scientific Value and Grade Point Average

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>(F)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>36.83</td>
<td>4.79*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>460</td>
<td>7.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N = 464)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of \(F\) at the .01 level is 3.82.
Using the Scheffé pairwise comparison test, there was a significant difference at the \( p = .05 \) level between the students with B Grade Point Averages and those with C averages. The mean score for the B average group was 14.61 and for the C average group, 13.64. Therefore, those students with an overall B average or better, scored the Scientific Value higher in importance than those with C averages or below. It could be assumed that students in this study with a higher GPA rated the Scientific Value higher than did those with a lower GPA.

**TABLE 5**

Results of the Scheffé Pairwise Comparison Among the Four Groups on Scientific Value and Grade Point Average

<table>
<thead>
<tr>
<th>Grade Point Average</th>
<th>Means</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Grade Point Average</td>
<td>14.61*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>C Grade Point Average</td>
<td>13.64</td>
<td></td>
</tr>
</tbody>
</table>

The Chi Square analysis showed a significant relationship between Scientific Value and GPA, \( x^2 = 66.41, \) df = 45, at the \( p = .05 \) level of significance. The real break seemed to be between the B average and C average students. Those with B average or above seemed to rank the Scientific Value as being of higher educational importance than did those with C averages or below.
There were some differences with regard to Scientific Value and ethnicity, at least in the initial findings.

TABLE 6
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Scientific Value and Ethnicity

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>34.132</td>
<td>4.43*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>460</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .01 level for statistical significance is 3.82.

According to the analysis of variance, there was a significant difference with respect to the three group means on Scientific Value and Ethnic Group.

Using the Scheffe test for further comparison, there appeared to be a significant difference at the .05 level between the black group sampled and those labeled "other." The black ethnic sample scored higher than the other three groups in response to the importance of the Scientific Educational Value. The "other" group included foreign students, Native Americans, Asians, and all other groups than white, black, and Hispanic students.
TABLE 7

Results of the Scheffe' Pairwise Comparison Among the Four Groups on the Scientific Value and Ethnicity

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Means</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>15.09*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Other</td>
<td>13.49</td>
<td></td>
</tr>
</tbody>
</table>

N = 464

The Chi Square analysis showed that there was a significant relationship between the Scientific Value and ethnicity, \( x^2 = 76.48, 45 \text{ df}, p = .01 \). Looking at the table more carefully, it seemed that blacks (mean 15.09) and whites (14.13 mean score), scored the Scientific more similarly in importance than did the Hispanics (13.48). However, the findings should be distrusted because the sample size for blacks (82) and Hispanics (27) was too small compared to the large number of white students (310), and was, therefore, unreliable.

Social Value: Understanding others as a goal of education

The Social Value consisted of questions 4 + 10 + 16 + 22. In the questionnaire the items were worded as follows:

(4) Understanding of social problems and their possible solutions.
(10) Understanding people of different social classes and nationalities.
(16) Courses concerned with understanding and helping people.
(22) Courses concerned with how to understand and be of help to other people.
There was a significant difference between groups with regard to sex and birth order when related to the Social Value. The respective tables follow.

### TABLE 8
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Social Value and Sex

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>273.79</td>
<td>30.31*</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>462</td>
<td>9.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .001 level is 11.0.

### TABLE 9
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Social Value, Sex and Birth Order

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>67.38</td>
<td>7.51*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Birth Order</td>
<td>5</td>
<td>15.07</td>
<td>1.68</td>
<td>NS</td>
</tr>
<tr>
<td>2-Way Interaction</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In a test of interaction between sex and birth order, sex was the significant factor at the $p = .01$ level. Girls rated the Social Value significantly higher (mean score 14.11) than did the boys (mean 12.57). Oldest girls ranked the Social Value higher than did any other family position.

**TABLE 10**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Social Value and Birth Order

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5</td>
<td>56.35</td>
<td>6.196*</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>458</td>
<td>9.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .001 level for statistical significance is 4.17.

Further analysis, using the Scheffe pairwise comparison test, showed a significant difference at the .05 level between the mean score of oldest girls and oldest boys. There was also a significant difference between the youngest girl and the oldest boy at the $p = .05$ level. Therefore, the oldest girls' mean score was significantly higher than the mean scores for the oldest boy. The youngest girls' mean score was significantly higher than the mean score for
oldest boys with respect to the Social Value. It appeared that both oldest and youngest girls rated the Social Value higher than did the oldest boy.

TABLE II
Results of the Scheffe Pairwise Comparison Among the Four Groups on the Social Value and Birth Order

<table>
<thead>
<tr>
<th>Birth Order</th>
<th>Means</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oldest girl</td>
<td>14.11*</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Oldest boy</td>
<td>12.17</td>
<td></td>
</tr>
<tr>
<td>Youngest girl</td>
<td>13.88*</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Oldest boy</td>
<td>12.17</td>
<td></td>
</tr>
</tbody>
</table>

The Chi Square analysis showed $x^2 = 36.99$, df = 16, with a significance level of $p = .01$, (Gamma = .32) with relationship to sex and the Social Value. Therefore, girls did rank the Social Value significantly higher than did boys. The Chi Square analysis of the Social Value and birth order was $x^2 = 103.34$, df = 80 with a $p = .05$ level of significance. The oldest girl did rank Social Values significantly higher than did any other family position. There was a significant relationship between sex, birth order, and the Social Value, with sex being the strongest determining factor.

**Aesthetic Value: Art appreciation as a part of education**

The Aesthetic educational value was computed from questions $5 + 11 + 17 + 23$. Aesthetic Value statements were:
(5) Appreciation of the beautiful and artistic things in life.
(11) Acquiring the ability to express oneself artistically.
(17) Courses in music, art, and literature.
(23) Courses in art, literature and music.

There were significant differences between the Aesthetic Value with regard to sex, and a possible difference with regard to grade point average.

TABLE 12
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Aesthetic Value and Sex

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>146.80</td>
<td>15.13*</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>462</td>
<td>9.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .001 level for statistical significance is 11.0.

The mean score for the females on the Aesthetic Value was higher (12.05) than the mean score on the same value for males (10.92). Therefore, females rated the Aesthetic Value as being of higher importance than did male students.

The Chi Square test, however, was not significant at the .05 level. It would be significant only at the p = .10 level. There was a weak relationship demonstrated between sex and
and the Aesthetic Value on the EVP.

There was a significant result at the p = .10 level with relationship to the Aesthetic Value and grade point average. This level was not as highly significant as some of the other findings, but was included for future use.

TABLE 13
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Aesthetic Value and Grade Point Average

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>25.38</td>
<td>2.56*</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>Within Groups</td>
<td>460</td>
<td>9.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .10 level for statistical significance is 2.10.

There was a significant difference only at the p = .10 level. With further analysis of the data, it appeared that students with an overall B grade point average or better, tended to rate the Aesthetic Value at a higher level (11.96), than did students with an overall GPA of D or lower (10.67).

Philosophical Value: Understanding life as a goal of education

The Philosophical Value was computed from questions 6 + 12 + 18 + 24. These included the following items:

(6) Gaining insight into the meaning and purpose of life.
(12) Development of a personal philosophy of life.
(18) Courses dealing with ideas about life and/or religious ideas.
(24) Courses concerned with life and religion.
The Philosophical Value and sex when tested with the analysis of variance resulted in a $p = .05$ level of significance. The mean for females (11.97) was greater than that for males (11.24) on the Philosophical Value. Therefore, female students rated the Philosophical Value as more important than did male students.

**TABLE 14**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Philosophical Value and Sex

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>63.19</td>
<td>5.55*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Within Groups</td>
<td>462</td>
<td>11.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of $F$ at the .05 level for statistical significance is 3.86.

The Chi Square statistic was $x^2 = 29.18$, df = 16, and was significant at the $p = .05$ level. Sex and choice of the Philosophical Value seemed to be related. Girls tended to rank the Philosophical Value as being higher in importance than did boys.
TABLE 15

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Philosophical Value and Ethnicity

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>54.759</td>
<td>4.89*</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>460</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .01 level for statistical significance is 3.82.

There was a significant difference between groups at the p = .01 level of significance on the Philosophical Value with ethnicity. The Scheffe's test showed a significant difference at the .05 level between the black ethnic group and the white group. The black ethnic group scored the Philosophical Value significantly higher, mean score 12.85, than did the white ethnic group, mean 11.29. Therefore, the black students sampled in this study rated the Philosophical Value as significantly higher in importance than did the white students.

The Chi Square statistic, $x^2 = 82.11$, df = 48, was significant at the p = .01 level. Further analysis showed scores for blacks and whites were similar. The significance statistic may be a function of sample size.
TABLE 16
Results of the Scheffe' Pairwise Comparison Among the Four Groups on the Philosophical Value and Ethnicity

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Means</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Group</td>
<td>12.85*</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>White Group</td>
<td>11.29</td>
<td></td>
</tr>
</tbody>
</table>

Leadership Value: Leadership as a goal of education

The Leadership Value was composed of questions 3 + 9 + 15 + 21. The statements in the test reflecting this value were:

(3) Ability to lead and influence other people.
(9) Understanding how the political process works.
(15) Courses concerned with how to organize and direct people.
(21) Courses concerned with how to understand and be of help to other people.

None of the statistical tests used showed a significant difference between Leadership and the demographic variables. The Pearson test for correlation between selected values and demographic factors showed that both the Vocational Value and the Aesthetic Value with respect to sex were statistically significant at the p = .001 level. The correlation for Leadership with other demographic variables was not significant.
The discussion of the significant differences between the demographic variables and educational practices will follow. The educational practices could be considered as values in operation.

Practice #1

Practice 1 was stated as:

Too much importance is placed on memorizing the textbook and class notes and not enough importance is placed on understanding and thinking about the course material.

There was a statistically significant difference at the p = .01 level with respect to Practice 1 and sex. The mean for males was 3.74 and for females, 4.05. Females tended to agree with this statement more strongly than did the male respondents.
TABLE 18
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to Practice \#1 and Sex

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>11.03</td>
<td>9.05*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>462</td>
<td>563.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .01 level is 6.69

There were also statistically significant results, \( p = .05 \), for Practice \#1 and grade point average. The Scheffé pairwise comparison test did not show a significant difference between the groups, however, students with higher GPA's had higher scores or "strongly agreed" with the statement in Practice 1; that is, that too much importance is placed on memorizing material, rather than on understanding it.

Practice \#2

Practice 2 was stated as follows:

It should be more important to learn basic skills in reading, writing, and mathematics and less time should be spent on extra subjects like art and music.

There were no significant differences on the Practice 2 and all the variables.
Practice #3

Practice 3 affirmed, "Too much teaching is on career or job skills and not enough teaching is on getting a broad general education." Practice 3 and social class, when studied by analysis of variance methods, showed statistical significance at the $p = .01$ level.

**TABLE 19**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to Practice #3 and Social Class

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>5.33</td>
<td>4.52*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>459</td>
<td>1.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>462</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .01 level is 3.82

The Scheffe pairwise comparison test among the four groups showed a significant difference between the average social class group, with a mean score of 2.67, and the upper middle class group, with the lowest mean score of 2.34. The average social class group strongly agreed with the statement made in Practice #3. That is, students in the average socioeconomic class strongly agreed that too much time is spent on the basics, and not enough time on a broad, general education.
TABLE 20

Results of the Scheffe' Pairwise Comparison Among the Four Groups on Practice #3 and Social Class

<table>
<thead>
<tr>
<th>Social Class</th>
<th>Means</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Social Class Group</td>
<td>2.67*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Upper Middle Class Group</td>
<td>2.34</td>
<td></td>
</tr>
</tbody>
</table>

Practice #4

Practice 4 was stated as follows:

Too much use is made of standard ways of teaching like lectures, textbooks, paper writing, and not enough use is made of newer methods like films, television, class discussion.

When Practice 4 was subjected to an analysis of variance test with grade point average, statistical significance at the p = .01 level was observed. Students who showed strong disagreement with the statement in Practice 4 had higher Grade Point Averages than did those who agreed. Students with an overall D grade point average had the highest mean score for agreement. That is, the students who had lower academic achievement favored more use of audiovisual materials and class discussions and less reliance on traditional methods of reading, writing and lecturing.
### TABLE 21

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to Practice #4 and Grade Point Average

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>$F$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>7.63</td>
<td>5.19*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>460</td>
<td>1.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$N = 464$

*Critical value of $F$ at the .01 level for statistical significance is 3.82.

When the results were analyzed with the Scheffé Test, students with A grade point averages disagreed with the statement, while students with C and D averages tended to agree with the statement.

### TABLE 22

Results of the Scheffé Pairwise Comparison Among the Four Groups on Practice #4 and Grade Point Average

<table>
<thead>
<tr>
<th>Grade Point Average Group</th>
<th>Mean</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>D grade point average group</td>
<td>3.76*</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>A grade point average group</td>
<td>2.91</td>
<td></td>
</tr>
<tr>
<td>C grade point average group</td>
<td>3.48*</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>A grade point average group</td>
<td>2.91</td>
<td></td>
</tr>
</tbody>
</table>
Using the Scheffé test, there was a significant difference at the p = .05 level between those with the higher GPA's (A's) and those with the lower GPA's (C's and D's). Students with lower grade point averages preferred more use of non-traditional teaching methods, such as audiovisual aids, than did students with higher averages.

**Practice #5**

Practice 5 was described as, "Teachers are usually more interested in other things than teaching, and they usually do not teach very well." The analysis of variance with respect to Practice 5 and grade point average was statistically significant at the p = .01 level. Students with grade point averages of C rated Practice 5 as "strongly agree," while students with A GPA's disagreed with the statement. It seems that students with lower levels of academic achievement tended to blame the teachers for being incompetent and uninterested in teaching.

**TABLE 23**

Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to Practice #5 and Grade Point Average

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>17.13</td>
<td>4.86*</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Within Groups</td>
<td>460</td>
<td>539.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 464

*Critical value of F at the .01 level is 3.82.
Using the Scheffe\' Pairwise Comparison test, there was a significant difference at the $p = .05$ level between C grade point average students and A average students. Those students with C GPA's tended to agree that teachers were ineffective at a significantly higher rate than students with A averages.

TABLE 24

Results of the Scheffe Pairwise Comparison Among the Four Groups on Practice #5 and Grade Point Average

<table>
<thead>
<tr>
<th>Grade Point Average</th>
<th>Means</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>C grade point average</td>
<td>2.63</td>
<td>$&lt; .05$</td>
</tr>
<tr>
<td>A grade point average</td>
<td>2.07</td>
<td></td>
</tr>
</tbody>
</table>

Practice #6

Practice 6 was stated as, "Not enough attention is paid to teaching morals, values, and citizenship." The analysis of variance with regard to Practice 6 and birth order was statistically significant at $p = .05$. The "oldest girl" had the highest mean score (3.51), and the "only child" had the lowest score (2.65). The oldest girl strongly agreed with the statement in Practice 6, while the only child mean score showed high disagreement with the statement. The oldest girl saw a need for more teaching of morals, values and citizenship in schools.
TABLE 25
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to Practice #6 and Birth Order

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5</td>
<td>3.12</td>
<td>2.63*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Within Groups</td>
<td>458</td>
<td>1.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 464

*Critical value of F at the .05 level for statistical significance is 2.23.

The Scheffé pairwise comparison test showed no significant differences between groups at the .05 level.

Area and Educational Values

With regard to area, the survey was unable to control for social class effects. This inability to control for social class made prediction difficult with respect to educational values and geographic area. The data were too crude to be trusted. Findings are reported, however, since statistically significant differences were found with regard to area and to the Aesthetic and Vocational Values.

With regard to the Aesthetic Value and area, there was a statistically significant difference found at the p = .05 level. The Chi Square analysis showed $x^2 = 144.17$, df = 112, p = .05.
### TABLE 26
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Aesthetic Value and Area

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>7</td>
<td>24.16</td>
<td>2.47*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Within Groups</td>
<td>456</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Critical value of F at the .05 level is 2.03*

Using the Scheffe test, no two groups were significantly different with regard to the Aesthetic Value at the .05 level. However, the Bay Area had the highest mean (12.09) and the San Joaquin sample had the lowest mean score (10.59) on the Aesthetic value.

With regard to the Vocational Value and area, the analysis of variance showed a significant difference at the .001 level.

### TABLE 27
Summary Table for the Analysis of Variance Among the Four Groups Surveyed with Respect to the Vocational Value and Area

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>M.S.</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>7</td>
<td>56.179</td>
<td>6.21*</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>456</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The critical value of F at the .001 level for statistical significance is 5.50. The Scheffé pairwise comparison test showed that there was a significant difference at the .05 level between the San Joaquin group with a mean of 17.29 and the Bay Area group with a mean of 15.74. The students in the San Joaquin sample ranked the Vocational Value as significantly higher in importance than the Bay Area sample.

**TABLE 28**

Results of the Scheffé Pairwise Comparison Among the Four Groups on the Vocational Value and Area

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Means</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Joaquin Group</td>
<td>17.29*</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Bay Area Group</td>
<td>15.74</td>
<td></td>
</tr>
<tr>
<td>N = 464</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Chi square analysis showed $\chi^2 = 138.58$, df = 112, $p = .05$. As stated with results regarding area and the Aesthetic Value, the data did not control for social class effects, so reliable predictions based on Area could not be made.

**Nonsignificant Findings**

Some educational values seemed to be randomly distributed between the sexes, across ethnic and age groups, social class, grade point averages, family position, and geographical
area. No significant relationships were found with regard to sex and the Scientific Value; sex and the Leadership Value.

Grade point average did not seem to be related to any of the educational values tested except to the Scientific Value, and to specific Practices, as reported. Grade point average did not show a strong relationship to the Vocational Value. Desire for leadership was unaffected by GPA. Social Values, such as understanding of social problems and the Philosophical Values, such as an understanding of life, were unaffected by GPA. Aesthetic Values showed a very weak relationship to GPA, which was considered significant only as a possible future research question.

Regarding the birth order factor, there was not a strong relationship between the Vocational Value and birth order, although it was included for possible future study. There were no significant relationships between the Scientific Value and birth order or the Leadership Value and birth order. There was no significant relationship between birth order and the Aesthetic Value.

Regarding ethnicity and social class, there were no significant relationships between ethnicity and vocational values, leadership values, social values or aesthetic values. There were no significant relationships between social class and any of the educational values tested: Vocational, Leadership, Scientific, Social, Aesthetic, or Philosophical.
Summary of the Limitations of the Findings

In terms of limitations in interpretation of the results, some of the results obtained with regard to ethnicity may be a function of sample size. Of the 464 respondents, 67% were white, 18% were black, and only 6% were Hispanic. Due to the inability to control for social class effects, the data were considered too crude to allow interpretation based on educational values and geographical area.

Chapter 4 looked at the significant differences among the four groups surveyed with regard to educational values and educational practices. The nonsignificant findings were also reported. The objective of the statistical tests used was to discern meaningful relationships between educational values and students' characteristics which might prove helpful to the high school guidance counselor. Chapter 5 will provide a discussion of the statistical findings and conclusions, as well as implications for counselors and suggestions for future research.
CHAPTER 5

DISCUSSION OF THE FINDINGS AND CONCLUSIONS

This study examined the educational values of juniors and seniors in high school and the implications for high school guidance counselors. It was undertaken in an effort to paint a portrait of the older high school student in the area of educational values. The purpose of the study was to discover whether the information generated on educational values would be helpful to the high school guidance counselor. Since the counselor must bridge the gap between the individual student's values and society's goals, it seemed that greater understanding of students' values would be useful.

Students' Educational Values

Some educational values appeared to be randomly distributed throughout the population from which the sample was taken. It seemed that some educational values were shared by both sexes, across ethnic and age groups, throughout all grade point averages, and family positions and in all geographical areas sampled. For instance, the sex of the respondent did not seem to affect the importance placed on the Leadership Value or the Scientific Value.
Grade point average and the educational values tested did not show a strong relationship except for the Scientific Value in which those with higher averages ranked the Scientific Value as being higher in importance than did those with lower G.P.A.'s. Leadership, Vocational, Social, and Philosophical Values seemed to be randomly distributed throughout all grade point average groups. The Aesthetic Value showed a weak relationship to G.P.A. and was included only as a possible area of future study.

In terms of birth order, the Leadership, Scientific, and Aesthetic Values appeared to be randomly shared by all family positions. The Vocational Value and birth order had only a weak relationship.

With regard to ethnicity, Vocational, Leadership, Social, and Aesthetic Values seemed to be randomly distributed throughout all the ethnic groups tested. blacks and whites seemed to score more similarly on some of the values than did Hispanics. This may be due to the fact that blacks have been urbanized longer than have Hispanics in the U. S. Blacks may perceive education as a means of upward mobility more strongly than do Hispanic students at the present time.

The values tested seemed to be distributed across all social classes, but the survey was unable to control for the effects of social class, which made prediction difficult. There were no significant differences found in educational values with regard to geographical area. However, this sample
consisting of eleventh and twelfth graders was actually a select group because it missed the most common drop-out stage for students which occurs at the end of tenth grade. It was probable that each age group studied was more like each other than either one was like the drop-out group. Therefore, the effects of social class in this study were unclear, since only the middle and upper middle class students were left in the sample by the time of eleventh and twelfth grades.

Implications for Counselors

Some of the research findings on educational values did show significant differences between the sexes, among ethnic groups, with various grade point averages, and in regard to birth order. With relationship to the sex of the respondent, and the Vocational Value, girls' mean scores were significantly higher than boys'. There was also a significant relationship between girls' higher grade point averages and their higher ranking of the Vocational Value. This paralleled Bachman and Johnston's (1979) findings that high school girls tend to be more vocationally ambitious than high school boys. In this study the youngest boy had the lowest mean score for the Vocational Value. The counselor's influence on an older high school student's future plans, especially of girls, is great (Rehberg, 1978). Prevailing counselor opinion, however, may work against a girl's having equal opportunity in school or in a profession (Westoff, 1979). The high school counselor
should take these findings into account when recommending courses of study or when assisting high school girls with future educational or career goals.

It has been documented that students' grade point averages affect the kind of advice given to them by the counselor. The only value which seemed to be strongly related to grade point average was the Scientific Value. Students with B averages or above seemed to rank the Scientific Value higher than did those with C averages or below. A counselor should be aware of this when giving curricular advice.

Some of the educational practices preferred were related to grade point average. For example, students with lower G.P.A.'s preferred use of non-traditional teaching methods, such as more use of audiovisual aids than did those students with higher grade averages. Students with higher G.P.A.'s preferred to have an understanding of the material presented, rather than just memorizing it. Understanding the relationship of teaching methods, as stated in Practices #1 through #6, may assist the counselor to understand the reasons for a student's frustration with a particular teacher's methods. The problem may lie in the student's scholastic deficiencies rather than with the teacher's methods themselves. The counselor could base advice to a student on class choice and curriculum recommendations on information about preferred practices.
Regarding the birth order factor, the oldest girls tended to rank the Social Value, that is, understanding and helping others, higher than did those in other family positions. Girls in general seemed to rank the Social Value as higher in importance than did boys. Oldest girls also tended to feel a need for more teaching of morals, values and citizenship in the schools. This was consistent with Forer's (1969) findings on birth order. The results found which related to birth order and Social Values may assist the counselor to realize the high achievement and affiliation needs of the oldest child, especially the oldest girl. This knowledge, coupled with the finding that the oldest child has more rigid standards of behavior, may help the counselor to understand how these tendencies may influence the oldest child's values.

In the area of social class, those in the lower social class group felt a need for getting a broad general education rather than just job skills. This result may be due to the students' perceptions of the middle class standard expected by the school, rather than a real indication of the preferences of the high school students tested.

With regard to ethnicity, black students scored the Scientific Value higher in importance than did any other ethnic group. Black and white students ranked the Scientific Value higher than did Hispanics. As mentioned earlier, the black students may perceive education as being more closely related to upward
mobility than do Hispanics, at present. The black students in the sample also rated the Philosophical Value significantly higher in importance than did other ethnic groups. Scores for blacks and whites were similar on this value, however.

Sound academic counseling and planning is the basis of student development and retention. The relationship between clear academic goals, decision-making, and attrition are well-documented in the literature (Muskat, 1979). Academic information could be dispensed on low-cost, computerized delivery systems (Schenk, Murphy & Shelton, 1980). However, the purpose of a beneficial counseling program would be to assist students to identify the relationship between high school courses and their own educational aspirations, and to clarify their educational goals and values, and to assist them to make future career plans. A greater knowledge of students' educational values should assist the counselor in achieving these goals. Nevertheless, the counselor must beware of forming stereotypical thinking based on value test results and student characteristics.

General Conclusions

In general the findings of this study were consistent with the previous research results in the area of educational values, as cited in the Review of the Literature, Chapter 2. Some of the results obtained in the area of ethnicity, however, are probably due to a function of sample size. Of the 464 respondents, 67% were white, 18% were black, and only 6% were
Hispanic. In some factors, such as geographical area and values, there was an inability to control for the effects of social class. Therefore, the data were considered too crude to make reliable findings regarding area and educational values.

Educational values, as measured by the Educational Values and Practices questionnaire, seemed to be randomly distributed throughout the areas sample. One of the trends indicated by the data is that high school girls appeared to be more vocationally ambitious than did high school boys. Since researchers have reported that older high school girls' future educational and career plans are highly influenced by the guidance counselor, it seems that the counselor should be aware of this when assisting girls in curriculum planning. It is considered very important for girls to have four years of high school math in order to open up to them the full range of college majors and professions (Westoff, 1979). This especially is true with regard to the more lucrative, non-traditionally "feminine" fields of science, engineering, medicine and business.

Regarding ethnicity and the high values placed on science by black students, several researchers have suggested that the achievement value is very high among black high school students. The need, however, is for the counselor to make black students aware of the procedures for applying to college, and also to convince the students that they can be successful there (Rosenberg & Simmons, 1968; Pouissaint, 1974).
The sample of Hispanic students, about 6% of the total, was not proportionately large in comparison to the white and black groups. This may be due to the nature of the sample, or may bear out the reported high dropout rate of Mexican-American high school students. The largest percent of Mexican-American students are reported to drop out between the tenth and eleventh grades (Carter, 1970). Mexican-American children strongly desire to stay in school and hold high occupational aspirations, however (Coleman, 1966). Researchers have theorized that Mexican-American students have dual conflicting values systems: those of their home and culture and those of the mainstream American middle class culture (Pollack & Menacker, 1971; Ramirez & Castañeda, 1974). In addition, family and peers are very influential to the Hispanic student. If counselors who understand the Hispanic cultural values could set up effective group, family, and peer counseling for Mexican-American students, this important loss of human resources might be stemmed.

Suggestions for Future Research

Some interesting areas of research were uncovered during this study. The area of birth order, achievement and values could be further explored with relationship to leadership qualities and vocational choice. Some studies reported that a high percentage of leaders, particularly those chosen during national crises, were first-born
children (Horn, 1976). A longitudinal study of values, with respondents being re-tested after college major or vocational choices have been made would be valuable. Another study of values could compare teachers, parents, and students' value orientations for further insights. Inter-generational factors in which age differences in values would be studied would be another possible research direction. A re-test of juniors and seniors in high school after the passage of three to five years time, indicating value trends, would also be useful. A study in which a broader sampling of students over a greater variety of geographical areas in the United States or cross-nationally would be worthwhile. Colleges and universities might use results of value surveys in planning their curriculum (Maeroff, 1979; Perry, 1979).

It would be especially useful to adapt the Educational Values and Practices questionnaire to a study of ninth and tenth graders' educational values. These are the grades in which curriculum decisions are being made which are crucial to the student's future path--academic or nonacademic (Rehberg, 1978). Including ninth and tenth graders in a values study before widespread effects of dropping-out occur, especially of such minority groups such as the Hispanics, might offer insight into this educational problem area.


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Hand, C. Annual report of the academic vice president to the faculty. Stockton: University of the Pacific, 1978.


Della Fave, L. R. Success values: Are they universal or class-differentiated? American Journal of Sociology, 1974, 80, 153-169.


Hart, G. Humanizing schools through values clarification. College Student Journal, 1975, 9, 82-85.


Horn, J. Birth Order: What scholars, strippers and congressmen share. Psychology Today, 1976, 9, p. 34.


Walters, L. and Saddlemire, G. Career planning needs of college freshmen and their perceptions of career planning. College Student Personnel, 1979, 20, 224-229.


**DISSERTATIONS AND UNPUBLISHED MANUSCRIPTS**


Gilpatrick, R. S. Guidelines for a values curriculum to be used in elementary schools (K-6). Unpublished doctoral dissertation, Brigham Young University, 1977.


APPENDICES
APPENDIX A

DIRECTIONS FOR ADMINISTERING THE EDUCATIONAL VALUES AND PRACTICES QUESTIONNAIRE--

(To the Questionnaire Administrator--Please read these directions to the students before administering the questionnaire:)

DIRECTIONS:

"The purpose of this questionnaire is to find out your ideas on values in education. Circle the number or check the blank by your best answer. The answers you give will be used for a graduate study. The answers you give may help in future educational planning. The answers on this questionnaire will have no effect on your grade in this course. All responses to the questions are optional. If you do not wish to answer one, some or all of the questions you are not required to do so. Thank you for your help."
EDUCATIONAL VALUES AND PRACTICES QUESTIONNAIRE

Part I. Each of the items in this section refers to a possible goal or something of importance to high school education. Circle the number of your choice after each statement to show how important you believe each goal should be. Use this key:

1 = Unimportant  2 = Somewhat important  3 = Important  4 = Very important  5 = Extremely important

1. Preparation for a vocation or profession of one's choice.  
   1 2 3 4 5

2. Understanding of scientific theory and the laws of nature.  
   1 2 3 4 5

3. Ability to lead and influence other people.  
   1 2 3 4 5

4. Understanding of social problems and their possible solutions.  
   1 2 3 4 5

5. Appreciation of the beautiful and artistic things in life.  
   1 2 3 4 5

6. Gaining insight into the meaning and purpose of life.  
   1 2 3 4 5

7. Learning how to succeed in a chosen occupation.  
   1 2 3 4 5

8. Learning to think logically and to solve problems.  
   1 2 3 4 5

9. Understanding how the political process works.  
   1 2 3 4 5

10. Understanding people of different social classes and nationalities.  
    1 2 3 4 5

11. Acquiring the ability to express oneself artistically.  
    1 2 3 4 5

    1 2 3 4 5

--Turn to next page--
Part II. Circle the number of your choice after each of the following items to show how valuable you think the particular types of high school subjects are to most students. Use the following key:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>1 = Not at all valuable</th>
<th>2 = Somewhat valuable</th>
<th>3 = Valuable</th>
<th>4 = Quite valuable</th>
<th>5 = Extremely valuable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Courses in your chosen vocational or professional field.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Courses in reading, science and mathematics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Courses concerned with how to organize and direct people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Courses concerned with understanding and helping people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Courses in music, art, and literature.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Courses dealing with ideas about life and/or religious ideas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Part III. Circle the number of your choice following items to show how much attention you feel should be given to each kind of high school course in the education of most high school students. Use this key:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>1 = No attention at all</th>
<th>2 = Little attention</th>
<th>3 = Moderate amount of attention</th>
<th>4 = Above average attention</th>
<th>5 = Extensive (a lot of) attention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Courses in the job or career field of your choice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Courses in science, mathematics, and reading skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Courses concerned with organizing and directing people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Courses concerned with how to understand and be of help to other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Courses in art, literature and music.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Courses concerned with life and religion.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

---Turn to next page---
Part IV. Circle the number of your choice after each of the following statements to indicate how much you agree or disagree with the statement about American high schools. Use this key:

1 = Strongly disagree  
2 = Disagree  
4 = Agree  
5 = Strongly agree

1. Too much importance is placed on memorizing the textbook and class notes, and not enough importance is placed on understanding and thinking about the course material.  
   1  2  3  4  5

2. It should be more important to learn basic skills in reading, writing, and mathematics and less time should be spent on extra subjects like art and music.  
   1  2  3  4  5

3. Too much teaching is on career or job skills and not enough teaching is on getting a broad, general education.  
   1  2  3  4  5

4. Too much use is made of standard ways of teaching like lectures, textbooks, paper writing, and not enough use is made of newer methods like films, television, class discussion.  
   1  2  3  4  5

5. Teachers are usually more interested in other things than teaching, and they usually do not teach very well.  
   1  2  3  4  5

6. Not enough attention is paid to teaching morals, values, and citizenship.  
   1  2  3  4  5

--Turn to next page--
Part V. Put a check on the line by the right answer:

1. How old are you?
   _______ 13-14 years
   _______ 15-16 years
   _______ 17-18 years
   _______ 19 or older

2. What is your sex?
   _______ male
   _______ female

3. What class are you in?
   _______ junior
   _______ senior

4. What is your position in your family?
   _______ only child
   _______ oldest girl
   _______ oldest boy
   _______ youngest girl
   _______ youngest boy
   _______ none of the above

5. What is your overall grade average in high school (approximately)?
   _______ A
   _______ B
   _______ C
   _______ D or lower

6. How would you describe your background (ethnic)?
   _______ Asian
   _______ Caucasian
   _______ Self identification
   _______ Black
   _______ Hispanic

7. According to the standard of living in the United States as a whole, in which of the following economic groups would your family be?
   _______ below average
   _______ somewhat above average
   _______ average
   _______ much higher than average

8. What is the occupation or job of the head of the household?

   ______________________________________

9. Would you be interested in courses that deal with the study of the future?
   _______ Yes
   _______ No

COMMENTS:

   ______________________________________
## APPENDIX C

### The Duncan Scale of Job Prestige*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Prestige</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dentists</td>
<td>96</td>
</tr>
<tr>
<td>Lawyers and judges</td>
<td>93</td>
</tr>
<tr>
<td>Physicians and surgeons</td>
<td>92</td>
</tr>
<tr>
<td>Architects</td>
<td>90</td>
</tr>
<tr>
<td>Aeronautical engineers</td>
<td>87</td>
</tr>
<tr>
<td>Social scientists</td>
<td>81</td>
</tr>
<tr>
<td>Natural scientists</td>
<td>80</td>
</tr>
<tr>
<td>Salaried managers in manufacturing</td>
<td>79</td>
</tr>
<tr>
<td>Authors</td>
<td>76</td>
</tr>
<tr>
<td>Stock and bond salespeople</td>
<td>73</td>
</tr>
<tr>
<td>Teachers, retail store buyers</td>
<td>72</td>
</tr>
<tr>
<td>Insurance agents and brokers</td>
<td>66</td>
</tr>
<tr>
<td>Actors, librarians</td>
<td>60</td>
</tr>
<tr>
<td>Retail trade managers</td>
<td>56</td>
</tr>
<tr>
<td>Local public administrators</td>
<td>54</td>
</tr>
<tr>
<td>Manufacturing foremen</td>
<td>53</td>
</tr>
<tr>
<td>Bill collectors, detectives, dieticians, furriers</td>
<td>52</td>
</tr>
<tr>
<td>Plumbers and steam fitters</td>
<td>50</td>
</tr>
<tr>
<td>Building managers</td>
<td>32</td>
</tr>
<tr>
<td>Plasterers</td>
<td>25</td>
</tr>
<tr>
<td>Bus drivers</td>
<td>24</td>
</tr>
<tr>
<td>Bakers</td>
<td>22</td>
</tr>
<tr>
<td>Motor vehicle manufacturing operators</td>
<td>21</td>
</tr>
<tr>
<td>Automobile mechanics</td>
<td>19</td>
</tr>
<tr>
<td>Members of the armed forces</td>
<td>18</td>
</tr>
<tr>
<td>Blast furnace operators</td>
<td>17</td>
</tr>
<tr>
<td>Waiters and waitresses</td>
<td>16</td>
</tr>
<tr>
<td>Farmers</td>
<td>14</td>
</tr>
<tr>
<td>Taxi drivers, charwomen, paperhangers, fishermen</td>
<td>10</td>
</tr>
<tr>
<td>Hucksters and peddlers, manufacturing laborers</td>
<td>8</td>
</tr>
<tr>
<td>Farm laborers</td>
<td>6</td>
</tr>
<tr>
<td>Coal miners, yam-, thread-, and fabric-mill machinery operators</td>
<td>2</td>
</tr>
</tbody>
</table>

*Created in 1961 by O. D. Duncan, see Jencks, C., *Psychology Today*, 1979.*
APPENDIX D

Comments Made by High School Students in the Study

Regarding values in general, a black senior girl commented:

I think this test is a very good one; people really don't have any values these days. They just take what they can get; they don't try to strive for the uppermost things in life...

Some of the responses which related to the Vocational Value or career choice follow.

From a 17 year old junior Caucasian boy from a suburban California school, who had an overall "A" grade point average, and came from an above average social class:

This questionnaire should specify first what the goals of the individual student are. For example: I believe that it would be greatly helpful to ask whether the person being questioned plans to go directly to college, to career, to vocational school, or if the student plainly does not know.

From a semi-rural small town, a 16 year old junior girl said, "It would be nice if a person could just take the courses on which he plans to base his career."

A 16 year old junior from the same area said, "More emphasis (sic) should be placed on the job training for preparation for students who do not desire to go on for further education in college."

Regarding the assignment of letter grades in measuring achievement, several responses follow.

A 16 year old Caucasian girl said, "I think the educational system places too much importance on achieving grades and not on the understanding of the subjects."
APPENDIX D (Continued)

An eleventh grade Asian girl stated,

The standards of my high school are too low. Getting a good grade is too easy. Also, teachers seem to care more about turning in your work, like reading a book and answering the questions than they do about you actually getting something out of their class that will stay with you for life. That is truly being educated—when you remember and understand. Not just memorizing to remember for a week.

With reference to academic counseling a 17 year old junior boy from the San Joaquin valley said,

This survey is very well done. It covers everything that a student might have a problem with in high school (especially when choosing classes).

Along the lines of social values and intercultural understanding a 17 year old girl said,

I think there should be more emphasis on learning and understanding other cultures and countries and especially languages. This would help in solving political and social problems.

Regarding educational practices, a senior male student from the Southwest said,

The teacher should make a person understand instead of making a person memorize something.

A 17 to 18 year old white male student with a relatively low grade point average (C- to D) said,

High school is just second-hand knowledge; learning must be a product of an experience, not the reading of that knowledge in a book someone else wrote.
APPENDIX E

Regarding the question on future study:

79% of those asked said yes
19% of those asked said no
2% abstained

Specifically, the question, #9, asked, "Would you be interested in courses that deal with the study of the future?"

A 16 year old Black junior, from an average social class background said, "If you get more high school students' minds on the future, they would be more careful of the present."
APPENDIX F

TUCSON PUBLIC SCHOOLS

1010 EAST TENTH STREET TUCSON, ARIZONA 85719 161

RESEARCH DEPARTMENT APPROVAL FORM

Application for Approval to Make Contacts in District One to Gather Information or Do Research

Mrs. Mary P. Allen 1265 Altschul Ave., Menlo Park
Name Street Address CA 94025 Telephone

Doctoral Candidate
Univ. of the Pacific(City) Stockton (State) CA (Zip) 95207
Position) Univ. of the Pacific Educ. & Couns. Psych(Dept.)
Organization or Institution
Univ. of the Pacific
Supervisor or Advisor Dr. Preston Gleason (Phone) 946-2167

Intended use of information or research: The data gathered will be incorporated with data from Northern California and Virginia, and will be used as part of a doctoral dissertation.

The information or research will require the following contacts: (State number required.)

Schools Administrative Teachers
Students 100 high school students Grade(s) -- Level(s) 50 Jr./50 Sr.

Other (specify)

If information only is required, attach the full explanation of request.

If research is required, please attach the following:

a. Copy of full proposal
b. Completed Advisor's Approval Form
c. Three (3) copies of measurement instrument(s)
d. Three (3) copies of the abstract
e. List of other persons who will enter the school(s) with this program: (on lines below)

Dr. Stephen Powers, a friend in the research dept. who has already spoken with Barbara Prentiss about the project.

I agree to the following terms on the collection and use of data:

a. No persons or schools will be referred to by name in connection with any data gathered for this study.
b. The researcher will advise every study participant of his right to refuse to answer any questions either written or oral. This will be stated on any written instrument or prior to any interview for gathering data.
c. Clearance must be obtained from the Research Department and the schools involved if persons other than those specifically named in this application will work with students and/or District personnel in connection with this project.
d. Notify the contact person in the Research Department when work in the schools is completed (791-6138).
e. Five copies of the results of the project will be furnished to the Research Department, Tucson Public Schools. The report will be filed and made available to District personnel at their request.

11/19/79 (Date) Mary P. Allen (Signature)

2/76 (1000)
November 15, 1979

Mrs. J. Kenton Allen
1265 Altschul Avenue
Menlo Park, CA 94025

Dear Mrs. Allen:

I regret I have taken so long to respond to your letter. I have been trying to think of ways to get access to 200 high school students. Unfortunately I've come up with very few leads. There is one young woman, I know, who might possibly be able to help me. She works as a special projects teacher at a nearby school. However, I'm not hopeful. If you don't mind, I will keep your questionnaire and see if my friend can be of help. I am sorry I haven't responded quicker or more positively.

Sincerely yours,

Kevin Ryan

KR/jf
TO: Principals  
FROM: Harry J. Reynolds  

April 19, 1978

This letter is to introduce Mrs. Mary P. Allen, a doctoral student at the University of Pacific, Counseling and Psychology. She is interested in securing the consent of approximately 25 students and or teachers from each of four schools, who would be filling out the questionnaire attached.

I believe that her proposal has merit and I would appreciate your cooperation, if you can find the time and means of lending her assistance.

She will be contacting you in the very near future.

HJR:rs

cc: Mr. Merle Fruehling, Asst. Superintendent, 
    Educational Services 
    Mrs. Mary P. Allen