

PERCEPTIONS OF SELF-IDENTIFIED HANDICAPPED  
AND NON-HANDICAPPED HIGH SCHOOL SENIORS TOWARD COUNSELING

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(ABSTRACT)

With the advent of federal legislation in the area of public education for handicapped students, there have been concerns expressed about the role of the counselor in meeting the needs of this group. This investigation focused on self-identified handicapped and non-handicapped high school seniors' perception of three areas of counseling: 1. continuing education; 2. finding employment; and 3. influencing post-high school plans.

The research method utilized a secondary analysis of data contained in the data set High School and Beyond (1980). The sample consisted of 411 self-identified handicapped high school senior students from public secondary schools who had participated in a special program for physically or educationally handicapped high school students within the school. An equal number of non-handicapped high school senior students were randomly selected for the comparison group. Non-parametric statistical tests, Mann-Whitney U Test and Kruskal-Wallis 1-Way ANOVA, were used to analyze six hypothesis.

Of six null hypotheses, four were accepted and two were rejected. Rejection of the two null hypotheses led to the following conclusions. The handicapped group perceived counselors as influencing their post-high school plans more than the non-handicapped group. Also, the handicapped group perceived differences in counselor influences based on their primary handicapping condition.

To

—for everything



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## Chapter 1

### INTRODUCTION AND STATEMENT OF THE PROBLEM

Federal legislation has played a large role in the education of handicapped individuals. This legislation has included Public Law 94-142, Public Law 94-482, and Public Law 93-112. Public Law 94-142, Education for All Handicapped Children Act of 1975, assures that all handicapped children, between 3 and 21 years of age, have a free and appropriate education in a least restrictive environment; that children are identified; appropriate records are maintained; individualized educational plans are developed; and due process procedures are implemented (Fagan & Wallace, 1979; Hohenshil & Humes, 1979; Humes, 1978). Public Law 94-482, Vocational Amendments Act of 1976, specifies certain appropriations for vocational programs for handicapped individuals (Humes, 1982). Public Law 93-112, Rehabilitation Act of 1973, Section 504, specifically forbids federal financial aid to any program that excludes an otherwise qualified individual solely by reason of his handicap (Hohenshil & Humes, 1979; Vacc & Clifford, 1980; Zabel, 1982).

The developmental counseling model prevalent in the 1960's and 1970's assumed that school counselors would serve the handicapped students by referring them to others (e.g., school psychologists, special education teachers) rather than taking an active role in pro-

viding services to this population (Hohenshil, 1979; Humes, 1982). However, with the advent of the above federal laws in the area of public education for handicapped students, there have been concerns expressed about the role of the counselor in meeting the needs of this group. These concerns have focused on such areas as developing individualized education programs in the affective domain (Kameen & McIntosh, 1979), implementation of career plans and placements (Brolin & Gysbers, 1979; Humes, 1982; Sinick, 1979), <sup>and</sup> the advocacy role of the counselor <sup>in the delivery of services</sup> (Hohenshil & Humes, 1979; Neely, 1982; Vacc & Clifford, 1980), and stereotypes held by counselors about handicapped individuals (Humes, 1982; Loesch, 1980; Nathanson, 1979; Vaac & Clifford, 1980).

The latter concern is of particular significance to this investigation because stereotyping can affect the counselor-counselee relationship (Harasymiw, Horne, & Lewis, 1976; Nathanson, 1979; Vaac & Clifford, 1980). That is, a counselor who holds negative stereotypes toward handicapped individuals may influence the perceptions of how handicapped individuals view the counseling process. In addition, the handicapped populations' attitude about helping professionals is often overlooked, but may be crucial to the counseling process (Loesch, 1980). Handicapped students may feel unwelcome in the counseling setting and, thus, not use services available to them. In other words, the way a student "perceives the counselor is positively correlated with the way he will use the counselor." (Betz, 1970, p.6)



In addition, students', in general, perceptions of the counselor role are important if counselor services are to be used (Heilfron, 1960). Rippee, Hanvey, and Parker (1965) support this, stating:

"Due to the inherent relationship between counselors and students, special significance is attached to the perceptions students have of counseling. Since students' perceptions of the role of the counselor may determine whether or not they use counseling services, and since in the last analysis, their concepts may determine the success or failure of a counseling program, the need to determine students' concepts of the role of counselors...seems manifestly important." (p. 696)

In addition, Betz (1970) states:

"The degree to which the counselor is able to supply or deliver his services to his clients, and the degree to which they are able to use them (appropriateness) is one measure of the counselor's effectiveness." (pp. 2-3)

The above authors were referring to students', in general, perceptions of counselor roles and services, but handicapped students' perceptions require additional attention. Concerns about meeting the needs of the handicapped student can only be of any significance if the counselor is in touch with handicapped students. Hence, increasing counselor's knowledge of handicapped high school students' perception of counseling services may lead to improvements in the counseling system. It may indicate the need for specialized counselors. In addition, with knowledge of what various people (e.g., father, counselor, teacher) think the handicapped individual should do post-high school, there is a potential to further develop the handicapped individual's ability to make maximum use of his strengths—to expand career options. This expansion is necessary according to

Jordan (1976) and MacGraw and Bitter (1974). Jordan (1976) reports that too few handicapped individuals have been assisted to pursue higher education or to pursue a broad range of career options, but rather, they are assumed to be able to hold skilled or unskilled jobs. MacGraw and Bitter (1974) relate that handicapped individuals often receive subtle communications from counselors that their needs or vocational aspirations are not too important.

However, most of the literature related to handicapped students has focused on their needs rather than on their perceptions. Although it is generally assumed that one's perception about any services determines whether or not that service is used, no apparent systematic studies have been done with handicapped high school students to determine their perceptions about counseling services. However, a national data base—High School and Beyond (1980)—contains information about handicapped senior students' perceptions of counseling that have not been systematically studied. Therefore, the purpose of this investigation was to fill the above gap and in so doing, provide counselors with a "new" data base about handicapped students.

#### High School and Beyond (HSB)

HSB (1980) is a national longitudinal study for the 1980's conducted by the National Opinion Research Center of the University of

Chicago. HSB is a part of the national longitudinal surveys of American youth begun with the 1972 high school seniors. These surveys were initiated by the National Center for Education Statistics.

Examples of research conducted with the HSB data base include: a description of the high school students within the data set (Peng, Feters, & Kolstad, 1981), attitudes toward work (Lewin-Epstein, 1981), a comparison of New York state high school students and the HSB students (New York State Department of Education, 1981), and a comparison of public and private schools on many variables (Coleman, Hoffer, & Kilgore, 1981a, 1981b, 1981c; Crain & Ferrer, 1981; Diprete, Muller, & Shaeffer, 1981). These research efforts demonstrate the flexibility, variability, and capability of the HSB data base.

Two groups of students participated in the 1980 survey—seniors and sophomores. A sub-sample of these students will be periodically resurveyed in the years ahead to determine educational and occupational experiences.

The sample design consisted of a two-stage probability sample. Schools were selected in the first stage with probability proportional to estimated enrollment, except for special strata schools which were oversampled (i.e., alternative public schools, Cuban-Hispanic-public, Cuban-Hispanic-Catholic, other Hispanic-public, high performance private, other non-Catholic private, Black Catholic). The oversampled special strata schools were defined

as having 30% or more of enrollment from the indicated subgroup. The numbers of schools selected in the sample was 1,122. The number participating in the sample was 1,015 schools because some schools declined to participate in the study. Students were randomly selected from the participating schools in the second stage of the sampling procedure. The total number of students selected in the sample was 69,662; the number participating was 58,270--28,240 senior students and 30,030 sophomore students. Participation was less than selection because some students declined to participate in the study.

One data source for the HSB student file was sophomore and senior questionnaires which included areas such as background, school activities, out-of-school activities, attitudes, post-high school plans, and aspirations. Some items were identical in the two questionnaires. However, the items related to counseling that were of interest in this investigation were unique to the senior questionnaire. Hence, only senior students were selected for this investigation. Also, these selected students attended public high schools, excluding alternative public schools.

### Conceptual Framework

A conceptual framework useful in examining the investigation's variables is the "attitudinal barrier cycle" developed by Goodman and Yasumura (1980). This cycle contains the following five components:

1. Lack of basic knowledge and inappropriate application of technical skills in a variety of situations;
2. Feelings of being ill-at-ease and embarrassed;
3. Frustration and irritation;
4. Increases hostility to oneself and child;
5. Close one's mind to ideas and learning;

The cycle could only be entered at the point of inadequate knowledge or inappropriate application of skills and followed a sequential pattern from inadequate knowledge to being ill-at-ease to frustration to hostility to closed mind (See Figure 1). The cycle was designed in reference to helping professionals (e.g. nurses, teachers). This investigator adapted the "attitudinal barrier cycle." The adapted cycle influences the counselor's attitude toward or perception of handicapped students and students, in general, as well as influencing the student's perceptions about himself. In addition, the attitudinal/perceptual barrier cycle may be entered at any point (See Figure 2). If handicapped students or students in general perceive the counselor as having a less than positive response, the student may not seek out the counselor for assistance with vocational or educational planning. The student's perception of the counselor may also be less than positive due to inadequate and/or inappropriate knowledge of the counselor's role. An additional factor that may influence the student's perception of the counselor is the counselor's perception of the student. Negative responses on the counselor's

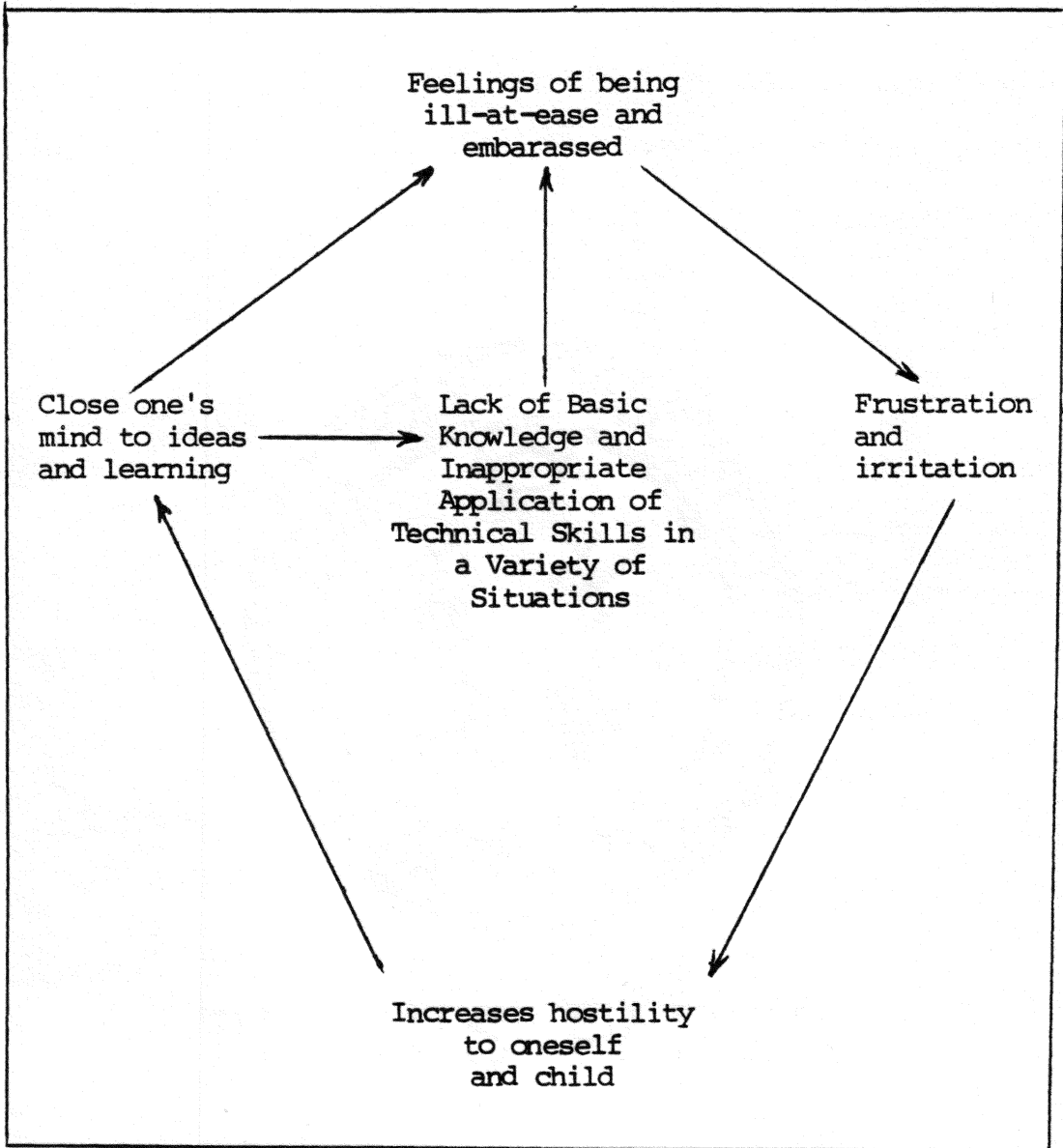


Figure 1. Attitudinal barrier cycle. (From "Physically Handicapped Children in the Mainstream: A trans-disciplinary Application of Physical Management Techniques" by Gay Goodman and Kathleen Yasumura, paper presented at the Annual International Convention of the Council for Exceptional Children, Philadelphia, Pa., April, 1980. (ERIC Document Reproduction Service No. ED 187 069))

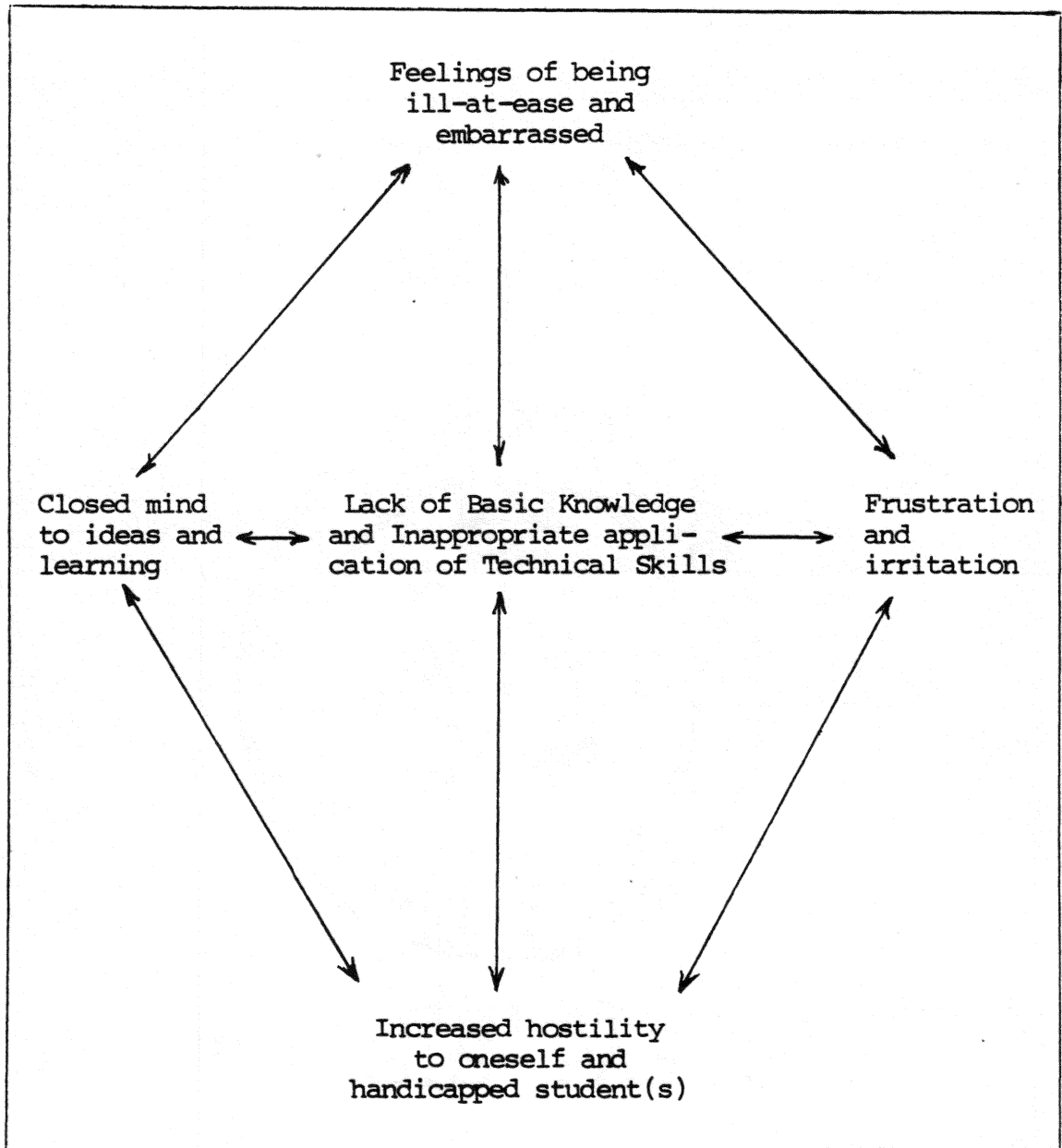


Figure 2. Perceptual barrier cycle. (Adapted from Handicapped Children in the Mainstream: A Transdisciplinary Application of Physical Management Techniques" by Gay Goodman and Kathleen Yasumura, paper presented at the Annual International Convention of the Council for Exceptional Children, Philadelphia, Pa., April, 1980. (ERIC Document Reproduction Service No. ED 187 069))

part to the student generates avoidance behavior by the student (Siller, 1976).

### Statement of the Problem

In view of the aforementioned conceptual framework, two research problems were formulated:

1. What are the perceptions of self-identified handicapped and non-handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment and post-high school planning?

2. When categorized by primary handicapping condition, what are the perceptions of self-identified handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment, and post-high school planning?

### Research Questions

Based upon the above problems, the specific research questions were:

1. What general descriptive characteristics describe the groups of handicapped high school seniors and non-handicapped high school seniors?

2. Do handicapped high school seniors perceive their school as



providing counseling that will help them continue their education differently than non-handicapped high school seniors?

3. Do handicapped high school seniors perceive their school as providing counseling that will help them find employment differently than non-handicapped high school seniors?

4. Do handicapped high school seniors perceive the counselor as influencing their post-high school plans differently than non-handicapped high school seniors?

5. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive their school as providing counseling that will help them continue their education differently?

6. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive their school as providing counseling that will help them find employment differently?

7. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive the counselor as influencing their post-high school plans differently?

### Null Hypotheses

The latter six research questions formed the basis for the following null hypotheses:

$H_{01}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school

provides counseling that will help them continue their education.

Ho<sub>2</sub>: There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

Ho<sub>3</sub>: There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

Ho<sub>4</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

Ho<sub>5</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

Ho<sub>6</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

### Definition of Terms

For purposes of this investigation, the following terms were operationally defined:

Handicapped high school seniors— Students in their final year of

education in public secondary schools within the United States in 1980 who as a group, were self-identified as having a specific learning disability, visual handicap, speech disability, orthopedic handicap, deafness, other health impairment, or physical condition that limits the kind or amount of work performed on a job or affects chances for more education, or being hard of hearing. These students also reported participating in a handicapped program within the school.

Non-handicapped high school seniors—Students in their final year of education in public secondary schools within the United States in 1980 who did not self-identify themselves as having a specific learning disability, visual handicap, speech disability, orthopedic handicap, deafness, other health impairment, or physical condition that limits the kind or amount of work performed on a job or affects chances for more education, or being hard of hearing. These students did not report participating in a handicapped program within their school.

Primary handicapping condition—Although the student data base of High School and Beyond (HSB) identified handicapping condition as items 408 through 415 (See Appendix B—Table A), a student could be placed in a handicapping category more than once. To avoid this problem, a weighting procedure was devised by the investigator whereby, first, each student who reported participating in a handicapped program within the school was placed in only one category of handi-

capping conditions. This resulted in 54 categories which were considered unwieldy for data analysis. Therefore, as a second step, the type of handicapping condition became the criteria by which individual students were further grouped. That is, students were eventually grouped into 13 useable categories based on a collapsing of the 54 handicapping condition categories. This grouping was determined by a weighting procedure (See Chapter 3--Weighting Procedure) and yielded the 13 categories of handicapping conditions (independent variables) listed below:

1. learning disabled
2. learning disabled plus one or more physical handicaps: visual, hearing, speech, orthopedic, other health impairment, physical condition that limits
3. visual
4. visual and/or hearing, speech, orthopedic, other health impairment, physical condition that limits.
5. hearing (hard of hearing; deafness)
6. hearing and/or speech, other health impairment, physical condition that limits.
7. speech
8. speech, and/or other health impairment, physical condition that limits.
9. orthopedic

10. orthopedic and/or other health impairment, physical condition that limits.
11. other health impairment
12. physical condition that limits
13. physical condition that limits and other health impairment

Perception of school as providing counseling that will help them continue with their education--Defined as item number 184 within student data base of HSB that states: School provided me with counseling that will help me continue my education.

Perception of school as providing counseling that will help them find employment--Defined as item number 185 within student data base of HSB that states: School provided me with counseling that will help me find employment.

Perception of counselor as influencing their post high school plans--Defined as item number 235 within student data base of HSB that states: How much has the guidance counselor influenced your plans for after high school?

#### Limitations of the Investigation

Inasmuch as secondary analysis was used, this investigation was limited in the following ways:

1. No definition of what handicapping conditions meant was given to students participating in the HSB study. Therefore, it is unknown what constituted a given condition in the student responses,

(e.g. Does orthopedic handicap mean a student limps, wears braces, or what?) Therefore, precise operational definitions of the 13 independent variables were not possible.

2. Students' perceptions of the counseling roles and services were limited by the areas included in the research instrument (i.e. student questionnaire).

3. Not all handicapping conditions were represented by the subjects in the HSB. Specifically, mentally retarded and emotionally disturbed students were not included. These particular "categories" were not included in the student questionnaire.

#### Strengths of the Investigation

This investigation has the following specific strengths:

1. The data base, High School and Beyond (HSB), is a recent national data base.

2. This data base (HSB) has information about handicapped students' perceptions of counseling roles and services that have not been systematically studied.

3. The sample size is large.

#### Basic Assumption

An assumption made in this investigation was that senior high school students provided accurate and truthful responses to the items on the student questionnaire.

### Summary

In summary, problem statements were:

1. What are the perceptions of self-identified handicapped and non-handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment and post-high school planning?

2. When categorized by primary handicapping condition, what are the perceptions of self-identified handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment, and post-high school planning?

Based upon the problems seven research questions were delineated:

1. What general descriptive characteristics describe the groups of handicapped high school seniors and non-handicapped high school seniors?

2. Do handicapped high school seniors perceive their school as providing counseling that will help them continue their education differently than non-handicapped high school seniors?

3. Do handicapped high school seniors perceive their school as providing counseling that will help them find employment differently than non-handicapped high school seniors?

4. Do handicapped high school seniors perceive the counselor as influencing their post-high school plans differently than

non-handicapped high school seniors?

5. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive their school as providing counseling that will help them continue their education differently?

6. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive their school as providing financial counseling that will help them find employment differently?

7. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive the counselor as influencing their post-high school plans differently?

The latter six research questions formed the basis for the null hypotheses.



## Chapter 2

### REVIEW OF LITERATURE

Literature was reviewed in the areas of counseling, psychology, and education from 1960 through 1983. Overall, the review included much information concerning needs of handicapped students, (e.g., Cochrane & Marini, 1977; Hosie, 1979), attitudes toward or perceptions of handicapped persons (e.g., Lombana, 1982b), and techniques for changing attitudes (e.g., Fix & Rohrbacher, 1977; Lombana, 1980, 1982a, 1982b). However, there was scant literature on the handicapped students' perception of counseling roles and services.

Within the framework of the above overview, the review of literature focused on the following areas: (a) non-handicapped students' or counselees' perception of the counseling role; (b) handicapped and non-handicapped students' perceptions of the adequacy of counseling services; and (c) counselors' or helping professionals' perceptions of handicapped and non-handicapped students or counselees.

#### Non-Handicapped Students' or Counselees' Perceptions of Counseling Roles

A search of the literature revealed information about non-handicapped students' or counselees' perceptions of the counseling role. No literature was found that included perceptions of handicapped

students relative to the counseling role per se.

Expectations and perceptions of high school students concerning counseling roles have been investigated by several researchers. Gladstein (1969) reported the expectations of 181 high school students in Minnesota. The students were from different schools with different ethnic, socio-economic, and religious backgrounds, but all were clients at a counseling center. Expectations included: career planning, determining interests and abilities, obtaining information about college, and coming to a better understanding of self.

Van Riper (1971) surveyed 735 ninth grade students in 14 schools from one Michigan county. Students clearly perceived the counselor as someone who could assist in educational planning (87%) and many students (67%) felt they could talk to a counselor about school problems. However, few students (27%) perceived the counselor as someone with whom to discuss personal problems. In addition, 42% of the students perceived the counselor as usually or nearly always helpful. On the other hand, 29% of the students perceived the counselor as seldom or almost never helpful.

In another study of expectations and perceptions of the role of the counselor, Mason, Arnold, and Hyman (1975) found high school students and parents held higher expectations than perceptions on 44 counselor functions. An interesting finding was that students expected counselors to be parents, to be active in discipline and attendance, and to plan their high school programs. Their percep-

tions were similar to expectations with the exception of planning their programs which was ranked third in expectation, but seventh in perception (8 possible ranks, with 1 highest). Students' perceptions of the functions relative to college and vocational advising were ranked 5 and 6 respectively.

Bebb initiated a study of students' and counselors' perceptions of the counseling role prior to developing a model high school counseling program in an Indiana high school (1972). A sample of 750 students in grades nine through twelve from a student body of 2000 participated in a survey. Students rated five counselors on a 7 point Likert-type scale (1 most helpful to 7 least helpful) as to the perceived quality of the counseling relationship. Findings included the counselor being perceived as understanding (2.5), listening (2), and helpful in educational planning (2.7). However, counselors were not perceived as being particularly helpful in career planning (3.3) and were not assisting students to gain self awareness and self knowledge (4.5). Students did not feel they had changed as a result of counseling (5.1). Additionally, the 750 students completed an 81 item questionnaire concerning the counselor's duties. Two hundred ninety (290) students indicated a duty was to help students develop post-high school educational plans; 343 indicated to help students revise their educational plans; and 226 indicated to help students make educational choices. On the other hand, only 138 students indicated a duty was to help students find post-high school

employment; and even fewer students indicated counselors had a responsibility to work more closely with business and industry for the purpose of improving placement services. Furthermore, 136 students perceived a counselor as being responsible for the evaluation and educational placement of students who are physically handicapped.

In a related study, Dunlop (1965) investigated the perceptions of the counselor's role by students, parents, teachers, administrators, and counselor educators. An opinionnaire was developed and pretested that included 46 items in 7 counseling areas: vocational, educational or personal counseling, testing and diagnosis, administrative-clerical, teacher-role expectancy, and counseling profession (e.g. items that related to ethical conduct). The 50 randomly selected senior students (25 college preparatory, 25 job-bound) were from a large Southern California high school. Only students' perceptions are presented in this review. College preparatory students perceived the counselor as a "good" choice for personal counseling only when no one else was available. Students indicated counselors should be involved in educational and vocational counseling, and testing and diagnosis. But, job-bound students were significantly less "enthusiastic" than others in relation to interpretation and explanation of test data. Students also expected counselors to "advise" students, be stern with failing students, perform some clerical tasks, and set up class schedules.

In another study (Betz, Engle, & Mallison, 1969), non-college bound, vocationally oriented high school graduates' perceptions of counseling roles and services were investigated. The investigators conducted structured interviews of 309 randomly selected high school graduates who were judged to be non-college bound by teachers, counselors, and administrators. Most graduates (77.9%) related that the persons influencing their educational and vocational decision were: self, parents, or peers. Only 7.2% responded that counselors influenced these decisions. The investigators firmly state "these data do not support the contention that counselors spend the majority of their time in educational and vocational counseling." (p. 992)

Betz (1970) further studied high school students' perceptions of counselors' characteristics. The sample was a random selection of 872 high school students in the public high schools of Kalamazoo, Michigan. A Counselor-Image Questionnaire (CIQ) was field tested in this study after "face" validity was ascertained. Reliability coefficients required further verification after this initial study. The questionnaire contained 15 items and students were to rank counselors on a scale of 1 to 5, with 1 being the lowest and 5 the highest possible score. Results indicated that students perceived their counselors as fair, friendly, concerned, and as having a good attitude toward students. However, they did not perceive the counselor as trustworthy--someone to go to with a personal problem (mean score 2.4). The counselor was also perceived as being only sometimes

available (3.3). Results indicated no difference of perceptions between male and female students.

Support for the above findings was found in a study by Bonnelle (1975). Bonnelle found high school students rated counselors highly on personal characteristics compared to other adults—the order was ministers, counselors, teachers, parents, principals, and policemen.

Shapiro and Asher (1972) after analyzing data from over 5,000 high school seniors (a subsample from 400,000 students in grades 9 through 12 in Project TALENT, initiated in 1960) reported 39% of the males and 43% of the females did not talk to counselors about post-high school plans. Students who discussed their post-high school plans with others (e.g. counselors, parents, peers) generally enrolled in college preparatory programs and planned to attend a 4 year college. In fact, Erpenbach (1973) in testimony to Congress concerning the need for continued funding for counseling and guidance services commented about conclusions from Project TALENT. In spite of Shapiro and Asher's findings, Erpenbach stated there was a "trend, especially for girls to discuss plans for after high school with a counselor." (p. 522) Yet, he also stated "the counseling of girls is a critical guidance challenge." (p. 556)

Mattison and Starkey (1970) found non-college bound seniors did not perceive the counselor as someone to talk to about a career. In fact, they would rather talk to someone other than a counselor. Only those seniors planning on attending a college agreed they had talked

to a counselor about their career. In addition, students did not perceive the counselor as a source of help with personal problems.

Perceptions of high school students toward the counseling role are often different from counselors' perception of this role. Leaverton (1976) conducted a survey of 225 randomly selected students in three Colorado high schools and 45 counselors. Students indicated they were not receiving much vocational counseling, but rather were receiving service in the form of choosing a college. On the other hand, counselors felt students were receiving much vocational counseling through career planning. In addition, students perceived the counselor in the role of disciplinarian, and as being "dictatorial." Again, counselor perceptions of their role differed from students. Counselors did not perceive themselves as either disciplinarians or "dictatorial."

Another study that focused on the counselor as an information source in choosing a college was done by Kerr (1962). Eighty eight per cent (88%) of 1,350 Iowa senior high school students felt the counselor was helpful to some degree in the college decision. Yet, 37% felt the counselor did not influence their college decision.

Warman (1960) studied perceptions of the counseling role in a college setting. Warman sampled five groups: students before counseling, students after counseling, counseling center professional staff, student personnel workers, and teaching faculty. The participants were expected to rate 100 statements of problems on a 5 point

scale as to appropriateness of the problems for discussion with a counselor. Students selected items relative to vocational choice as most appropriate for discussion with a counselor, followed by routine college concerns, (e.g., learning proper study habits). The least significant area for discussion with counselors was the area of adjustment to self or others. Counseling staff felt discussion in the area of adjustment to self or others was more appropriate than any other group.

Resnick and Gelso (1971) replicated the Warman study, but in addition, added a sixth group that included students in an advanced undergraduate psychology course. Results of the study tended to support Warman's findings. But at this time, all groups perceived adjustment to self and others as more appropriate for discussion with counselors.

In another study of college students, Tinsley and Harris (1976) administered an 88 item Likert-type questionnaire concerning expectations for counseling to 287 students in an introductory psychology class. Students expected to have an expert counselor who was genuine, trustworthy, and accepting. They did have lower expectations regarding counselor's understanding of their problems and the outcome of the counseling. In fact, students seemed to doubt that counseling could ever be helpful to them. Dreman (1977) and Dreman and Dolev (1976) studied client expectations and preferences for a university student counseling service. The counseling service



offered individual and group counseling for personal and inter-personal problems and vocational-educational counseling. Yet, the questionnaire that was administered focused only on the personal and inter-personal problems, (i.e., analyzed emotional problems of clients). Both groups, client and non-clients, preferred more counselor activity than they expected to get. Non-clients, once again, did not perceive themselves as potential users of counseling services. There was more congruence between preferences and expectations concerning counseling in the client population in contrast to the non-client population.

Students' views of counselor characteristics and counseling role have also been ascertained by several other investigators. Strong, Hendel, and Bratton (1971) studied 67 volunteer college sophomore women who were divided into three groups and given an adjective checklist. One group was to check adjectives that would describe counselors. The second group was to describe advisors, and the third group was to describe psychiatrists. Further, each student group was to indicate what topics would be discussed with the individuals they were describing. Students' perceived counselors as more friendly, polite, and warm than psychiatrists. However, psychiatrists were perceived as knowing more and being more able than counselors. Hence, appropriate topics for discussion with psychiatrists were personal concerns. Counselors were seen as the appropriate source of help for educational and vocational problems as well as for help in

increasing self-knowledge and self-development.

Another study concerning counselor characteristics and role was conducted by Gelso and Karl (1974). They specified the type of counselor, rather than using the generic term counselor as presented by Strong, Hendel, and Bratton (1971). Participants in the Gelso and Karl (1974) study were 436 students in an introductory psychology class. Again, each student adjectively described one help giver—counseling psychologist, psychiatrist, high school counselor, college counselor, clinical psychologist, and advisor—and indicated what problems would be discussed with the described individual. Descriptions of high school and college counselors differed minimally. However, they differed in many ways from the counseling psychologist, clinical psychologist, and psychiatrist. The school counselor was perceived as less knowledgeable, analytic, purposeful, interesting, and more dull than the counseling or clinical psychologist and the psychiatrist. Discussion of personal concerns were more likely to be discussed with psychiatrists than with college counselors, advisors, or high school counselors. Counseling psychologists were more likely sources of help for discussing uncomfortable feelings, and gaining insight into strengths and weaknesses, than high school or college counselors, and advisors.

In a study designed to identify a hierarchy of help giving sources for emotional or educational-vocational problems, 168 college students completed a questionnaire (Christensen & Magoon, 1974).

They found counselors to be ranked fifth to seventh in a list of 12 sources. Friends and parents would be consulted first with emotional problems. On the other hand, faculty would be consulted prior to friends and parents with educational-vocational problems.

In a study by Webster and Fretz (1978) Asian-American, Black, and White college students were asked to rank 12 sources of help (with 1 being first source and 12 being the last source) with educational/vocational problems and emotional problems. The university counseling center was ranked third as a source of help for educational/vocational problems and fifth for emotional problems. Parents were ranked first for both types of problems. The least preferred sources of help included community mental health services and private psychotherapists. There were no statistically significant differences in rankings across race, sex, or problem type.

#### Summary of Review of Literature—Non-Handicapped Students' or Counselors' Perception of Counseling Roles

The review of the above literature showed the following trends:

1. Students expected to see an expert counselor who was genuine, trustworthy, and accepting, but not necessarily understanding.
2. Students' expectations and perceptions of the counseling roles frequently differed.
3. Students perceived a counseling role to be one of assisting in educational planning. Frequently, students perceived a role to

include vocational counseling. However, job-bound students did not perceive vocational counseling as a role. In addition, students generally did not perceive personal counseling as a role, but, counselors perceived personal counseling as an important role.

Expectations concerning counseling and the perception of the counseling role by high school and college students have sometimes led investigators to study adequacy of counseling services.

#### Handicapped and Non-Handicapped Students' Perceptions of the Adequacy of Counseling Services

More research has been done since 1975 in the area of perceptions of the adequacy of counseling services by students than in prior years due to federal legislation. Literature reviewed in this section included the years 1972 to 1981.

Ninety four per cent (62,181) of the public high school senior students in Virginia participated in a survey administered by the Virginia Department of Education in May 1976. Only the questions related to guidance and counseling services were analyzed by Anderson (1978). A 10% random sample of students (6,202) were selected. Forty eight per cent (48%) were male, 52% were female, 80% white, 20% minority (Black and other); 39% were participating in a general high school program of study, 40% college preparatory, and 21% vocational. Based on the Short Test of Educational Ability--Level 5, one

third of the sample was placed in each ability level--high (I.Q. 108-145), middle (I.Q. 93-107), and low (I.Q. 65-92). About two thirds of the students were enrolled in urban/suburban schools and one third in rural schools. Results showed a favorable attitude toward counselors and counseling services. Students (49.5%) perceived counseling services as most helpful relative to career choice and least helpful (81.3%) in finding employment. However, counselors were rated lowest of six sources of help in choosing a career. The primary source of help was parents (84.3%), followed by courses (69.5%), work experience (61.3%), friends (56.4%), and teachers (50.1%). Counselors received the highest percentage (28.5%) for all sources for a response of unimportant in relation to choosing a career. Half of the seniors (50.3%) perceived the counselor to be available and helpful in regard to questions, needs, and personal problems; 15% perceived the counselor as helpful, but not often available; 15% available, but not often helpful; while 6.9% of the students perceived counselors negatively on both availability and helpfulness. However, 76% of those students who used counseling services considered it helpful. Subgroups with the most favorable attitude toward counseling services were: females, minorities, students in vocational programs, students within the middle range of scholastic ability, and students from small, rural schools.

Counselor-student perceptions of the extent of performance of guidance services were studied by Muro and Revello (1976). They ad-

ministered a modified version of the Schedule of Educational Vocational Guidance Services Inventory to a volunteer sample of 81 counselors and a random sample of 399 high school seniors in Maine. The inventory consisted of 92 items in the following areas: information (e.g., for consideration in the process of selecting a college), counseling (e.g. concerning personal problems), follow-up (e.g., follow-up surveys of graduates), orientation, (e.g., student handbook), and placement services (i.e., assistance in finding employment). Findings included: students did not perceive counseling services related to personal adjustment or self-understanding as being rendered; counselors, however, felt these services were provided. Both groups reported counselors were providing information and help with college placement, but students felt business and trade school information was not being provided. Students did not perceive assistance was given in helping them find employment; whereas, counselors reported this service was at least partially performed.

Another area of guidance services is student career development. This area was the subject of a national survey sponsored by the American College Testing Program in 1973. The sample consisted of 32,000 eighth, ninth, and eleventh grade students (Noeth, Roth, & Prediger, 1975; Prediger, Roth & Noeth, 1974). Students completed the Assessment of Career Development. This inventory consists of 267 items covering occupational awareness, self-awareness, career planning, and student reactions to career guidance experiences. Among the findings

for eleventh grade students were: 90% had discussed their occupational choices with a parent, relative, or guardian; 42% had never talked with a counselor or teacher about the relationship between the jobs they were considering and their goals, interests, and abilities; 50% reported little or no help with career planning from their counselor or their school, and only 13% reported they had received "a lot of help." Yet, career planning (78%) was the highest priority perceived need for help. The second priority (67%) perceived need was for help finding after school or summer employment. Discussions of personal concerns with a counselor ranked eighth (30%) of nine needs.

The National Longitudinal Study (NLS) of the High School Class of 1972 was initiated by the National Center for Educational Statistics. A stratified random sample of 19,136 students from 1,070 public, private, and church-affiliated high schools participated in the base-year survey (Peng, Stafford, & Talbert, 1977). Feters (1974) reported on findings from the NLS relative to student responses to questions concerning guidance and counseling. Over 62% of the senior students felt they had received help with educational planning, but only 38% felt they received sufficient help in finding employment. In addition, of 6 choices for influencing students' post-high school plans, counselors ranked lowest. Only 9% of the students felt counselors were an influence in this area. Ninety-one per cent (91%) gave themselves credit for their post-high school planning; 43% indicated parents influenced this area; and 25%

indicated peers.

In another study of priorities related to counseling, Leviton (1977) found students in Edina, Minnesota public high schools ranked high school program planning as most important followed by post-high school planning, academic problems, and career education. Least important were peer relations, help with student discipline, and student supervision. Further, of the 550 students surveyed, 26% would discuss career indecision with a counselor, while 45% would discuss this area with a parent. Personal problems would be discussed with a relative/friend or parent, 54% and 10% respectively. Only 4% would discuss personal problems with a counselor.

Student attitudes toward guidance services were also surveyed by Wells and Ritter (1979). They surveyed 550 students in randomly selected classes in one large high school. Over 80% of the students would go to a counselor to change a class or check on graduation requirements. In addition, about 25% would seek a counselor to discuss choosing a college, financial aid, deciding a college major, and career decisions. Only four to eight per cent (4 to 8%) of the students would see a counselor to discuss personal or social problems, or for help in finding a job or information about career opportunities; also, 33% of the students responded counselors were usually not helpful and 48% did not feel free to discuss problems with counselors.

Another study comparing role priorities of counseling and gui-



dance functions was implemented by Handler (1981). This study compared role priorities and satisfaction with 21 counseling and guidance services in a public New Jersey high school. Respondents were: 350 seniors, 83 teachers, 25 counselors, administrators and special services team members (e.g. school nurse, social worker). For students, two expected, important and well performed guidance services were planning students' high school program and college planning. Further, students and teachers expected counselors to be available when needed and to maintain confidentiality. These functions were also rated as being performed best. Thirty-four per cent (34.5%) of the students responded that discussion of personal problems with a counselor was an important, but not expected function. On the other hand, the majority of teachers (53.2%) indicated this was an important and expected function. In addition, career-vocational counseling was perceived by the students as important and expected, but poorly performed. In fact, for all three groups (students, teachers, others) career-vocational planning was the second most important counselor function. Overall, the students rated functions in which the counselor is a processor (e.g., checking for graduation requirements, planning high school program, college planning) as important and expected. The functions which involved counseling skills (e.g., conference with parents, discussing personal problems) were not expected and not important.

In another study, perceptions of teachers, counselors, and prin-

cipals concerning counseling services were investigated through a survey of 9,086 randomly selected seventh through twelfth grade Iowa students (Pellegreno & Engen, 1975). Only the findings relative to the counselors are reviewed. Students perceived the counselor as the most helpful person in school in several areas: post-high school planning (75%), changing courses (65%), selecting courses (61%), planning for occupational careers (51%), getting a job (43%), and solving personal problems (39%).

Weinrach (1972, 1974) randomly selected 1,658 eleventh grade Toledo, Ohio area students in an effort to ascertain students' perceptions of guidance programs. However, these students were selected after counselors volunteered to participate as part of a larger study. The participation rate was 20% (23 schools with counselors from an initial population of 114). A 105 item multiple choice instrument, the Guidance Program Evaluation Student Survey, Form A-4, was administered by the counselors. Findings indicate that 40.7% (675) students perceived the most important way counselors could be of help was in helping students plan for an occupation or for further education post-high school. The least important ways counselors could be of help was in the areas of helping students with their personal or social problems. Students rankings as to perceptions of the importance of various ways counselors could be of assistance did not coincide with the rankings of the most important reasons for being in school. Most students (621) felt they were in school to "improve

themselves." (1974, p. 3)

In addition to the above studies, Cunha (1975) analyzed priority counseling needs of 39,219 high school students in California. About 5% (1,961) of these students indicated they had a physical handicap that would limit their career opportunities. A universal need was for career counseling. Of four highest priority needs, three were career planning, and help in educational and personal counseling. An interesting result concerning personal-social needs was that when students indicated they had a problem, they most frequently obtained help from other students; and, counselors were the third choice for obtaining help. Further, students felt counselors could be of more help if they knew more about students' thought processes and behavior. Cunha concluded that "the secondary school counselors were not meeting the perceived educational, career guidance, and personal-social needs of students." (p. 114)

Four hundred (400) randomly selected ninth and twelfth grade students in Maryland were surveyed on perceptions of counseling services (McCullough, 1973). A student-constructed questionnaire covered eleven areas of counseling services with responses recorded on a Likert-type scale. Results showed that twelfth grade students placed a higher priority on counselors' knowledge of vocational opportunities and knowledge of college admissions than other areas. Students' perceived counselors as helpful in areas such as vocational planning, educational planning, and health problems. However, students did not

perceive counselors as helpful in areas of parent-student conflict or dealing with peer pressure.

Patza (1977) studied high school students, parents, counseling staff, teachers, and administrators' perceptions of objectives for a secondary guidance program. One hundred twenty (120) high school students from a suburban community in Wisconsin were surveyed. The guidance objectives were rated on a 5 point Likert-type scale using a card q-sort. All groups rated 10 of 47 objectives as above average in importance. These objectives included student knowledge of careers and educational goals, and two objectives related to exhibiting a healthy self-concept and the ability to express views without anti-social behaviour.

In only one study (Lundt, 1981) were perceptions of mentally gifted, regular high school students, and special education students toward high school counseling services investigated. Special education students were defined as educable mentally retarded or educationally handicapped. Educationally handicapped students were students who had learning problems associated with neurological impairment, emotional disturbances, or severe behavioural problems. Of the 34 special education students 8 were educable mentally retarded, 14 were educationally handicapped, and 12 were physically or orthopedically handicapped. Lundt surveyed all (539) eleventh grade students in a California high school with a questionnaire concerning seven major counseling areas; counselor availability, personal qualities of the

counselor, counselor communication skills, counselor's personal interest in students, counselor's individual assessment skills, consultation services, and overall job performance. She found all students viewed counseling as effective in the seven areas. However, there was a significant difference concerning the perception of the consulting role. An increased percentage (70.6%) of special education students were aware of this role while two thirds of the other students were not.

#### Summary of Review of Literature-Handicapped and Non-Handicapped Students' Perceptions of the Adequacy of Counseling Services

The review of the above literature showed the following trends:

1. Students perceived services related to educational planning as important and well performed.
2. Students perceived services related to career planning as important and less well performed. In addition, services were perceived as least helpful in finding employment.
3. Students did not perceive personal counseling as an important service and most students would not discuss personal problems with a counselor.

#### Counselors' Perceptions of Handicapped and Non-Handicapped Students or Counselees

A significant factor influencing the counselor-counselee rela-

tionship is the counselor's perception of the client (Harasymiw, Horne, & Lewis, 1976). Some evidence (Thompson, 1969) suggests that the more alike the counselor and counselee are, the more positively the counselor perceives the counselee. It does not seem unreasonable to assume that a counselor who is working with a client unlike himself (i.e. a handicapped person) may perceive the client as less than ideal. Counselors' perceptions, then, have the potential to positively or negatively influence the counselees' perception of counseling services.

In regard to counselors' perception of counselees, the secondary counselor's ideal client has been described as youthful, attractive, verbal, and intelligent (Shertzer & Stone, 1974, p. 83). In a study of high school students participating in Project TALENT (which was described in a previous section of the review of literature) Shapiro and Asher (1972) concluded "the counselor tends to neglect the students most unlike himself—the student who has a poor academic record, is from a lower socio-economic family, plans to marry soon, and who may have trouble expressing himself." (p. 107)

In a similar type of study, Thompson (1969) attempted to determine characteristics of ideal and non-preferred client types in a high school setting. Selected were 10 counselors, one male and one female, from 5 high schools with about the same numbers of students enrolled in college preparatory, vocational, and general curriculum programs. The counselors were asked to select from a file of coun-

selees interviewed at least 4 times all counselees they were most successful with and those they had the least success with. Counselors rated the degree of counseling success on a 9 point scale. (These definitions of most and least successful were used to deal with possible counselor biases about client idealness). Thompson then selected 10 successful and 10 unsuccessful client cases from each of the counselor lists. Analyzed were Meyer Briggs Type Indicator (MBTI) scores between counselor-client and between the client groups, as well as agreement on counseling effectiveness. He found the ideal client was more successful in school than the non-preferred client, possibly more intelligent, enrolled in more college preparatory programs, had problems of a vocational nature with lack of environmental and self-information as major causes of their problems, and had more future plans centered on college. Non-preferred clients often mentioned emotional problems for a reason to seek counseling. Problems included conflict with others—parents, school authorities, and peers. Findings included a statistically significant personality similarity between counselors and the preferred client. Yet, there were no statistically significant differences on personality measures between ideal and non-preferred clients. However, there was a wide perceptual difference between the counselor and the non-preferred client on the rating of counseling effectiveness. There was a mean of 2 (on a 9 point scale where 9 is highly effective) by the counselors and a mean of 6.7 by the non-preferred client on this dimension.

Professionals have no immunity from negative attitudes/perceptions toward handicapped individuals (Harasymiw, Horne, & Lewis, 1976; Schneider & Anderson, 1980). Attitudes of health professionals (e.g. doctors, nurses, psychologists, social workers) toward 12 disabilities were studied by Janicki (1971). Fifty-four (54) health professionals in a large government hospital ranked the disabilities. Blindness was least preferred, followed by motor disabilities (i.e. paraplegic, amputated arm, leg, arthritis). An interesting note, deafness was ranked third by the males and eleventh by the females. The other disabilities and their rankings were: asthma (6), facial disfigurement (8), hypertension (9), chronic headache (10), diabetes (11), and stomach ulcers (12).

Six vocational counselors' perceptions of 619 disabled clients (193 physically disabled, 225 mentally retarded, 201 emotionally disturbed) were studied in areas related to evaluation or workshop performance and client employability, counselor-client interaction based on rate of client dropout, and recommendations for future work adjustment programs (Schofield & Kunce, 1971). Findings indicated counselors evaluated workshop performance of physically disabled clients higher than emotionally disturbed clients and retarded clients were last. However, retarded clients were evaluated as more employable than physically disabled clients and emotionally disturbed clients were last. Emotionally disturbed clients were referred for future work adjustment programs more often than the physically dis-



abled clients and retarded clients were last Schofield and Kunce concluded "the results of this study delineated different perceptual styles, individual biases, group stereotyping, and the interaction of these variables with counselor-client behavior." (1971, p. 165)

In the second study of perceptions of disabled individuals and counseling effectiveness, Cook, Kunce, and Getsinger (1976) found less effective (as rated by supervisor) female counselors tended to upgrade males on a semantic differential test of six male photographs when given instruction that the males were disabled. On the other hand, less effective male counselors downgraded males when given the disability information.

However, in general, little is known about the perceptions of counselors toward handicapped individuals (Lombana, 1982b). From the following review of teachers' attitudes/perceptions concerning handicapped students and labeling effects, an assumption may be made about counselors' perceptions: they do not differ from other professionals or the general public (Lombana, 1982b).

A number of studies have been identified by Lombana (1982b) that focus on teachers' perceptions of handicapped students. One such study by Conine (1969) surveyed 473 randomly selected public elementary school teachers. The survey instrument was the Attitudes Disabled Persons Scale--Form O. These elementary school teachers were not found to be highly accepting or rejecting of disabled persons. In fact, their attitudes seem to be similar to the attitudes of the

general public. In addition, 91.75% of the teachers associated the term "disabled persons" with physical handicaps (i.e. orthopedic or sensory impairments). Eighty seven per cent (87%) of the teachers also included mental and emotional disorders as "disabled." Conine also reported that teacher attitudes were not related to race, age, subject specialization, or teaching experience.

In contrast to Conine's (1969) finding that teacher attitudes toward the handicapped were not related to teaching experience, Wechsler, Suarez, and McFadden (1975) found those teachers who had previous experience with physically handicapped students were more optimistic about integration of physically handicapped students in their classroom. However, this study was limited to only the reporting of percentages of responses to 5 questions (e.g., how willing they would be to have a child with a handicapping condition in their classroom) and 6 handicapping conditions (i.e., heart condition, asthma, use of crutches or braces, seizures, impaired vision, impaired hearing).

Additional studies concerning attitudes of teachers toward the handicapped have indicated a hierarchical structure relative to the type of disability (Schneider & Anderson, 1980). Jones (1974) reported the mildly retarded individual is viewed least negatively, the psychologically disabled individual most negatively, and the physically disabled individual is in the middle. However, Trengo (1970) and the Harasymiw, Horne, & Lewis (1976) studies support different

hierarchy of preference with physically disabled individual rated first, followed by individuals with sensory disabilities, psychologic disabilities, and the socially stigmatized. Further, regular and special education teachers, rehabilitation personnel, elementary and high school students have responded with a stable, over time, congruence disability group acceptance with stereotyping of the disability groups (Harasymiw, Horne, Lewis, & Barco, 1976).

Other researchers have found similar results in terms of overall groupings of handicapped persons. Panda and Bartel (1972) assessed 80 special education and regular education teachers' responses to handicapped students through a semantic differential scale of 9 bipolar adjectives representing evaluation, potency, and activity factors. Most positive attitudes were exhibited toward sensory handicapped students (blind and deaf), followed by other physical disabilities, (crippled and speech impaired students), and emotionally maladjusted students. Casey (1978) also used a semantic differential scale to assess teacher attitudes. In this case, most positive responses were toward students with physical handicaps, followed by speech impairment, mental retardation, and emotional disturbances. In any event, "the labeling of handicapped students negatively influences teacher attitudes toward them" (Lombana, 1982, p. 114). Gillund and Rucker (1977) found regular classroom teachers and special education teachers had lower expectations for handicapped students—mentally retarded, emotionally disturbed, and learning dis-

abled--when labeled than for students who were not labeled, but exhibited the same behaviour.

In summary, in reference to attitudes/perceptions concerning handicaps or disabilities, Siller (1976) has noted:

1. "There is a high degree of generality of attitude components across disabilities.
2. Attitudes toward the disabled are more frequently negative.
3. At the level of stereotyping, disabilities may be lumped together as belonging to one group.
4. Non-disabled individuals tend to label and consequently stereotype disabled persons with untoward consequences for the disabled person and society." (pp. 73-76)

#### Summary of the Review of Literature

The review of literature demonstrated the following trends:

1. There is much overlap concerning counselor roles and functions, or counseling and guidance services. In fact, the terms have been used interchangeably within the same study and in different studies. However, relative to counselor characteristics that impinge on the counselor roles, students expected to see an expert counselor who was genuine, trustworthy, and accepting.

2. Students or counselees tend to perceive the counseling services primarily directed to educational or career planning. On the other hand, counselors perceived their services to include assisting

with personal concerns such as adjustment to self and others.

3. Helping professionals tend to perceive students favorably or unfavorably as based on select characteristics such as intelligence or types of handicapping conditions.

## CHAPTER 3

### METHODOLOGY

The problems addressed in this investigation were:

1. What are the perceptions of self-identified handicapped and non-handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment, and post-high school planning?
2. When categorized by primary handicapping condition, what are the perceptions of self-identified handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment, and post-high school planning?

Chapter 3 describes the research method, data set and survey instrument, including the selected variables; the sample, and the descriptive and non-parametric statistical procedures used to analyze the data.

#### METHOD

The research method utilized in this investigation was secondary analysis. Hyman (1971) defines secondary analysis as using "data al-

ready collected in a previous survey which then are used in a new analysis of a novel problem." (p. 45) Further, the research design is achieved by rearrangement of the survey that would complicate the analysis (Hyman, 1971). In other words, a search among the available indicators must be carried out to identify the ones that fit the concepts to be studied. This is necessary to prevent great "slippage"--the instrument does not measure what the secondary analyst says it does (Hyman, 1971). Another error can occur when there is overgeneralization of the meaning of a specific question (Hyman, 1971). Hyman (1971) reports that quantitative procedure for both primary and secondary analysis are the same.

#### Data Set, Population, and Sample for Original HSB Study

High School and Beyond (HSB) is part of the national longitudinal surveys of American youth begun with the 1972 high school seniors. These surveys were initiated by the National Center for Education Statistics. The data set includes student, school, language, teacher comment files and files on twins.

The population consisted of high school sophomores and seniors in secondary schools in the United States in 1980. As described in Chapter 1, the sample design consisted of a two-stage probability sample. Schools were selected in the first stage with probability proportional to estimated enrollment, except for special strata schools which were oversampled (e.g., alternative public schools,

high performance private, other non-Catholic private, and Black Catholic). In the second stage, students within the selected schools were randomly selected. The HSB (1980) study, then, consists of 30,030 sophomores and 28,240 seniors from 1,015 schools.

#### Data Set, Population, and Sample for Present Investigation

The data set for this investigation was the student file, in contrast to the other files noted above. Items from the senior student questionnaire portion of the student file were utilized in the investigation.

The population was the 23,768 seniors in public secondary schools, excluding alternative public schools, in the United States in 1980 who participated in the HSB study.

The first criterion of sample selection for this investigation was senior high school students who self-identified as having participated in a special program for physically or educationally handicapped students. There were 1135 students who met this criteria. The second criterion was students self-identified as having a primary handicapping condition. However, only 411 of the 1135 students met the second criterion for selection into this investigation. Also, these students attended public schools, excluding alternative public schools.

An equal number of non-handicapped high school seniors who are recorded in the HSB (1980) data base were randomly selected for the



comparison group in this investigation. These students also attended public schools, except alternative public schools. No student who self-identified as having participated in a special program for physically or educationally handicapped students was included in this latter group.

#### Data Collection Procedures in Original HSB Study

According to the HSB information for users, data were collected between February 1 and May 15, 1980. Questionnaires and tests were completed in one session with sophomores and senior groups meeting separately. A field representative was present to explain the procedures.

While students were taking the tests, field personnel spot edited the perviously completed self-administered questionnaire. The spot editing was performed to check the completeness of key questions. The key questions that were selected as descriptive variables in this investigation were:

(1) When do you expect to graduate from high school? (Student Item 13)

(2) Which of the following best describes your high school program? (Student Item 17)

(11) Have you ever been in the following kinds of courses or programs in high school? (Student Items 115, 166)

(71) What is the one thing that most likely will take the larg-

est share of your time in the year after you leave high school?  
(Student Item 364)

(87) Do you have any of the following conditions? (Student Items 408 through 414)

(89) What is your race? (Student Item 416) (See Appendix A for questions; Appendix B--Table A for variables and description)

Students were asked by field personnel to provide any missing key information after completing the tests. Students were given the option of marking a special oval if they preferred not to respond to a key question. Some senior students (113) refused to respond to student item 115, participation in a program for educationally handicapped; 116 students refused to respond to student item 116, participation in a program for physically handicapped. Between 2,071 and 2,082 senior students refused to respond to student items 408 through 414 having specific learning disability, visual handicap, hard of hearing, deafness, speech disability, orthopedic handicap, and other health impairment.

"All student questionnaires and tests were optically scanned. The questionnaire data were machine edited after scanning. Key items which students had neither answered nor indicated they preferred not to answer were flagged. Editors attempted to retrieve this flagged information by telephone." (HSB, 1980, p. 15)

### HSB Survey Instrument and Selected Variables for This Investigation

The survey instrument contained 121 questions from the senior questionnaire. However, these questions, plus test scores (e.g. reading tests), and constructed variables (e.g. SES) translated into 638 items in HSB information for users (1980). The categories from the questionnaire covered areas such as background, school activities, out-of-school activities, attitudes, post-high school plans and aspirations (See Appendix A). Questions that required multiple responses became separate items in the HSB information for users (e.g., question 87. Do you have any of the following conditions? Mark all that apply. a. Specific learning disability, b. Visual handicap, c. Hard of hearing, d. Deafness, e. Speech disability, f. Orthopedic handicap, g. Other health impairment--became student items 408 through 414 in HSB information for users).

For this investigation, 26 specific items (variables) taken from the HSB student data base, were analyzed (See Appendix B--Table A). Only socio-economic status (SES) (student item 511) was a composite scale score rather than discrete categories. This composite variable is "the sum of five variables (standardized within grade prior to summing): father's occupation, father's education, mother's education, family income by one-sevenths, and an additive scale of possessions--daily newspaper, encyclopedia, typewriter, electric dishwasher, two or more cars or trucks, more than 50 books, room of your own, pocket calculator, each standardized." (HSB, 1980, p. 8-243)

Weighting Procedure Developed by Investigator

Because the original HSB student data base only identified eight categories of handicapping conditions that were not mutually exclusive, this produced a data analysis problem in that one student could be counted more than once. To correct this problem, the investigator determined various primary handicapping conditions by computing the handicapping conditions through weight factors. These factors took the following forms:

Student Item 408 X 10000000

409 X 1000000

410 X 100000

411 X 10000

412 X 1000

413 X 100

414 X 10

415 X 1

This weighting procedure yielded 54 handicapping categories. These 54 categories were collapsed into 13 useable categories with handicapping conditions serving as the grouping strategy. The 13 categories produced, with memberships appropriate to each, may be seen in Table 1.

Table 1  
Primary Handicapping Condition Groups  
(Total N=411)

Group	N	% of Sample
Learning Disabled	48	11.7
Learning Disabled + Physical Handicaps	59	14.4
Visual	88	21.4
Visual + other Physical Handicaps	27	6.6
Hearing	15	3.6
Hearing + other Physical Handicaps	22	5.4
Speech	9	2.2
Speech + other Physical Handicaps	8	1.9
Orthopedic	8	1.9
Orthopedic + other Physical Handicaps	12	2.9
Other Health Impairment	41	10.0
Physical Condition that Limits	50	12.2
Physical Condition that Limits + other Health Impairment	24	5.8

Note. Each of the 411 handicapped students appear in only one of the 13 primary handicapping condition groups.

### Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) (Nie, Hull, Jenkins, Steinbrenner, & Brent, 1975).

Data analyses were divided into three sections as follows:

Descriptive statistics were used to analyze several factors for the handicapped group and the non-handicapped group. The factors included: sex, SES, race, type of high school program, and post-high school plans. These factors may discriminate on type of counseling service or quality of service provided.

The Mann-Whitney U Test was used to test three study hypotheses:

$H_{0_1}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

$H_{0_2}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

$H_{0_3}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

The Mann-Whitney U Test may be used to analyze variables when there are two variables—a two-point nominal variable and a dependent ordinal variable (Andrew, Klem, Davidson, O'Malley, & Rodgers, 1974). The hypothesis tested is that no population distributions are the same for a specified variable (Hinkle, Wiersma, & Jurs, 1979).

The Mann-Whitney U Test is one of the most powerful of the non-parametric tests (Siegel, 1956). For a large sample ( $n > 20$ ), "U is transformed into a normally distributed statistic, Z." (Hull & Nie, 1979, p.57). The definitional formula for Mann-Whitney U Test samples of  $n > 20$  (Hinkle, Wiersma, & Jurs, 1980) is:

$$U_1 = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1$$

$$U_2 = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - R_2$$

where

$n_1$  = number of observations in Group 1

$n_2$  = number of observations in Group 2

$R_1$  = sum of the ranks assigned to Group 1

$R_2$  = sum of the ranks assigned to Group 2

and the mean of the sampling distribution is:

$$\mu_U = \frac{n_1 n_2}{2}$$

where

$n_1$  = sample size of Group 1

$n_2$  = sample size of Group 2

and the standard deviation of the sampling distribution is:

$$\sigma_u = \sqrt{\frac{(n_1)(n_2)(n_1 + n_2 + 1)}{12}}$$

and the test statistic is:

$$Z = \frac{U - \mu_u}{\sigma_u}$$

The Kruskal-Wallis One-Way Analysis of Variance was used to test three study hypotheses:

Ho<sub>4</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

Ho<sub>5</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

Ho<sub>6</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

Kruskal-Wallis One-Way Analysis of Variance may be used to analyze variables when there are two variables--a more than two-point



nominal variable and a dependent, ordinal variable (Andrews, Klem, Davidson, O'Malley, & Rodgers, 1974). The hypothesis tested is that the k samples come from the same population (Siegel, 1956). The Kruskal-Wallis One-Way Analysis of Variance H statistic is one of the most powerful of the non-parametric tests (Siegel, 1956). It has approximately a chi-square distribution (Hull & Nie, 1979). The definitional formula for Kruskal-Wallis H (Siegel, 1956) is

$$H = \frac{12}{N(N+1)} \sum_{j=1}^k \frac{R_j^2}{n_j} - 3(N+1)$$

where k = number of samples

$n_j$  = number of cases in jth sample

$N = \sum n_j$ , the number of cases in all samples combined

$R_j$  = sum of ranks in  $j^{\text{th}}$  sample (column)

$\sum_{j=1}^k$  directs one to sum over the k samples (column)

### Summary

In summary:

1. The research method was secondary analysis.
2. HSB student data base contained the variables selected for inclusion in this investigation.

3. From the HSB student data base, 411 high school senior students met the criteria for the handicapped group; the non-handicapped group was comprised of 411 randomly selected high school senior students.

4. Data analysis consisted of descriptive statistics, Mann-Whitney U Test, and Kruskal-Wallis One-Way Analysis of Variance. These statistics are not adversely influenced by samples of different sizes.

## CHAPTER 4

### RESULTS

This chapter reports the result from the data analysis. The results are reported in the following order:

1. Descriptive data for the first research question posed in Chapter 1.
2. Non-parametric tests for each of the six hypotheses listed in Chapter 1. The results related to each hypothesis are reported in six distinct sections.

#### Descriptive Data

Research question 1 was: What general descriptive characteristics describe various groups of handicapped high school seniors and non-handicapped high school seniors?

The variables used in describing the sample were: sex, race, SES, expected date of high school graduation, type of high school program, post-high school plans according to others, ability to complete college, main activity in the year after high school, handicapping conditions, and type of handicapped programs. A summary of the variables used to describe the sample is presented in Table 2.

Table 2  
Summary Table of Variables  
Used in Describing the Sample

(N = 822)

<u>Variable Group</u>	<u>Handicapped Group</u> (N = 411)		<u>Non-Handicapped Group</u> (N = 411)	
	<u>N</u>	<u>% of Handicapped Group</u>	<u>N</u>	<u>% of Non-Handicapped Group</u>
Sex*				
Male	205	49.9	175	42.6
Female	174	42.3	219	53.3
Race**				
White	272	66.2	319	77.6
Black	76	18.5	51	12.4
American Indian	13	3.2	5	1.2
Asian	9	2.2	6	1.5
Other	33	8.0	25	6.1
Expected Date H.S. Graduation				
Leave before graduate	12	2.9	0	0.0
By 6/80	364	88.6	394	95.9
7/80—8/80	20	4.9	9	2.2
9/80—1/81	5	1.2	4	1.0
2/81—6/81	3	0.7	4	1.0
After 6/81	5	1.2	0	0.0

Note. N does not equal 411 in each group because of missing values for some variables. Percentages reported are for relative frequencies, and, therefore, do not always sum to 100%.

\*p = .0089

\*\*p = .0076

Table 2--continued

<u>Variable Group</u>	<u>N</u>	<u>% of Handicapped Group</u>	<u>N</u>	<u>% of Non-Handicapped Group</u>
H.S. Program				
General	168	40.9	143	34.8
Academic	92	22.4	163	39.7
Vocational	145	35.3	99	24.1
Post H.S. Plans-- Father*				
College	149	36.3	206	50.1
Fulltime job	82	20.0	53	12.9
Trade School	43	10.5	41	10.0
Military Service	15	3.6	17	4.1
They don't care	11	2.7	14	3.4
I don't know	46	11.2	38	9.2
Not applicable	35	8.5	32	7.8
Post H.S. Plans-- Mother**				
College	185	45.0	252	61.3
Fulltime job	78	19.0	47	11.4
Trade School	46	11.2	42	10.2
Military Service	13	3.2	14	3.4
They don't care	14	3.4	10	2.4
I don't know	31	7.5	28	6.8
Not applicable	16	3.9	6	1.5

\* $p = .0122$ \*\* $p = .0007$

Table 2--continued

<u>Variable Group</u>	<u>N</u>	<u>% of Handicapped Group</u>	<u>N</u>	<u>% of Non-Handicapped Group</u>
Post H.S. Plans-- Counselor				
College	139	33.8	209	50.9
Fulltime job	23	5.6	5	1.2
Trade school	31	7.5	17	4.1
Military service	4	1.0	2	0.5
They don't care	26	6.3	22	5.4
I don't know	114	27.7	105	25.5
Not applicable	35	8.5	33	8.0
Post H.S. Plans-- Teachers				
College	155	37.7	190	46.2
Fulltime job	18	4.4	8	1.9
Trade school	25	6.1	16	3.9
Military Service	7	1.7	4	1.0
They don't care	35	8.5	31	7.5
I don't know	104	25.3	110	26.8
Not applicable	22	5.4	30	7.3
Post H.S. Plans-- Peers, Relatives*				
College	147	35.8	217	52.8
Fulltime job	68	16.5	49	11.9
Trade School	34	8.3	24	5.8
Military Service	15	3.6	14	3.4
They don't care	38	9.2	20	4.9
I don't know	66	16.1	56	13.6
Not applicable	15	3.6	16	3.9

\*p = .0004

Table 2--continued

<u>Variable Group</u>	<u>N</u>	<u>% of Handicapped Group</u>	<u>N</u>	<u>% of Non-Handicapped Group</u>
Ability to Complete College				
Yes, definitely	114	27.7	184	44.8
Yes, probably	109	26.5	145	35.3
Not sure	90	21.9	52	12.7
I doubt it	30	7.3	10	2.4
No, definitely	34	8.3	9	2.2
Main Activity in Year After H.S.*				
Fulltime work	155	37.7	117	28.5
Apprenticeship	12	2.9	8	1.9
Military Service	17	4.1	15	3.6
Homemaker, fulltime	11	2.7	4	1.0
Trade school, Business school	34	8.3	28	6.8
Jr. College, Academic	33	8.0	36	8.8
Jr. College, Tech. or vocational	25	6.1	24	5.8
College 4 yr.	81	19.7	149	36.3
Work part-time, no school	7	1.7	7	1.7
Other	12	2.9	12	2.9

\*p = .0004

Table 2--continued

<u>Variable Group</u>	<u>N</u>	<u>% of Handicapped Group</u>	<u>N</u>	<u>% of Non-Handicapped Group</u>
Handicaps/Disabilities <sup>a</sup>				
Learning Disability	107	26.0	2	0.5
Visual Handicap	127	30.9	49	11.9
Hard of Hearing	37	9.0	6	1.5
Deafness	18	4.4	0	0.0
Speech Disability	44	10.7	4	1.0
Orthopedic Handicap	36	8.8	7	1.7
Other Health Impairment	91	22.1	23	5.6
Physical Condition that limits	158	38.4	28	6.8
Handicapped Program				
Educationally Handicapped	126	30.7	0	0.0
Physically Handicapped	75	18.2	0	0.0
Both	210	51.1	0	0.0

<u>Variable</u>	<u>Handicapped Group</u>			<u>Non-Handicapped Group</u>		
	<u>N</u>	<u>Mean</u>	<u>Sd</u>	<u>N</u>	<u>Mean</u>	<u>Sd</u>
Socioeconomic	389	-0.347	0.819	398	-0.118	0.789

<sup>a</sup> Handicaps/Disabilities are not mutually exclusive.



A chi-square analysis yielded significant differences between the handicapped and non-handicapped groups on the variables of sex ( $p = .0089$ ), race ( $p = .0076$ ), post-high school plans according to father ( $p = .0122$ ), mother ( $p = .0007$ ), and peers/relatives ( $p = .0004$ ), and the main activity in the year after high school ( $p = .0004$ ).

There were more males (205) in the handicapped group and more females (219) in the non-handicapped group. In addition, there were 76 Black students in the handicapped group, and only 51 Black students in the non-handicapped group. More fathers (206) of the non-handicapped group wanted their child to attend college than the fathers (149) of the handicapped group. This was also true for the mothers; 209 wanted their child to attend college in the non-handicapped group, and 139 wanted their child to attend college in the handicapped group. Further, more peers/relatives (217) wanted the students to attend college in the non-handicapped group than the handicapped group (147). More students (155) in the handicapped group expected their main activity in the year after high school to be full-time work; whereas, 117 students in the non-handicapped group expected to be working fulltime. On the other hand, only 81 students in the handicapped group expected to be in a four year college, but 149 students in the non-handicapped group expected to be in college.

Socio-economic status had been previously standardized with a

mean of zero (HSB, 1980). As can be seen in Table 2, the means for socioeconomic status for the handicapped and non-handicapped groups were both below zero; therefore, these groups' socioeconomic status were slightly below average.

Also, 210 (51.1%) of the students in the handicapped group participated in both educationally handicapped and physically handicapped programs. Only 126 (30.7%) of the handicapped students participated in a educationally handicapped program and 75 (18.2%) handicapped students participated in a physically handicapped program.

An incidental result was the distribution of handicapping condition groups by type of program taken. Table 3 presents each of the handicapping condition groups by the type of handicapped program. As can be seen in Table 3, distribution of enrollments in handicapped programs does not appear to relate with the type of handicapping condition. That is, students who report only a learning disability appear not only in the educationally handicapped program, but also in the physically handicapped program or both programs. On the other hand, students who report only physical handicaps appear not only in the physically handicapped program, but also in the educationally handicapped program, or both programs.

#### Non-parametric Statistical Tests

The Mann-Whitney U Test was used to analyze each of the first three null hypotheses stated in Chapter 1. Results of the analysis

Table 3  
Primary Handicapping Condition Groups  
By Handicap Program

(N = 411)

Groups	Educationally Handicapped Program			Physically Handicapped Program		Both	
	N <sub>t</sub>	N <sub>1</sub>	% of N <sub>t</sub>	N <sub>2</sub>	% of N <sub>t</sub>	N <sub>3</sub>	% of N <sub>t</sub>
Learning Disabled	48	35	72.9	4	8.3	9	18.8
Learning Disabled + Physical Handicaps	59	35	59.3	5	8.5	19	32.2
Visual	88	12	13.6	16	18.2	60	68.2
Visual + other Physical Handicaps	27	4	14.8	6	22.2	17	63.0
Hearing	15	3	20.0	3	20.0	9	60.0
Hearing + other Physical Handicaps	22	9	40.9	8	36.4	5	22.7
Speech	9	3	33.3	0	0.0	6	66.7
Speech + other Physical Handicaps	8	1	12.5	1	12.5	6	75.0
Orthopedic	8	0	0.0	4	50.0	4	50.0
Orthopedic + other Physical Handicaps	12	2	16.7	7	58.3	3	25.0

Table 3--Continued

Groups	Educationally Handicapped Program			Physically Handicapped Program		Both	
	$N_t$	$N_1$	% of $N_t$	$N_2$	% of $N_t$	$N_3$	% of $N_t$
Other Health Impairment	41	11	26.8	7	17.1	23	56.1
Physical Condition that Limits	50	7	14.0	9	18.0	34	68.0
Physical Condition that limits + Other Health Impairment	24	4	16.7	5	20.8	15	62.5

Note. Each of the 411 handicapped students appear in only one of the 13 primary handicapping condition groups.

of the three null hypotheses are presented in Table 4.

The testing of the hypotheses were as follows:

$H_{0_1}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

The Mann-Whitney U Test yielded no significant difference between the handicapped and non-handicapped groups on this variable. As can be seen in Table 4, the Z statistic, corrected for ties, on the variable counseling for continuing education, was -0.4402 with a 2-tailed probability of 0.6598. This probability was insufficient for rejection; therefore, the null hypothesis was accepted.

$H_{0_2}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

As can be seen in Table 4, the Mann-Whitney U Test yielded no significant difference between the handicapped and non-handicapped groups on this variable. The Z statistic, corrected for ties, on the variable counseling for finding employment, was -1.7498 with a 2-tailed probability of 0.0802. This probability was insufficient for rejection; therefore, the null hypothesis was accepted.

$H_{0_3}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which the counselor influences post-high school plans.

Table 4  
Mann-Whitney U Test for Dependent  
Variables By Handicapped and  
Non-Handicapped Groups

(N = 822)

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<u>Dependent Variables</u>	Handicapped Group	Non-Handicapped Group	<u>Z</u>	<u>2-tailed P</u>
	<u>(N = 411)</u>	<u>(N = 411)</u>		
	<u>Mean Rank</u>	<u>Mean Rank</u>		
School Provided Counseling for Continuing Education	407.98	415.02	-0.4402	0.6598
School Provided Counseling for Finding Employment	397.37	425.63	-1.7498	0.0802
Counselor Influenced Post-High School Plans	435.36	387.64	-3.0926	0.0020

---

Note. Z statistic was corrected for ties

The Mann-Whitney U Test yielded a significant ( $p = .002$ ) difference between the handicapped and non-handicapped groups on this variable. As can be seen in Table 4, the Z statistic, corrected for ties, on the variable counselor influenced post-high school plans, was -3.0926 with a 2-tailed probability of .002. Therefore, the null hypothesis was rejected. The handicapped group perceived counselors' as influencing their post-high school plans more than the non-handicapped group.

The Kruskal-Wallis One-Way Analysis of Variance was used to analyze null hypotheses 4, 5, and 6 listed in Chapter 1. Tables 5, 6, and 7 presents the results of this analysis.

$H_{04}$ : When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

The Kruskal-Wallis One Way Analysis of Variance yielded no significant difference among the primary handicapping condition groups on this variable. As can be seen in Table 5, the calculated  $\chi^2$ , corrected for ties, on the variable counseling for continuing education, was 19.367 with a probability of 0.080. This probability was insufficient for rejection; therefore, the null hypothesis was accepted.

$H_{05}$ : When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of

the degree to which their school provides counseling that will help them find employment.

As can be seen in Table 6, the Kruskal-Wallis One-Way Analysis of Variance yielded no significant difference among the primary handicapping condition groups on this variable. The calculated  $\chi^2$ , corrected for ties, on the variable counseling for finding employment, was 10.280 with a probability of 0.591. This probability was insufficient for rejection; therefore, the null hypothesis was accepted.

$H_{06}$ : When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

The Kruskal-Wallis One-Way Analysis of Variance yielded a significant ( $p = .023$ ) difference among the primary handicapping condition groups on this variable. As can be seen in Table 7, the calculated  $\chi^2$ , corrected for ties, on the variable counselor influenced post-high school plans, was 23.662 with a probability of 0.023. Therefore, the null hypothesis was rejected. The speech disabled group had the highest mean rank (273.61) on this variable while the orthopedic plus other physical handicaps group had the lowest mean rank (133.33). The four groups with higher mean ranks (above 242) were learning disabled plus all other physical handicaps, hearing, speech, and speech plus other physical handicaps. The lower mean



Table 5  
Kruskal-Wallis 1-Way ANOVA for  
School Provided Counseling for Continuing  
Education by Primary Handicapping  
Condition Groups

(N = 411)

Groups	N	Mean Rank
Learning Disabled	48	238.64
Learning Disabled + Physical Handicaps	59	186.66
Visual	88	226.24
Visual + other Physical Handicaps	27	233.07
Hearing	15	191.33
Hearing + other Physical Handicaps	22	216.93
Speech	9	143.78
Speech + other Physical Handicaps	8	174.19
Orthopedic	8	241.56
Orthopedic + other Physical Handicaps	12	225.13
Other Health Impairment	41	185.27

Table 5--continued

Groups	N	Mean Rank
Physical Condition that Limits	50	182.71
Physical Condition that Limits + Other Health Impairment	24	179.21

Note. Each of the 411 handicapped students appear in only one of the  
 13 primary handicapping condition groups.  
 $\chi^2 = 19.367$  (corrected for ties)  
 $p = 0.080$

Table 6  
 Kruskal-Wallis 1-Way ANOVA for  
 School Provided Counseling for Finding  
 Employment By Primary Handicapping  
 Condition Groups

(N = 411)

Group	N	Mean Rank
Learning Disabled	48	218.92
Learning Disabled + Physical Handicaps	59	188.97
Visual	88	222.77
Visual + other Physical Handicaps	27	215.69
Hearing	15	200.77
Hearing + other Physical Handicaps	22	201.05
Speech	9	144.94
Speech + other Physical Handicaps	8	174.38
Orthopedic	8	249.19
Orthopedic + other Physical Handicaps	12	236.63
Other Health Impairment	41	195.73

Table 6--continued

Groups	N	Mean Rank
Physical Condition that Limits	50	190.46
Physical Condition that Limits + other Health Impairment	24	211.10

Note. Each of the 411 handicapped students appear in only one of the  
 13 primary handicapping condition groups.  
 $\chi^2 = 10.280$  (corrected for ties)  
 $p = 0.591$

Table 7

Kruskal-Wallis 1-Way ANOVA for  
Counselor Influenced Post-High School  
Plans by Primary Handicapping Condition Groups

(N = 411)

Group	N	Mean Rank
Learning Disabled	48	208.27
Learning Disabled + Physical Handicaps	59	246.40
Visual	88	190.74
Visual + other Physical Handicaps	27	182.70
Hearing	15	246.53
Hearing + other Physical Handicaps	22	191.70
Speech	9	273.61
Speech + other Physical Handicaps	8	242.56
Orthopedic	8	229.44
Orthopedic + other Physical Handicaps	12	133.33
Other Health Impairment	41	189.23

Table 7--continued

Groups	N	Mean Rank
Physical Condition that Limits	50	197.08
Physical Condition that Limits + Other Health Impairment	24	210.29

Note. Each of the 411 handicapped students appear in only one of the 13 primary handicapping condition groups.

$$\chi^2 = 23.662 \text{ (corrected for ties)}$$

$$p = 0.023$$

ranks (below 200) were obtained by the following six groups: visual, visual plus all other physical handicaps, hearing plus other physical handicaps, orthopedic plus other physical handicaps, physical condition that limits, and other health impairment. The remaining three groups—learning disabled, orthopedic, and physical condition that limits plus other health impairment—had middle mean ranks (208-229).

### Summary

This chapter answered the first research question posed in Chapter 1 by describing the background characteristics of the handicapped and non-handicapped groups. In addition, the six null hypotheses stated in Chapter 1 were analyzed through the Mann-Whitney U Test and the Kruskal-Wallis One-Way Analysis of Variance. Two null hypotheses were found to be significant and were rejected. These hypotheses were:

$H_{0_3}$ : There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans ( $p = .002$ ).

$H_{0_6}$ : When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans ( $p = .023$ ).

CHAPTER 5  
SUMMARY, DISCUSSION,  
AND RECOMMENDATIONS FOR FURTHER STUDY

With the advent of federal legislation in the area of public education for handicapped students, there have been concerns expressed about the role of the counselor in meeting the needs of this group. The present investigation focused on self-identified handicapped and non-handicapped high school seniors' perception of counseling roles and services.

Two research problems were formulated:

1. What are the perceptions of self-identified handicapped and non-handicapped high school seniors toward counseling role and services in the areas of assistance with further education, help in finding employment, and post-high school planning?
2. When categorized by primary handicapping condition, what are the perceptions of self-identified handicapped high school seniors' toward counseling role and services in the areas of assistance with further education, help in finding employment, and post-high school planning?

Based upon the problems, the specific research questions were:

1. What general descriptive characteristics describe the groups



of handicapped high school seniors and non-handicapped high school seniors?

2. Do handicapped high school seniors perceive their school as providing counseling that will help them continue their education differently than non-handicapped high school seniors?

3. Do handicapped high school seniors perceive their school as providing counseling that will help them find employment differently than non-handicapped high school seniors?

4. Do handicapped high school seniors perceive the counselor as influencing their post-high school plans differently than non-handicapped high school seniors?

5. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive their school as providing counseling that will help them continue their education differently?

6. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive their school as providing counseling that will help them find employment differently?

7. When handicapped high school seniors are categorized by primary handicapping condition, do they perceive the counselor as influencing their post-high school plans differently?

The latter six research questions formed the basis for the null hypotheses:

$H_{01}$ : There is no difference in handicapped and non-handicapped

high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

Ho<sub>2</sub>: There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

Ho<sub>3</sub>: There is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

Ho<sub>4</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them continue their education.

Ho<sub>5</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which their school provides counseling that will help them find employment.

Ho<sub>6</sub>: When categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans.

The research method utilized a secondary analysis of data contained in the data set High School and Beyond (HSB) (1980). The senior questionnaire portion of the student file of HSB provided the variables for this investigation.

The sample consisted of 411 self-identified handicapped high school senior students from public secondary schools, excluding alternative public schools, who had participated in a special program for physically or educationally handicapped students within the school. An equal number of non-handicapped high school senior students were randomly selected for the comparison group.

A chi-square analysis yielded significant differences between the handicapped and non-handicapped groups on the variables of sex, race, post-high school plans according to--father, mother, and peers/relatives, and the main activity in the year after high school. There were more males and more Black students in the handicapped group than in the non-handicapped group. Fewer fathers and mothers wanted their child to attend college in the handicapped group. Also, fewer peers/relatives wanted the students to attend college. Further, more students in the handicapped group expected their main activity in the year after high school to be full-time work than in the non-handicapped group.

Of the six null hypotheses, four were accepted (1, 2, 4, and 5) and two were rejected (3, 6). The rejected null hypotheses follow.

$H_{03}$ : Utilizing the Mann-Whitney U Test, the null hypothesis, there is no difference in handicapped and non-handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans, was rejected. The handicapped group perceived counselors as influencing their post-high school plans more

than the non-handicapped group.

$H_{06}$ : Utilizing the Kruskal-Wallis One-Way Analysis of Variance, the null hypothesis, when categorized by primary handicapping condition, there is no difference in handicapped high school seniors' perception of the degree to which the counselor influences their post-high school plans, was rejected. The handicapped group perceived differences in counselor influences based on primary handicapping condition.

## Discussion

Methodological Consideration and Limitations of Original HSB Study and Present Investigation. When developing the strategy for the sample of handicapped high school seniors, it was expected that the students who participated in a handicapped program would also have a handicapping condition. However, of the 1135 students who self-identified as participating in a handicapped program, only 411 (36.2%) reported a handicapping condition. With only 36.2% of the students participating in handicapped programs having a perception of self as handicapped, one is left with a question unintended by the study—how to account for a discrepancy of such an inordinate magnitude.

This discrepancy may be explained in that students may not view themselves as handicapped even though they have been placed in special programs for handicapped students. Their view of self may be

quite different than the view held by others who have placed these students in handicapping programs. This hypothesis, unaddressed by this investigation, may be of enough interest to warrant further investigation in this direction.

Another possible explanation for this discrepancy is that the large number (724) of students who do not perceive themselves as having a handicapping condition even though they have been placed in a special program for handicapped students is the phrasing of the question in the senior questionnaire (question 11)—"Have you ever been in any of the following programs in high school?" Students may have participated in the special programs in the past, and at the time of completing the questionnaire perceived the handicap as being resolved. An example of this was a senior student who participated in a program for a speech handicap in the tenth grade, who no longer participates in the program because the handicapping problem has been resolved.

Further, in the non-handicapped group, 89 students (21.7%) indicated a self-identified handicapping condition. In any event, these handicapping conditions did not necessitate the students' participation in a special program for handicapped students. Of this number, there were 49 reports of a visual or visual and all other physical handicapping conditions. Because no directions were given as to what constituted a handicap, students may have checked visual handicap if they wore glasses. In light of the large percentage (63.8%) of

"labelled" handicapped students lacking the self-perception of being handicapped, it is surprising that there are the 89 students from the non-handicapped group who have a self perception of having a handicapping condition.

In relating the findings of this investigation, a caution must be noted. Other research has generally reported findings based on percentages or chi-square analysis. The dependent variables in this investigation were measured at the ordinal level; therefore, other statistical tests were used.

Discussion of Results. In conjunction with research question one, no attempt was made to match the handicapped and non-handicapped groups on descriptive variables. Sex and race composition of the handicapped and non-handicapped groups were statistically significant. More Black students were in the handicapped group and more females in the non-handicapped group. These results are consistent with the research of Nazzaro and Portuondo (1980), Tucker (1980), and Ysseldyke, Algozzine, and Richey (1982). In comparing the results of the present investigation with prior research, Anderson (1978) found the subgroups of minorities and females to have the most favorable attitudes toward counseling services. This current investigation did not demonstrate a significant difference between the handicapped and non-handicapped groups on the dependent variables of providing counseling that will help them continue their education or find employment. Hence, the sex and the race differences in group composition

may have counterbalanced each other. However, other research (Betz, 1970; Webster & Fretz, 1978) indicates no difference between sexes or among races related to counseling services. On the other hand, the significant sex and race differences found in this investigation may be irrelevant to the delivery of counseling services.

Further, the variables socio-economic status, expected date of high school graduation, type of high school program, and ability to complete college were not significantly different between the handicapped and non-handicapped groups. These variables do not, then, aid in describing differences between the groups. The reasons for the non-significant results are not apparent. Some research (Shapiro & Asher, 1972; Mattison & Starkey, 1980) indicated students who discussed post high school plans with counselors were generally in college preparatory programs and planned to attend a four year college. As noted above, type of high school program did not differentiate the two groups in this investigation. But, expected main activity after high school was significantly different. More students in the handicapped group expected to be working full-time and fewer expected to be attending a four year college than the non-handicapped group. This may be the result of more students in the handicapped group enrolled in vocational and general high school programs than students in the non-handicapped group. Yet, these significant differences in activity post-high school did not appear sufficient to make a significant difference between the two groups in the analysis of the de-

pendent variables of providing counseling to help continue their education or find employment.

However, the expectation of full-time work held by the handicapped group has implications for counselors. Attention to career development and career counseling would be of critical importance. Further, a new focus of importance would be demonstrating to the students that attending college or other school may be a viable option for them post-high school. This is particularly true in the light of research that indicates that non-college bound students perceive counselors to favor college-bound students (Betz, Engle, & Mattison, 1969; Betz, 1970; Shapiro & Asher, 1972). However, the discussion or interpretation of test data (e.g. aptitude tests) for the job-bound students requires a careful approach. It has been reported that this group of students is significantly less "enthusiastic" than others in relation to interpretation of test data (Dunlop, 1965). This differential, then, may be of significant interest and warrant development of new strategies for counselor intervention.

Some of the variables related to post-high school plans according to others were significant. According to the students, fewer parents of the handicapped group thought their child should attend college and more responded with "they don't care" or "full-time job" than the non-handicapped group. These responses may or may not be accurate perceptions. In any event, this is an area counselors could consider for intervention--consulting with parents concerning the assessment



or expectations of their children's post-high school plans. Shapiro and Asher (1972) concluded parents are less likely to help their handicapped child plan for the future. This conclusion was supported in this investigation according to the reports of the students. Hence, since students' perceive the parents are neglecting this role, it is even more imperative that the counselor undertake the task of aiding the handicapped students in planning their future.

Although there was no significant difference between the handicapped and non-handicapped group on the variable of what the counselor thought the student should do post-high school, it can be seen in Table 2 that 114 students in the handicapped group and 105 students in the non-handicapped group responded "I don't know." This number (219) of students who do not know the counselors' thoughts relative to their post-high school plans is over 25% of the total students (822) in the two groups. This may be another area for counselor intervention. Possibly, counselors need to demonstrate more concern for post-high school plans to enhance students' perception of the counselors' recommendations in this area. The significant issue may not, however, be the quality of counselor intervention, but the quantity—perhaps counselor intervention simply needs to be of increased intensity in this area.

Additionally, analysis of the handicapped group with the dependent variable, counselor influencing post-high school plans, was significant. The handicapped group perceived counselors as influencing

their post-high school plans more than the non-handicapped group. These data do not support Shapiro and Ashers' (1972) conclusion that counselors' tend to "neglect the students most unlike himself" (p. 107). It may be that with the passage of federal legislation (e.g. PL 94-142) counselors have devoted more attention to meeting handicapped students' needs. This may be an important finding. What may be disturbing about this finding is that this legislation, designed to guarantee handicapped students equal access to educational processes, may handicap and curtail the same access for non-handicapped students. In fact, Huckaby and Daly (1979) report counselors may be spending 75 to 90% of their time involved with implementation of PL 94-142. In light of this, perhaps counselors need to balance time and attention to fulfilling federal mandates with a concentrated effort to more equitably distribute their efforts. It may be, however, that the handicapped students, by virtue of their handicap, are in need of more counselor attention. In any event, this finding is very tenuous in its implications for counselors in properly balancing interventions among varying types of students. However, when the students, themselves, perceive this difference, the issue is one the counselors should definitely address.

In addition, when students are grouped according to primary handicapping condition, the only significant difference among the groups is found with the variable, counselor influencing post-high school plans. However, SPSS does not have the capability to perform

non-parametric post-hoc multiple comparison tests; therefore, where the significant differences were among the groups is unknown. However, from Table 7 it can be seen that students with a speech disability had the highest mean rank of counselors' influencing their post-high school plans, while students with an orthopedic and other physical handicaps had the lowest mean rank. It can be concluded that counselors are not meeting equally the needs of students with differing primary handicapping conditions relative to influencing their post-high school plans. With SPSS unable to provide a statistical interpretation of this finding, an intuitive approach may have some usefulness. From such an approach, one may expect that lower verbal skills held by those students with speech disabilities would both hinder their academic performance as well as their ability to communicate with counselors in a satisfying manner. On the contrary, the highest mean rank of counselors influencing post-high school plans belongs to the speech disabled group.

The majority of students (51.1%) in the handicapped group participated in both an educationally and physically handicapping program. Because of the prevalent multiple handicapping conditions among the students, then, one dimensional counseling techniques may be inappropriate. Rather, a more creative, many pronged strategy of intervention may be necessary to more appropriately meet the students' needs. This may require counselors to be even more holistic and involved increasingly in program planning, career development,

and post-high school planning.

Relationship to Conceptual Framework. In reference to the conceptual framework, the perceptual barrier cycle, handicapped high school senior students apparently did not perceive a barrier to seeking counseling, that is, the school providing counseling that will help continue their education or find employment, and counselors' influencing post-high school plans. The lack of a perceived barrier by the students towards seeking counselor attention appears to be an important finding in this investigation. If this be true, it is reasonable to assume that increased counselor attention to the needs of handicapped students would be an appropriate use of their time. Further, this finding demonstrates that it would not be a prodigal use of limited educational resources to engage in research and develop applications of models for counselor intervention and interaction with handicapped students in post-high school planning.

#### Recommendations for Further Research

Secondary analysis is a valuable, efficient, and economical research method and the HSB data set is a rich source of variables for further research. Therefore, it is recommended that:

1. The 1135 high school senior students who reported participating in a special program for educationally or physically handicapped students be considered in a replication and extension of this investigation.

2. Additional variables that have implications for career development and counseling for job-bound and college-bound students should be included in further research. These variables include: courses taken in disciplines that equip the student for a beginning job (e.g. auto mechanics); amount of time spent in work or community service during the school day; working for pay last week; looking for a job last week; number of hours spent working per week; amount of money earned per hour; job categories; description of job setting; skills to find out about jobs, apply for a job, or college.

3. The variables of parent expectations and roles in the process of post-high school planning for the handicapped students should be more closely examined in conjunction with possible counselor intervention.

4. Post-hoc multiple comparison tests should be carried out to determine which mean rank or ranks differ significantly from other mean ranks when Kruskal-Wallis One-Way Analysis of Variance determines that a null hypothesis is to be rejected.

5. As counseling role and services may differ in private schools, it is recommended that handicapped and non-handicapped seniors in private schools be included in further research.

6. As many important variables not examined in this study may bear on counseling roles and services over time, it is recommended that the HSB data set be examined to identify variables which might be examined over time (e.g., self-concept, values, educational plans,

careers).

7. As the findings of this investigation are based upon a national data set, without correction for regional biases which may create differing results, it is recommended that high school seniors in Virginia in the 1980 Survey of Public School Seniors be compared with the HSB seniors to clarify deviations in the findings resulting from regional biases.

8. Handicapped high school seniors in Virginia in the 1980 Survey of Public School Seniors should be compared with the HSB handicapped seniors.

Some caution must be noted concerning the HSB (1980) data set. For example, 17 and 18 year old students completed the senior questionnaire without specific instructions. It is also possible some students misinterpreted questions. It was not likely that students who reported as having been in a physically handicapped program or in both an educationally and physically handicapped program had only a learning disability as a handicapping condition. However, even though some of the data may have been collected under uncertain circumstances, HSB still remains the most current and complete data set on high school students.

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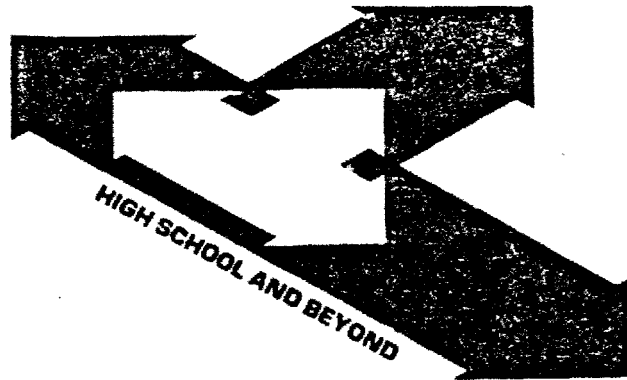
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## **APPENDICES**

APPENDIX A  
SENIOR QUESTIONNAIRE



High School and Beyond is sponsored by the National Center for Education Statistics, an agency of the United States Department of Education.

Thank you for accepting our invitation to participate in HIGH SCHOOL AND BEYOND. This is a voluntary but important national survey. We are pleased that you have agreed to participate. Your cooperation and participation will help us learn more about the experiences of high school students and their plans for the future.

All information which would permit identification of the individual will be held in strict confidence, will be used only by persons engaged in and for the purposes of this survey, and will not be disclosed or released to others for any purposes except as required by law.

## SENIOR QUESTIONNAIRE

STATE:

SCHOOL NO:

STUDENT NO:

As a matter of policy, the National Center for Education Statistics is concerned with protecting the privacy of individuals who participate in voluntary surveys. We want to let you know that:

1. Section 406 of the General Education Provisions Act (20-USC 1221e-1) allows us to ask you the questions in this questionnaire.
2. You may skip any question you do not wish to answer.
3. We are asking you these questions in order to gather information about what happens to students as they move out of high school and make decisions about post-secondary education and work.
4. Your responses will be merged with those of other students, and the answers you give will never be identified as yours.

### GENERAL INSTRUCTIONS

PLEASE READ EACH QUESTION CAREFULLY.

It is important that you follow the directions for responding to each kind of question. These are:

(MARK ONE)

What is the color of your eyes? (MARK ONE)

Brown ..... ☐  
 Blue ..... ☐  
 Green ..... ☒  
 Another color ..... ☐

If the color of your eyes is green, you would mark the oval to the right of green.

(MARK ALL THAT APPLY)

Last week, did you do any of the following? (MARK ALL THAT APPLY)

See a play ..... ☐  
 Go to a movie ..... ☒  
 Attend a sporting event ..... ☒

If you went to a movie and attended a sporting event last week, you would mark the two ovals as shown.

(MARK ONE OVAL FOR EACH LINE)

Do you plan to do any of the following next week? (MARK ONE OVAL FOR EACH LINE)

	<u>Yes</u>	<u>Not Sure</u>	<u>No</u>
a. Visit a relative .....	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
b. Go to a museum .....	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
c. Study at a friend's house .....	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you plan to study at a friend's house, do not plan to visit a relative, and are not sure about going to a museum next week, you would mark one oval on each line as shown.

This questionnaire is not a test. We hope you will answer every question, but you may skip any question you do not wish to answer.

WE HOPE YOU WILL ANSWER EVERY QUESTION, BUT YOU MAY SKIP ANY QUESTION YOU DO NOT WISH TO ANSWER.

1. When do you expect to graduate from high school? (MARK ONE)

- ☐ I will leave high school before I graduate .....○  
 Now through June 1980 .....○  
 July or August 1980 .....○  
 September 1980 through January 1981 .....○  
 February through June 1981 .....○  
 After June 1981 .....○

2. Which of the following best describes your present high school program? (MARK ONE)

- ☐ General .....○  
 Academic or college preparatory .....○  
 Vocational (Occupational preparation)  
   Agricultural occupations .....○  
   Business or office occupations .....○  
   Distributive education .....○  
   Health occupations .....○  
   Home economics occupations .....○  
   Technical occupations .....○  
   Trade or industrial occupations .....○

3. How often has each of the following been used in the courses you are taking this year? (MARK ONE OVAL FOR EACH LINE)

- |  | <u>Never</u> | <u>Seldom</u> | <u>Fairly often</u> | <u>Frequently</u> |
|--|--------------|---------------|---------------------|-------------------|
| a. Listening to the teacher's lecture .....  | ○            | ○             | ○                   | ○                 |
| b. Participating in student-centered discussions .....                                 | ○            | ○             | ○                   | ○                 |
| c. Working on a project or in a laboratory .....                                       | ○            | ○             | ○                   | ○                 |
| d. Writing essays, themes, poetry, or stories ...                                      | ○            | ○             | ○                   | ○                 |
| e. Having individualized instruction (small groups or one-to-one with a teacher) ..... | ○            | ○             | ○                   | ○                 |
| f. Using teaching machines or computer-assisted instructions .....                     | ○            | ○             | ○                   | ○                 |

4. Starting with the beginning of the tenth grade and through the end of this school year how  
☐ much course work will you have taken in each of the following subjects?

Count only courses that meet at least three times (or three periods) a week. (MARK ONE  
 OVAL FOR EACH LINE)

	<u>None</u>	<u>1/2</u> <u>year</u>	<u>1</u> <u>year</u>	<u>1 1/2</u> <u>years</u>	<u>2</u> <u>years</u>	<u>2 1/2</u> <u>years</u>	<u>3</u> <u>years</u>	<u>More</u> <u>than</u> <u>3</u> <u>years</u>
a. Mathematics .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. English or literature .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. French .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. German .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Spanish .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. History or social studies .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Science .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Business, office, or sales .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Trade and industry .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Technical courses .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Other vocational courses .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Which of the following courses have you taken, counting the courses you are taking this semester? (MARK ONE OVAL FOR EACH LINE)

	<u>Yes,</u> <u>have taken</u>	<u>No, have</u> <u>not taken</u>
a. First-year algebra .....	<input type="radio"/>	<input type="radio"/>
b. Second-year algebra .....	<input type="radio"/>	<input type="radio"/>
c. Geometry .....	<input type="radio"/>	<input type="radio"/>
d. Trigonometry .....	<input type="radio"/>	<input type="radio"/>
e. Calculus .....	<input type="radio"/>	<input type="radio"/>
f. Physics .....	<input type="radio"/>	<input type="radio"/>
g. Chemistry .....	<input type="radio"/>	<input type="radio"/>

6. Have you taken any high school courses in the following areas which have equipped you for a beginning job in that area? (MARK ONE OVAL FOR EACH LINE)

	<u>Yes</u>	<u>No</u>
a. Agriculture, including horticulture .....	<input type="radio"/>	<input type="radio"/>
b. Auto mechanics .....	<input type="radio"/>	<input type="radio"/>
c. Commercial arts .....	<input type="radio"/>	<input type="radio"/>
d. Computer programming or computer operations .....	<input type="radio"/>	<input type="radio"/>
e. Construction trades:		
1. Carpentry, cabinet making, or millwork .....	<input type="radio"/>	<input type="radio"/>
2. Electrical .....	<input type="radio"/>	<input type="radio"/>
3. Masonry .....	<input type="radio"/>	<input type="radio"/>
4. Plumbing .....	<input type="radio"/>	<input type="radio"/>
f. Cosmetology, hairdressing, or barbering .....	<input type="radio"/>	<input type="radio"/>
g. Drafting .....	<input type="radio"/>	<input type="radio"/>
h. Electronics .....	<input type="radio"/>	<input type="radio"/>
i. Home economics, including dietetics and child care .....	<input type="radio"/>	<input type="radio"/>
j. Machine shop .....	<input type="radio"/>	<input type="radio"/>
k. Medical or dental assisting .....	<input type="radio"/>	<input type="radio"/>
l. Practical nursing .....	<input type="radio"/>	<input type="radio"/>
m. Quantity food occupations .....	<input type="radio"/>	<input type="radio"/>
n. Sales or merchandising .....	<input type="radio"/>	<input type="radio"/>
o. Secretarial, stenographic, typing, or other office work .....	<input type="radio"/>	<input type="radio"/>
p. Welding .....	<input type="radio"/>	<input type="radio"/>
q. Other .....	<input type="radio"/>	<input type="radio"/>

7. Which of the following best describes your grades so far in high school? (MARK ONE)

☐ Mostly A (a numerical average of 90-100) .....☐  
 About half A and half B (85-89) .....☐  
 Mostly B (80-84) .....☐  
 About half B and half C (75-79) .....☐  
 Mostly C (70-74) .....☐  
 About half C and half D (65-69) .....☐  
 Mostly D (60-64) .....☐  
 Mostly below D (below 60) .....☐

8. For each of the high school subjects listed below, mark an oval for each statement that applies to you. (MARK ALL THAT APPLY FOR EACH SUBJECT)

A. Mathematics

- a. I got mostly A's and B's in this subject ..... ☐  
 b. It will be useful in my future ..... ☐  
 c. It was interesting to me ..... ☐  
 d. Took no mathematics courses ..... ☐

B. English or literature

- a. I got mostly A's and B's in this subject ..... ☐  
 b. It will be useful in my future ..... ☐  
 c. It was interesting to me ..... ☐  
 d. Took no English or literature courses ..... ☐

C. Business, office, or sales

- a. I got mostly A's and B's in this subject ..... ☐  
 b. It will be useful in my future ..... ☐  
 c. It was interesting to me ..... ☐  
 d. Took no business courses ..... ☐

D. Trade or industry

- a. I got mostly A's and B's in this subject ..... ☐  
 b. It will be useful in my future ..... ☐  
 c. It was interesting to me ..... ☐  
 d. Took no trade or industrial courses ..... ☐

9. Have you taken any of the following tests this year, or last year (or both)? (MARK ONE OVAL FOR EACH LINE)

	Yes, both this year and last year	Yes, this year	Yes, last year	No, did not take
a. College Board SAT test .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. ACT tests .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Armed Services Vocational Aptitude Battery (ASVAB) ..	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. When did you begin going to this school? (MARK ONE)

Before 9th grade .....☐  
 Beginning of 9th grade .....☐  
 During the 9th grade .....☐  
 Beginning of 10th grade .....☐  
 During the 10th grade .....☐  
 Beginning or during 11th grade .....☐  
 Beginning or during 12th grade .....☐

11. Have you ever been in any of the following kinds of courses or programs in high school? (MARK ONE OVAL FOR EACH LINE)

	No	Yes
a. Remedial English (sometimes called basic or essential) .....	<input type="radio"/>	<input type="radio"/>
b. Remedial Mathematics (sometimes called basic or essential) .....	<input type="radio"/>	<input type="radio"/>
c. Advanced or honors program in English .....	<input type="radio"/>	<input type="radio"/>
d. Advanced or honors program in Mathematics .....	<input type="radio"/>	<input type="radio"/>
e. Bilingual or bicultural program .....	<input type="radio"/>	<input type="radio"/>
f. Family life or sex education .....	<input type="radio"/>	<input type="radio"/>
g. Alcohol or drug abuse education .....	<input type="radio"/>	<input type="radio"/>
h. Special program for the educationally handicapped .....	<input type="radio"/>	<input type="radio"/>
i. Special program for the physically handicapped .....	<input type="radio"/>	<input type="radio"/>

12. During this school year about how much of your regular school day have you spent in course work at another school—averaged out over the school year? (MARK ONE)

None ..... ☐

About one period a day ..... ☐

More than one period but less than half a day ..... ☐

About half a day ..... ☐

More than half of the school day ..... ☐

13. Some students spend part of the school day in programs outside of any school in some kind of work or community service setting. Averaged over this school year, about how much of your school day have you spent in programs held someplace other than at a school? (MARK ONE)

None ..... ☐

About one period a day ..... ☐

More than one period but less than half a day ..... ☐

About half a day ..... ☐

More than half of the school day ..... ☐

14. Have you ever heard of or participated in any of the following high school educational programs? (MARK ONE OVAL FOR EACH LINE)

	Never heard of this program	Have heard of this program but have not participated	Have participated in this program
a. Cooperative Vocational Education Program (Co-op Program) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. High School Vocational Education Work-Study Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Talent Search .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Upward Bound .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Continuation High School .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Alternative High School .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Special School for pregnant girls or mothers .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. CETA Work Programs (such as the Youth Employment and Training Program or the Conservation Corps) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Junior ROTC .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



15. Approximately what is the average amount of time you spend on homework a week?  
(MARK ONE)

No homework is ever assigned ..... ☐  
 I have homework, but I don't do it ..... ☐  
 Less than 1 hour a week ..... ☐  
 Between 1 and 3 hours a week ..... ☐  
 More than 3 hours, less than 5 hours a week ..... ☐  
 Between 5 and 10 hours a week ..... ☐  
 More than 10 hours a week ..... ☐

16. Between the beginning of school last fall and Christmas vacation, about how many days were  
☐ you absent from school for any reason, not counting illness? (MARK ONE)

None ..... ☐  
 1 or 2 days ..... ☐  
 3 or 4 days ..... ☐  
 5 to 10 days ..... ☐  
 11 to 15 days ..... ☐  
 16 to 20 days ..... ☐  
 21 or more ..... ☐

17. Between the beginning of school last fall and Christmas vacation, about how many days were  
☐ you late to school? (MARK ONE)

None ..... ☐  
 1 or 2 days ..... ☐  
 3 or 4 days ..... ☐  
 5 to 10 days ..... ☐  
 11 to 15 days ..... ☐  
 16 to 20 days ..... ☐  
 21 or more ..... ☐

18. How old were you when you first worked for pay, not counting work around the house?  
(MARK ONE)

11 or younger ..... ☐  
 12 ..... ☐  
 13 ..... ☐  
 14 ..... ☐  
 15 ..... ☐  
 16 ..... ☐  
 17 ..... ☐  
 18 ..... ☐  
 19 ..... ☐  
 20 or older ..... ☐  
 Never have worked for pay ..... ☐

19. Did you do any work for pay last week, not counting work around the house? (MARK ONE)

Yes ..... ☐  
No ..... ☐

20. Were you looking for a job last week? (MARK ONE)

Yes ..... ☐  
No ..... ☐

21. When was the most recent time you worked for pay, not counting work around the house? (MARK ONE)

Never worked for pay ..... ☐  
Last week ..... ☐  
Within the past month, but not last week ..... ☐  
Within the past 3 months ..... ☐  
Since school started last fall ..... ☐  
Last summer ..... ☐  
Before that ..... ☐

22. How many hours do/did you work a week on your current or most recent job? (MARK ONE)

None, never worked for pay ..... ☐  
1-4 hours per week ..... ☐  
5-14 hours per week ..... ☐  
15-21 hours per week ..... ☐  
22-29 hours per week ..... ☐  
30-34 hours per week ..... ☐  
35 hours or more per week ..... ☐

23. How much do/did you earn per hour on that job (your current or most recent job)? (MARK ONE)

Have not worked for pay ..... ☐  
Less than \$1.50 per hour ..... ☐  
\$1.50 to \$1.99 ..... ☐  
\$2.00 to \$2.49 ..... ☐  
\$2.50 to \$2.89 ..... ☐  
\$2.90 to \$3.09 ..... ☐  
\$3.10 to \$3.49 ..... ☐  
\$3.50 to \$3.99 ..... ☐  
\$4.00 per hour or more ..... ☐

24. Which of the job categories below comes closest to the kind of work you do/did for pay on your current or most recent job? (If more than one kind of work, choose the one which paid you the most per week.) (MARK ONE)

Have not worked for pay .....○

Lawn work or odd jobs .....○

Waiter or waitress in a restaurant or drive-in .....○

Babysitting or child care .....○

Farm or agricultural work .....○

Factory work, unskilled or semi-skilled .....○

Skilled trade .....○

Other manual labor .....○

Store clerk or salesperson .....○

Office or clerical .....○

Hospital or health .....○

Other .....○

25. Is your current job (or was your most recent job) a CETA-sponsored job or another job supported by government funds, or is it for a private company? (MARK ONE)

Have not worked for pay .....○

CETA-sponsored youth employment job .....○

Other government-funded job .....○

Private company .....○

Other .....○

Don't know .....○

26. At your current or most recent job, about what proportion of the time is (was) spent on training (not on just doing your regular work on the job)? (MARK ONE)

Have not worked for pay .....○

Almost no time in training .....○

Less than one-quarter of the time .....○

About a quarter of the time .....○

About half of the time .....○

More than half the time in training .....○

27. In describing your present or most recent job, would you say it is... (MARK ONE OVAL FOR EACH LINE)

	<u>Yes</u>	<u>No</u>	<u>Never worked</u>
a. A place where people goof off? .....	○	○	○
b. Something you do just for the money? .....	○	○	○
c. More enjoyable than school? .....	○	○	○
d. Encourages good work habits? .....	○	○	○
e. More important for you than school? .....	○	○	○

28. What is the lowest hourly wage you would be willing to accept for a job while you are still in high school? (MARK ONE)

Below \$1.50 ..... ☐  
 \$1.50 ..... ☐  
 \$1.75 ..... ☐  
 \$2.00 ..... ☐  
 \$2.25 ..... ☐  
 \$2.50 ..... ☐  
 \$2.75 ..... ☐  
 \$3.00 ..... ☐  
 \$3.25 ..... ☐  
 \$3.50 ..... ☐  
 \$3.75 ..... ☐  
 \$4.00 per hour or more ..... ☐  
 Would not accept any job ..... ☐

29. What is the lowest hourly wage you would be willing to accept for a job after you graduate from high school? (MARK ONE)

Below \$1.50 ..... ☐  
 \$1.50 ..... ☐  
 \$1.75 ..... ☐  
 \$2.00 ..... ☐  
 \$2.25 ..... ☐  
 \$2.50 ..... ☐  
 \$2.75 ..... ☐  
 \$3.00 ..... ☐  
 \$3.25 ..... ☐  
 \$3.50 ..... ☐  
 \$3.75 ..... ☐  
 \$4.00 per hour or more ..... ☐

30. During last summer (summer of 1979), about how many hours per week did you work for pay outside your own home? (MARK ONE)

None ..... ☐  
 1-4 hours per week ..... ☐  
 5-14 hours per week ..... ☐  
 15-21 hours per week ..... ☐  
 22-29 hours per week ..... ☐  
 30-34 hours per week ..... ☐  
 35 hours or more per week ..... ☐

31. During the school year before this one, about how many hours per week on the average did you work for pay outside your own home? (MARK ONE)

None ..... ☐  
 1-4 hours per week ..... ☐  
 5-14 hours per week ..... ☐  
 15-21 hours per week ..... ☐  
 22-29 hours per week ..... ☐  
 30-34 hours per week ..... ☐  
 35 hours or more per week ..... ☐

32. Have you participated in any of the following types of activities either in or out of school this year? (MAKE ONE OVAL FOR EACH LINE)

	Have not participated	Have participated actively (but not as a leader or officer)	Have participated as a leader or officer
a. Varsity athletic teams .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Other athletic teams - in or out of school .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Cheer leaders, pep club, majorettes .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Debating or drama .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Band or orchestra .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Chorus or dance .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Hobby clubs such as photography, model building, hot rod, electronics, crafts .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Honorary clubs, such as Beta Club or National Honor Society .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. School newspaper, magazine, yearbook, annual .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. School subject-matter clubs, such as science, history, language, business, art .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Student council, student government, political club .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Vocational education clubs, such as Future Homemakers, Teachers, Farmers of America, DECA, FBLA, or VICA .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Youth organizations in the community, such as Scouts, Y, etc. ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Church activities, including youth groups .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. Junior Achievement .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. In the past year, have you tried to enlist into any branch of the Armed Services? (MARK ONE)

Yes ..... ☐

No, but I plan to try to enlist soon ..... ☐

No, and I don't plan to enlist ..... ☐

34. Have you been accepted by or sworn into any branch of the Armed Services? (MARK ONE)

No ..... ☐

Yes, and I will enter basic training later  
on this year in the . . .

    Army ..... ☐

    Navy ..... ☐

    Air Force ..... ☐

    Marine Corps ..... ☐

    Coast Guard ..... ☐

Yes, but I decided not to enter any service ..... ☐

I have not heard yet ..... ☐

35. How much do you agree with each of the following statements about your high school? (MARK ONE OVAL FOR EACH LINE)

- |  | <u>Agree<br/>strongly</u> | <u>Agree<br/>somewhat</u> | <u>Disagree<br/>somewhat</u> | <u>Disagree<br/>strongly</u> | <u>Does not<br/>apply</u> |
|--|---------------------------|---------------------------|------------------------------|------------------------------|---------------------------|
| a. School should have placed more emphasis on basic academic subjects (math, science, English, etc.) ..... | <input type="radio"/>     | <input type="radio"/>     | <input type="radio"/>        | <input type="radio"/>        | <input type="radio"/>     |
| b. School should have placed more emphasis on vocational and technical programs .....                      | <input type="radio"/>     | <input type="radio"/>     | <input type="radio"/>        | <input type="radio"/>        | <input type="radio"/>     |
| c. School did not offer enough practical work experience .....   | <input type="radio"/>     | <input type="radio"/>     | <input type="radio"/>        | <input type="radio"/>        | <input type="radio"/>     |
| d. School provided me with counseling that will help me continue my education .....                        | <input type="radio"/>     | <input type="radio"/>     | <input type="radio"/>        | <input type="radio"/>        | <input type="radio"/>     |
| e. School provided me with counseling that will help me find employment .....                              | <input type="radio"/>     | <input type="radio"/>     | <input type="radio"/>        | <input type="radio"/>        | <input type="radio"/>     |

36. Which of the following people live in the same household with you? (MARK ALL THAT APPLY)

- a. I live alone ..... ☐
- b. Father ..... ☐
- c. Other male guardian (step-father or foster father) ..... ☐
- d. Mother ..... ☐
- e. Other female guardian (step-mother or foster mother) ..... ☐
- f. Brother(s) and/or sister(s) (including step- or half-) ..... ☐
- g. Grandparent(s) ..... ☐
- h. My husband/wife ..... ☐
- i. My child or my children ..... ☐
- j. Other relative(s) (children or adults) ..... ☐
- k. Non-relative(s) (children or adults) ..... ☐

37. Did your mother (stepmother or female guardian) usually work during the following periods of your life? (MAKE ONE OVAL FOR EACH LINE)

- |   | <u>Did not<br/>work</u> | <u>Worked<br/>part-time</u> | <u>Worked<br/>full-time</u> | <u>Don't know</u>     | <u>Does not<br/>apply</u> |
|---|-------------------------|-----------------------------|-----------------------------|-----------------------|---------------------------|
| a. When you were in high school .....         | <input type="radio"/>   | <input type="radio"/>       | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/>     |
| b. When you were in elementary school .....   | <input type="radio"/>   | <input type="radio"/>       | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/>     |
| c. Before you went to elementary school ..... | <input type="radio"/>   | <input type="radio"/>       | <input type="radio"/>       | <input type="radio"/> | <input type="radio"/>     |

The next questions ask about your parents or guardians. Please answer for those parents with whom you are now living. For example, if you have both a natural father and a step-father or other male guardian, answer for the male who lives in the same household with you. If you are living with neither, use the category—'Do not live with father (stepfather or male guardian).

Please answer for the same persons in later questions that ask about your father or your mother.

**Which of the categories below comes closest to describing that job? (MARK ONE)**

- Do not live with father (stepfather or male guardian) .....○  
CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent .....○  
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber,  
telephone installer, carpenter .....○  
FARMER, FARM MANAGER .....○  
HOMEMAKER OR HOUSEWIFE ONLY .....○  
LABORER such as construction worker, car washer, sanitary worker, farm laborer .....○  
MANAGER, ADMINISTRATOR such as sales manager, office manager, school  
administrator, buyer, restaurant manager, government official .....○  
MILITARY such as career officer, enlisted man or woman in the Armed Forces .....○  
OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab,  
bus, or truck driver .....○  
PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian,  
writer, social worker, actor, actress, athlete, politician, but not including school  
teacher .....○  
PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college  
teacher .....○  
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant  
owner .....○  
PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter .....○  
SALES such as salesperson, advertising or insurance agent, real estate broker .....○  
SCHOOL TEACHER such as elementary or secondary .....○  
SERVICE such as barber, beautician, practical nurse, private household worker,  
janitor, waiter .....○  
TECHNICAL such as draftsman, medical or dental technician, computer programmer .....○  
Never worked .....○  
Don't know .....○

39. What was the highest level of education your father (stepfather or male guardian) completed?  
☐ (MARK ONE)

- Do not live with father (stepfather or male guardian) .....○
- Less than high school graduation .....○
- High school graduation only .....○
- Vocational, trade, or business school after high school ..... { Less than two years .....○  
Two years or more .....○
- College program ..... { Less than two years of college .....○  
Two or more years of college (including two-year degree) .....○  
Finished college (four- or five-year degree) .....○  
Master's degree or equivalent .....○  
Ph.D., M.D., or other advanced professional degree .....○
- Don't know .....○

40. How much of his life has your father (stepfather or male guardian) spent in the United States? (MARK ONE)

All or almost all ..... ☐  
 More than 20 years, but not all ..... ☐  
 About 11-20 years ..... ☐  
 About 6-10 years ..... ☐  
 About 1-5 years ..... ☐  
 Don't know. .... ☐

41. Please describe below the job most recently held by your mother (stepmother or female guardian) even if she is not working at present.

(WRITE IN) \_\_\_\_\_

Which of the categories below comes closest to describing that job? (MARK ONE)

Do not live with mother (stepmother or female guardian) ..... ☐  
 CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent ..... ☐  
 CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter ..... ☐  
 FARMER, FARM MANAGER ..... ☐  
 HOMEMAKER OR HOUSEWIFE ONLY ..... ☐  
 LABORER such as construction worker, car washer, sanitary worker, farm laborer ..... ☐  
 MANAGER, ADMINISTRATOR such as sales manager, office manager, school administrator, buyer, restaurant manager, government official ..... ☐  
 MILITARY such as career officer, enlisted man or woman in the Armed Forces ..... ☐  
 OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver ..... ☐  
 PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor actress, athlete, politician, but not including school teacher ..... ☐  
 PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college teacher ..... ☐  
 PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner ..... ☐  
 PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter ..... ☐  
 SALES such as salesperson, advertising or insurance agent, real estate broker ..... ☐  
 SCHOOL TEACHER such as elementary or secondary ..... ☐  
 SERVICE such as barber, beautician, practical nurse, private household worker janitor, waiter ..... ☐  
 TECHNICAL such as draftsman, medical or dental technician, computer programmer ..... ☐  
 Never worked ..... ☐  
 Don't know ..... ☐



42. What was the highest level of education your mother (stepmother or female guardian) completed? (MARK ONE)

Do not live with mother (stepmother or female guardian) ..... ☐

Less than high school graduation ..... ☐

High school graduation only ..... ☐

Vocational, trade or business school after high school ..... { Less than two years ..... ☐

Two years or more ..... ☐

College program ..... { Less than two years of college ..... ☐

Two or more years of college (including two-year degree) ..... ☐

Finished college (four- or five-year degree) ..... ☐

Master's degree or equivalent ..... ☐

Ph.D., M.D., or other advanced professional degree ..... ☐

Don't know ..... ☐

43. How much of her life has your mother (stepmother or female guardian) spent in the United States? (MARK ONE)

All or almost all ..... ☐

More than 20 years, but not all ..... ☐

About 11-20 years ..... ☐

About 6-10 years ..... ☐

About 1-5 years ..... ☐

Don't know ..... ☐

44. Were you born in the United States? (MARK ONE)

Yes ..... ☐

No ..... ☐

45. How much of your life have you spent in the United States? (MARK ONE)

All or almost all ..... ☐

More than 10 years, but not all ..... ☐

About 6-10 years ..... ☐

About 1-5 years ..... ☐

46. Are the following statements about your parents true or false? (MARK ONE OVAL FOR EACH LINE)

	True	False	Does not apply
a. My mother (stepmother or female guardian) keeps close track of how well I am doing in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. My father (stepfather or male guardian) keeps close track of how well I am doing in school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. My parents (or guardians) almost always know where I am and what I'm doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

47. How often do you spend time on the following activities outside of school? (MARK ONE OVAL FOR EACH LINE)

	<u>Rarely or never</u>	<u>Less than once a week</u>	<u>Once or twice a week</u>	<u>Every day or almost every day</u>
a. Visiting with friends at a local gathering place .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Reading for pleasure .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Going out on dates .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Just driving or riding around (alone or with friends) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Talking with friends on the telephone ..	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Thinking or daydreaming alone .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Talking with your mother or father about personal experiences .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Reading the front page of the newspaper .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

48. During week days about how many hours per day do you watch TV? (MARK ONE)

Don't watch TV during week .....	<input type="radio"/>
Less than 1 hour .....	<input type="radio"/>
1 hour or more, less than 2 .....	<input type="radio"/>
2 hours or more, less than 3 .....	<input type="radio"/>
3 hours or more, less than 4 .....	<input type="radio"/>
4 hours or more, less than 5 .....	<input type="radio"/>
5 or more .....	<input type="radio"/>

49. How much has each of the following persons influenced your plans for after high school? (MARK ONE OVAL FOR EACH LINE)

	<u>Not at all</u>	<u>Somewhat</u>	<u>A great deal</u>
a. Your father .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Your mother .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. A guidance counselor .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Teachers .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Friends or relatives about your own age .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Military recruiters .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. College recruiters .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

50. What do the following people think you ought to do after high school? (MARK ONE OVAL FOR EACH LINE)

	<u>Go to college</u>	<u>Get a full-time job</u>	<u>Enter a trade school or an appren- ticeship</u>	<u>Enter military service</u>	<u>They don't care</u>	<u>I don't know</u>	<u>Does not apply</u>
a. Your father .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Your mother .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. A guidance counselor .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Teachers .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Friends or relatives about your own age .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

51. Please think of your closest friend in this school who is a senior. As far as you know, are the following statements true or false for him/her? (MARK ONE OVAL FOR EACH LINE)

	<u>True</u>	<u>False</u>
a. Gets good grades .....	<input type="radio"/>	<input type="radio"/>
b. Is interested in school .....	<input type="radio"/>	<input type="radio"/>
c. Attends classes regularly .....	<input type="radio"/>	<input type="radio"/>
d. Plans to go to college .....	<input type="radio"/>	<input type="radio"/>
e. Is popular with others .....	<input type="radio"/>	<input type="radio"/>

52. How much has each of the following interfered with your education at this school? (MARK ONE OVAL FOR EACH LINE)

	<u>Not at all</u>	<u>Somewhat</u>	<u>A great deal</u>
a. Courses are too hard .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Find it hard to adjust to school routine .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Poor teaching .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Poor study habits .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Courses are too easy .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

53. Please rate your school on each of the following aspects. (MARK ONE OVAL FOR EACH LINE)

	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Excellent</u>	<u>Don't know</u>
a. Condition of buildings and classrooms .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Library facilities .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Quality of academic instruction .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Reputation in the community .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Teacher interest in students .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Effective discipline .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Fairness of discipline .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. School spirit .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

54. Does your high school have a minimum competency or proficiency test—that is, a special test that all students must pass in order to get a high school diploma? (MARK ONE)

Yes ..... ☐  
 No ..... ☐  
 Don't know ..... ☐

55. Have you taken a minimum competency or proficiency test yet? (MARK ONE)

School does not have such a test ..... ☐  
 Yes ..... ☐  
 No ..... ☐  
 Don't know ..... ☐

56. Did you pass or fail or don't you know the results yet? (MARK ONE)

Did not take such a test ..... ☐  
 Passed ..... ☐  
 Failed ..... ☐  
 Don't know results yet ..... ☐

57. How important is each of the following to you in your life? (MARK ONE OVAL FOR EACH LINE)

	<u>Not important</u>	<u>Somewhat important</u>	<u>Very important</u>
a. Being successful in my line of work .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Finding the right person to marry and having a happy family life .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Having lots of money .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Having strong friendships .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Being able to find steady work .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Being a leader in my community .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Being able to give my children better opportunities than I've had .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Living close to parents and relatives .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Getting away from this area of the country .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Working to correct social and economic inequalities .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Having children .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Having leisure time to enjoy my own interests ....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

58. How do you feel about each of the following statements? (MARK ONE OVAL FOR EACH LINE)

	<u>Agree strongly</u>	<u>Agree</u>	<u>Disagree</u>	<u>Disagree strongly</u>	<u>No opinion</u>
a. I take a positive attitude toward myself .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Good luck is more important than hard work for success .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I feel I am a person of worth, on an equal plane with others .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I am able to do things as well as most other people .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Every time I try to get ahead, something or somebody stops me .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Planning only makes a person unhappy, since plans hardly ever work out anyway .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. People who accept their condition in life are happier than those who try to change things .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. On the whole, I am satisfied with myself .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. What happens to me is my own doing .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. At times I think I am no good at all .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. When I make plans, I am almost certain I can make them work .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. I feel I do not have much to be proud of .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

59. Are the following statements about your experiences in school true or false? (MARK ONE OVAL FOR EACH LINE)

	<u>True</u>	<u>False</u>
a. I am satisfied with the way my education is going .....	<input type="radio"/>	<input type="radio"/>
b. I have had disciplinary problems in school during the last year .....	<input type="radio"/>	<input type="radio"/>
c. I am interested in school .....	<input type="radio"/>	<input type="radio"/>
d. I have been suspended or put on probation in school .....	<input type="radio"/>	<input type="radio"/>
e. Every once in a while I cut a class .....	<input type="radio"/>	<input type="radio"/>
f. I don't feel safe at this school .....	<input type="radio"/>	<input type="radio"/>

60. During the past month, have you felt so sad, or had so many problems, that you wondered if anything was worthwhile? (MARK ONE)

Yes, more than once .....	<input type="radio"/>
Yes, once .....	<input type="radio"/>
No .....	<input type="radio"/>

61. Are the following statements about yourself true or false? (MARK ONE OVAL FOR EACH LINE)

- |   | <u>True</u>           | <u>False</u>          |
|---|-----------------------|-----------------------|
| a. I have been in serious trouble with the law .....                | <input type="radio"/> | <input type="radio"/> |
| b. I am overweight .....  | <input type="radio"/> | <input type="radio"/> |
| c. Others think of me as physically unattractive ....               | <input type="radio"/> | <input type="radio"/> |
| d. I am popular with other students in my class ....                | <input type="radio"/> | <input type="radio"/> |
| e. I like to work hard in school .....                              | <input type="radio"/> | <input type="radio"/> |
| f. I enjoy working for pay .....                                    | <input type="radio"/> | <input type="radio"/> |
| g. I will be disappointed if I don't<br>graduate from college ..... | <input type="radio"/> | <input type="radio"/> |

62. Write in here the name of the job or occupation that you expect or plan to have when you are  
☐ 30 years old. Even if you are not at all sure, write in your best guess.

(WRITE IN) \_\_\_\_\_

Which of the categories below comes closest to describing that job? (MARK ONE)

- CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent ..... ☐
- CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber,  
telephone installer, carpenter ..... ☐
- FARMER, FARM MANAGER ..... ☐
- HOMEMAKER OR HOUSEWIFE ONLY ..... ☐
- LABORER such as construction worker, car washer, sanitary worker, farm laborer ..... ☐
- MANAGER, ADMINISTRATOR such as sales manager, office manager, school  
administrator, buyer, restaurant manager, government official ..... ☐
- MILITARY such as career officer, enlisted man or woman in the Armed Forces ..... ☐
- OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab,  
bus, or truck driver ..... ☐
- PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian,  
writer, social worker, actor, actress, athlete, politician, but not including school  
teacher ..... ☐
- PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college  
teacher ..... ☐
- PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant  
owner ..... ☐
- PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter ..... ☐
- SALES such as salesperson, advertising or insurance agent, real estate broker ..... ☐
- SCHOOL TEACHER such as elementary or secondary ..... ☐
- SERVICE such as barber, beautician, practical nurse, private household worker,  
janitor, waiter ..... ☐
- TECHNICAL such as draftsman, medical or dental technician, computer programmer ..... ☐
- NOT WORKING ..... ☐

63. How important was each of the following factors in determining the kind of work you plan to be doing for most of your life? (MARK ONE OVAL FOR EACH LINE)

	Not important	Somewhat important	Very important
a. Previous work experience in the area .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Good income to start or within a few years .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Job security and permanence .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Work that seems important and interesting to me .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Freedom to make my own decisions .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Meeting and working with sociable friendly people .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

64. Would you be willing to move from this town or city in order to get a job you want? (MARK ONE)

Yes, I would prefer to move away ..... ☐

Yes, it makes no difference to me ..... ☐

Yes, but I would prefer to find work in this  
community ..... ☐

No, I am not willing to move ..... ☐

65. As things stand now, how far in school do you think you will get? (MARK ONE)

☐ Less than high school graduation ..... ☐

High school graduation only ..... ☐

Vocational, trade, or business  
school after high school ..... { Less than two years ..... ☐

Two years or more ..... ☐

College program ..... { Less than two years of college ..... ☐

Two or more years of college  
(including two-year degree) ..... ☐

Finish college (four- or five-year degree) ..... ☐

Master's degree or equivalent ..... ☐

Ph.D., M.D., or other advanced  
professional degree ..... ☐

66. How far in school do you think your mother wants you to go? (MARK ONE)

Less than high school graduation ..... ☐

High school graduation only ..... ☐

Vocational, trade, or business  
school after high school ..... { Less than two years ..... ☐

Two years or more ..... ☐

College program ..... { Less than two years of college ..... ☐

Two or more years of college  
(including two-year degree) ..... ☐

Finish college (four- or five-year degree) ..... ☐

Master's degree or equivalent ..... ☐

Ph.D., M.D., or other advanced  
professional degree ..... ☐

Don't know ..... ☐

67. What is the lowest level of education you would be satisfied with? (MARK ONE)

Less than high school graduation .....	<input type="radio"/>
High school graduation only .....	<input type="radio"/>
Vocational, trade, or business school after high school .....	<input type="radio"/>
	{ Less than two years .....
	{ Two years or more .....
College program .....	{ Less than two years of college .....
	{ Two or more years of college (including two-year degree) .....
	{ Finished college (four- or five-year degree) .....
	{ Master's degree or equivalent .....
	{ Ph.D., M.D., or other advanced professional degree .....

68. Did you expect to go to college when you were in the following grades? (MARK ONE OVAL FOR EACH LINE)

When you were . . .	<u>Yes</u>	<u>No</u>	<u>Was not sure</u>	<u>Hadn't thought about it</u>
a. In the 8th grade? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. In the 9th grade? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. In the 10th grade? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. In the 11th grade? .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

69. Whatever your plans, do you think you have the ability to complete college? (MARK ONE)

Yes, definitely .....	<input type="radio"/>
Yes, probably .....	<input type="radio"/>
Not sure .....	<input type="radio"/>
I doubt it .....	<input type="radio"/>
Definitely not .....	<input type="radio"/>

70. If there were a program of compulsory two-year service after high school, with options of military service or community service as listed below, what would you most likely do? (MARK ONE)

Military service with educational benefits afterwards (such as scholarships for veterans) .....	<input type="radio"/>
Public service (such as hospitals, Peace Corps, forest service) .....	<input type="radio"/>
I am undecided .....	<input type="radio"/>
I would try to avoid either option .....	<input type="radio"/>



71. What is the one thing that most likely will take the largest share of your time in the year after you leave high school? (MARK ONE)

Working full time ..... ☐

Entering an apprenticeship or on-the-job training program ..... ☐

Going into regular military service (or service academy) ..... ☐

Being a full-time homemaker ..... ☐

Taking vocational or technical courses at a trade or business school full time or part time ..... ☐

Taking academic courses at a junior or community college full time or part time ..... ☐

Taking technical or vocational subjects at a junior or community college full time or part time ..... ☐

Attending a four-year college or university full time or part time ..... ☐

Working part time, but not attending school or college ..... ☐

Other (travel, take a break, no plans) ..... ☐

72. What other things do you now plan to do the year after you leave high school? (MARK ALL THAT APPLY)

a. Work ..... ☐

b. Enter an apprenticeship or on-the-job training program ..... ☐

c. Go into regular military service (or service academy) ..... ☐

d. Be a homemaker ..... ☐

e. Take vocational or technical courses at a trade or business school ..... ☐

f. Take academic courses at a junior or community college ..... ☐

g. Take technical or vocational subjects at a junior or community college ..... ☐

h. Attend a four-year college or university ..... ☐

i. Other (travel, take a break, no plans) ..... ☐

73. If you plan to work full time after high school, do you have a definite job lined up for you after you leave high school? (MARK ONE)

Yes, I'll continue in a job I now have ..... ☐

Yes, I have a new job lined up ..... ☐

No, but I've inquired at employment agencies or potential employers, looked in the newspapers, etc. .... ☐

No, I haven't done anything yet to get a job ..... ☐

Do not plan to work full time after high school ..... ☐

74. If you plan to work full time next year and can't find a job after six months, what one thing would you probably decide to do? (MARK ONE)

Don't plan to work full time next year ..... ☐  
 Keep on looking for a job around here ..... ☐  
 Move to a different area and look for jobs there ..... ☐  
 Work part time but not attend school or college ..... ☐  
 Enter an apprenticeship or on-the-job training  
 program ..... ☐  
 Go into regular military service (or service  
 academy) ..... ☐  
 Become a full-time homemaker ..... ☐  
 Take vocational or technical courses at a trade  
 or business school full time or part time ..... ☐  
 Take academic courses at a junior or community  
 college full time or part time ..... ☐  
 Take technical or vocational subjects at a  
 junior or community college full time or part time ..... ☐  
 Attend a four-year college or university full time  
 or part time ..... ☐  
 Other (travel, or take a break) ..... ☐  
 Don't know ..... ☐

75. About how much money do you expect to earn from work in the year beginning July 1980 and ending June 1981? (MARK ONE)

None ..... ☐  
 Less than \$1,000 ..... ☐  
 \$1,000 to \$2,999 ..... ☐  
 \$3,000 to \$4,999 ..... ☐  
 \$5,000 to \$6,999 ..... ☐  
 \$7,000 to \$8,999 ..... ☐  
 \$9,000 to \$10,999 ..... ☐  
 \$11,000 to \$12,999 ..... ☐  
 \$13,000 to \$14,999 ..... ☐  
 \$15,000 or more ..... ☐

76. About how much money do you expect to spend on living expenses (such as room and board and clothing) next year? Include expenses even if they will be paid by a scholarship or loan. (But don't include tuition or other schooling expenses.) (MARK ONE)

Almost none—I plan to live at home ..... ☐  
 None, for other reasons ..... ☐  
 Less than \$1,000 ..... ☐  
 \$1,000 to \$1,999 ..... ☐  
 \$2,000 to \$2,999 ..... ☐  
 \$3,000 to \$3,999 ..... ☐  
 \$4,000 to \$4,999 ..... ☐  
 \$5,000 to \$6,999 ..... ☐  
 \$7,000 to \$10,000 ..... ☐  
 More than \$10,000 ..... ☐

77. About how much money do you expect to spend on schooling expenses next year? Include expenses for fees, tuition, books, and so on, even if they will be paid by your parents, a scholarship, or a loan. (But don't include the costs of room and board, or other living expenses.) (MARK ONE)

None ..... ☐  
 Less than \$500 ..... ☐  
 \$500 to \$999 ..... ☐  
 \$1,000 to \$1,999 ..... ☐  
 \$2,000 to \$4,000 ..... ☐  
 More than \$4,000 ..... ☐

78. Assume you are in this situation. You want to go to college next year, but the college you want to attend will cost \$1,500 more than you and your family and any scholarship funds can provide. Which one of these would you most likely do? (MARK ONE)

Try to get a loan ..... ☐  
 Try to get a part-time job ..... ☐  
 Choose a college that costs less ..... ☐  
 Go to college later when funds  
 are available ..... ☐  
 Don't know ..... ☐

79. How do you plan to pay for the living expenses and schooling expenses (if any) you may have next year? For each source listed below, indicate how much money you expect to receive in the year beginning July 1980 and ending June 1981. If you are not sure, make your best guess. (MARK ONE OVAL FOR EACH LINE)

	None	Under \$300	\$300 to \$599	\$600 to \$1,199	\$1,200 to \$2,000	Over \$2,000
A. My family:						
a. Parents .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Husband or wife .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Other relatives .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Myself:						
a. Summer earnings, 1980 .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Earnings, Sept. 1980-June 1981 .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Savings .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Other sources:						
a. A state scholarship or grant .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. A federal scholarship or grant .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Other scholarship or grant .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. A state loan .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. A federal loan .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Other loan .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Social Security or Veterans Administration benefits .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

80. Where do you plan to live next year? (MARK ONE)

At home ..... ☐  
 In a school dormitory or residence hall ..... ☐  
 In a place of my own or with a room-mate ..... ☐  
 Sharing a place with more than one other person ..... ☐  
 In a place with more than one other person ..... ☐

81. At what age do you expect to . . . (MARK ONE OVAL FOR EACH QUESTION)

[illegible]

82. How many children altogether do you eventually expect to have? (MARK ONE)

None ..... ☐

One ..... ☐

Two ..... ☐

Three ..... ☐

Four or more ..... ☐

## Background information . . .

**83. Sex:**  
**(MARK ONE)**

Male .....○  
Female .....○

**84. Age:**  
**(MARK ONE)**

**15 or younger**      **16**      **17**      **18**      **19**      **20**      **21 or older**

☐                  ☐                  ☐                  ☐                  ☐                  ☐

**85. Height**  
(MARK THE OVALS WHICH INDICATE YOUR HEIGHT IN FEET AND INCHES)

Feet:      3    4    5    6    7  
☐   ☐   ☐   ☐   ☐

Inches: 0 1 2 3 4 5 6 7 8 9 10 11

## 86. Weight:

(MARK THE OVAL THAT INDICATES YOUR WEIGHT)

- Less than 100 pounds ..... ☐  
 101-105 ..... ☐  
 106-110 ..... ☐  
 111-115 ..... ☐  
 116-120 ..... ☐  
 121-125 ..... ☐  
 126-130 ..... ☐  
 131-135 ..... ☐  
 136-140 ..... ☐  
 141-145 ..... ☐  
 146-150 ..... ☐  
 151-155 ..... ☐  
 156-160 ..... ☐  
 161-165 ..... ☐  
 166-170 ..... ☐  
 171-175 ..... ☐  
 176-180 ..... ☐  
 181-185 ..... ☐  
 186-190 ..... ☐  
 191-195 ..... ☐  
 196-200 ..... ☐  
 201-205 ..... ☐  
 206-210 ..... ☐  
 211-215 ..... ☐  
 216-220 ..... ☐  
 221-225 ..... ☐  
 Over 226 pounds ..... ☐

## 87. Do you have any of the following conditions? (MARK ALL THAT APPLY)

☐

- a. Specific learning disability ..... ☐  
 b. Visual handicap ..... ☐  
 c. Hard of hearing ..... ☐  
 d. Deafness ..... ☐  
 e. Speech disability ..... ☐  
 f. Orthopedic handicap ..... ☐  
 g. Other health impairment ..... ☐

## 88. Do you feel that you have a physical condition that limits the kind or amount of work you can do on a job, or affects your chances for more education? (MARK ONE)

- No ..... ☐  
 Yes ..... ☐

89. What is your race? (MARK ONE)

- ☐ Black ..... ☐  
☐ White ..... ☐  
☐ American Indian or Alaskan Native ..... ☐  
☐ Asian or Pacific Islander ..... ☐  
☐ Other ..... ☐

90. What is your origin or descent? (If more than one, please mark below the one you consider the most important part of your background.) (MARK ONE)

HISPANIC OR SPANISH:

- ☐ Mexican, Mexican-American, Chicano ..... ☐  
☐ Cuban, Cubano ..... ☐  
☐ Puerto Rican, Puertorriqueno or Boricua ..... ☐  
☐ Other Latin American, Latino, Hispanic, or Spanish descent ..... ☐

NON-HISPANIC:

African:

- ☐ Afro-American ..... ☐  
☐ West Indian or Carribean ..... ☐  
☐ Alaskan Native ..... ☐  
☐ American Indian ..... ☐

Asian or Pacific Islander:

- ☐ Chinese ..... ☐  
☐ Filipino ..... ☐  
☐ Indian, Pakistani or other South Asian ..... ☐  
☐ Japanese ..... ☐  
☐ Korean ..... ☐  
☐ Vietnamese ..... ☐  
☐ Other Pacific Islander ..... ☐  
☐ Other Asian ..... ☐

European:

- ☐ English or Welsh ..... ☐  
☐ French ..... ☐  
☐ German ..... ☐  
☐ Greek ..... ☐  
☐ Irish ..... ☐  
☐ Italian ..... ☐  
☐ Polish ..... ☐  
☐ Portuguese ..... ☐  
☐ Russian ..... ☐  
☐ Scottish ..... ☐  
☐ Other European ..... ☐  
☐ Canadian (French) ..... ☐  
☐ Canadian (Other) ..... ☐  
☐ United States only ..... ☐

Other (WRITE IN) \_\_\_\_\_ ☐

**NOTE:** The following four questions pertain to fundamental freedoms of expression. These and other questions will provide helpful information for the interpretation of survey results. If you have any reservations about answering questions 91, 92, 93 and 94, please remember that you may leave them unanswered.

**91. What is your religious background? (MARK ONE)**

- Baptist ..... ☐
- Methodist ..... ☐
- Lutheran ..... ☐
- Presbyterian ..... ☐
- Episcopalian ..... ☐
- Other Protestant denomination ..... ☐
- Catholic ..... ☐
- Other Christian ..... ☐
- Jewish ..... ☐
- Other religion ..... ☐
- None ..... ☐

**92. In the past year, about how often have you attended religious services? (MARK ONE)**

- More than once a week ..... ☐
- About once a week ..... ☐
- Two or three times a month ..... ☐
- About once a month ..... ☐
- Several times a year or less ..... ☐
- Not at all ..... ☐

**93. Do you think of yourself as a religious person? (MARK ONE)**

- Yes, very ..... ☐
- Yes, somewhat ..... ☐
- No, not at all ..... ☐

**94. How would you describe your political beliefs? (MARK ONE)**

- Conservative or very conservative ..... ☐
- Moderate ..... ☐
- Liberal ..... ☐
- Very liberal or radical ..... ☐
- None ..... ☐
- Don't know ..... ☐

95. Did anyone at home read to you when you were young before you started school? (MARK ONE)

- Never .....○  
 Less than once a month .....○  
 One to four times a month .....○  
 Several times a week .....○  
 Every day .....○  
 Don't remember .....○

96. How many brothers and sisters do you have in each of the age groups below? Please include step-brothers and step-sisters if they live, or have lived, in your home. (MARK ONE OVAL FOR EACH LINE)

How many brothers and sisters  
do you have who are . . .

None      One      Two      Three      Four      Five  
or more

- a. Three or more years older  
than you .....○.....○.....○.....○.....○.....○.....○.....  
 b. 1-2 years older .....○.....○.....○.....○.....○.....○.....○.....  
 c. Same age as you .....○.....○.....○.....○.....○.....○.....○.....  
 d. 1-2 years younger .....○.....○.....○.....○.....○.....○.....○.....  
 e. Three or more years younger .....○.....○.....○.....○.....○.....○.....○.....

97. Do you have a twin brother or twin sister? (MARK ONE)

- Yes .....○  
 No .....○



98. How many of your brothers and sisters will be in college next fall? (MARK ONE)

- I don't have any brothers or sisters ..... ☐  
 None ..... ☐  
 One ..... ☐  
 Two or more ..... ☐

99. How many of your brothers and sisters will be in high school next fall? (MARK ONE)

- I don't have any brothers or sisters ..... ☐  
 None ..... ☐  
 One ..... ☐  
 Two or more ..... ☐

100. American families are divided below into three equal groups according to how much money the family makes in a year. Mark the oval for the group which comes closest to the amount of money your family makes in a year. (MARK ONE)

- 1/3 of American families make: \$11,999 or less ..... ☐  
 1/3 of American families make: \$12,000 to \$19,999 ..... ☐  
 1/3 of American families make: \$20,000 or more ..... ☐

101. This time families are divided into seven groups according to how much money they make in a year. Mark the oval for the group which comes closest to the amount of money your family makes in a year. (MARK ONE)

- \$6,999 or less ..... ☐  
 \$7,000 to \$11,999 ..... ☐  
 \$12,000 to \$15,999 ..... ☐  
 \$16,000 to \$19,999 ..... ☐  
 \$20,000 to \$24,999 ..... ☐  
 \$25,000 to \$37,999 ..... ☐  
 \$38,000 or more ..... ☐

102. Does your family own or rent the house or apartment in which you now live? (MARK ONE)

- Own ..... ☐  
 Rent ..... ☐  
 Other arrangement ..... ☐

103. How many rooms are there in your home? Count only the rooms your family lives in. Count the kitchen (if separate) but not bathrooms. (MARK ONE)

- 1 ..... ☐    2 ..... ☐    3 ..... ☐    4 ..... ☐    5 ..... ☐    6 ..... ☐    7 ..... ☐    8 ..... ☐    9 ..... ☐    10 or more ..... ☐

104. Which of the following do you have in your home? (MARK ONE OVAL FOR EACH LINE)

- |   | <u>Have</u>           | <u>Do not have</u>    |
|---|-----------------------|-----------------------|
| a. A specific place for study .....               | <input type="radio"/> | <input type="radio"/> |
| b. A daily newspaper .....                        | <input type="radio"/> | <input type="radio"/> |
| c. Encyclopedia or other<br>reference books ..... | <input type="radio"/> | <input type="radio"/> |
| d. Typewriter .....                               | <input type="radio"/> | <input type="radio"/> |
| e. Electric dishwasher .....                      | <input type="radio"/> | <input type="radio"/> |
| f. Two or more cars or trucks<br>that run .....   | <input type="radio"/> | <input type="radio"/> |
| g. More than 50 books .....                       | <input type="radio"/> | <input type="radio"/> |
| h. A room of your own .....                       | <input type="radio"/> | <input type="radio"/> |
| i. Pocket calculator .....                        | <input type="radio"/> | <input type="radio"/> |

105. When you were in the first, sixth, and ninth grades, about how many of the students in your class were Black? (MARK ONE OVAL FOR EACH LINE)

- |                            | <u>None</u>           | <u>Few</u>            | <u>About<br/>half</u> | <u>Most</u>           | <u>All</u>            |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| a. In my first grade ..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. In my sixth grade ..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. In my ninth grade ..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

106. When you were in the first, sixth, and ninth grades, about how many of the students in your class were Hispanic (Mexican, Cuban, Puerto Rican, Latino, or other Spanish descent)? (MARK ONE OVAL FOR EACH LINE)

- |                            | <u>None</u>           | <u>Few</u>            | <u>About<br/>half</u> | <u>Most</u>           | <u>All</u>            |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| a. In my first grade ..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. In my sixth grade ..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. In my ninth grade ..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

107. If you went to college, would it most likely be . . . (MARK ONE)

- A four-year college or university ..... ☐
- A two-year junior or community college ..... ☐

108. If you went to college would you most likely go to . . . (MARK ONE)

- A public college or university ..... ☐
- A private college or university ..... ☐

109. If you went to college would you probably go . . . (MARK ONE)

- In this state ..... ☐
- In another state ..... ☐

110. If you went to college would you probably go . . . (MARK ONE)

Full-time .....○

Part-time .....○

111. How much do you think each of the following kinds of schooling would cost for a year? Just answer about expenses for tuition, fees, books, and so on—not living expenses. (MARK ONE OVAL FOR EACH LINE)

Schooling expenses would be . . .

	Under \$500	\$500- \$1,000	\$1,001- \$2,000	\$2,001- \$3,000	\$3,001- \$5,000	\$5,001- \$7,000	Don't know
a. Cost at a public junior or community college .....	○	○	○	○	○	○	○
b. Cost at a state four-year college or university .....	○	○	○	○	○	○	○
c. Cost at a private four-year college or university .....	○	○	○	○	○	○	○

112. Do you plan to go to any vocational or trade school, or enter any apprenticeship program after leaving high school? (MARK ONE)

Yes .....○

No .....○ SKIP TO QUESTION 115

113. What field will you most likely train for? (MARK ONE)

- Agriculture, including horticulture .....○
- Auto mechanics .....○
- Commercial arts .....○
- Computer programming or computer operations .....○
- Construction trades:
  - Carpentry, cabinet making, or millwork .....○
  - Electrical .....○
  - Masonry .....○
  - Plumbing .....○
- Cosmetology, hairdressing, or barbering .....○
- Drafting .....○
- Electronics .....○
- Home economics, including dietetics and child care .....○
- Machine shop .....○
- Medical or dental assisting .....○
- Practical nursing .....○
- Quantity food occupations .....○
- Sales or merchandising .....○
- Secretarial, stenographic, typing, or  
other office work .....○
- Welding .....○
- Other .....○

114. Have you been accepted by any vocational school, trade school, or apprenticeship program?  
(MARK ONE)

- Have applied and have been accepted ..... ☐  
Have applied, but have not yet been accepted ..... ☐  
Program does not require advance application ..... ☐  
Plan to apply later ..... ☐

115. Do you plan to go to college at some time in the future? (MARK ONE)

- Yes, next year ..... ☐  
Yes, after staying out one year ..... ☐  
Yes, after a longer period out of school ..... ☐  
Don't know ..... ☐  
No ..... ☐

FOR THOSE ANSWERING "NO" THE  
QUESTIONNAIRE ENDS HERE.

ALL OTHERS CONTINUE WITH  
THE QUESTIONNAIRE

116. How important are each of the following in choosing a college you plan to attend? (MARK ONE OVAL FOR EACH LINE)

	<u>Not important</u>	<u>Somewhat important</u>	<u>Very important</u>
a. College expenses (tuition, books, room and board) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Availability of financial aid such as a school loan, scholarship, or grant .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Availability of specific courses or curriculum .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Reputation of the college in academic areas .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Reputation of the college in athletic programs .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Social life at the college .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Able to live at home and attend the college .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

117. Have you applied for admission to any college or university? (MARK ONE)

Yes, to one college ..... ☐

Yes, to two or three colleges ..... ☐

Yes, to four or more colleges ..... ☐

No, the college I am planning to attend does not require advance application for admission ..... ☐

No, I plan to apply soon ..... ☐

No, I plan to go to college later ..... ☐

118. Have you been accepted by any college or university? (MARK ONE)

Yes ..... ☐

No ..... ☐

Have not heard yet ..... ☐

Have not applied yet ..... ☐

119. Please write down here the name and location (city or town, and state) of the college you think you are most likely to attend.

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120. Indicate the field that comes closest to what you would most like to study in college.  
(MARK ONE)

- Agriculture (for example, agricultural economics, agronomy, forestry, and soils) ..... ☐
- Architecture ..... ☐
- Art (for example, art appreciation, design, drawing photography, graphics, and sculpting) ..... ☐
- Biological sciences (for example, botany, ecology, and zoology) ..... ☐
- Business (for example, accounting, business administration industrial management, marketing, and finance) ..... ☐
- Communications (for example, journalism, radio, and television) ..... ☐
- Computer and information sciences (for example, systems analysis) ..... ☐
- Education (for example, secondary education, elementary education, and physical education) ..... ☐
- Engineering (for example, chemical engineering, civil engineering, electrical engineering, and mechanical engineering) ..... ☐
- English (for example, creative writing, linguistics, literature, and speech and drama) ..... ☐
- Ethnic studies (for example, Black studies and Mexican-American studies) ..... ☐
- Foreign languages (for example, French, German, Italian, Latin, and Spanish) ..... ☐
- Health occupations (for example, practical nursing, medical technology, and x-ray technology) ..... ☐
- Health sciences (for example, registered nursing, optometry, and pharmacy) ..... ☐
- Home economics (for example, dietetics, family and child development, and textiles and clothing) ..... ☐
- Interdisciplinary studies ..... ☐
- Mathematics (for example, calculus and statistics) ..... ☐
- Music (for example, music appreciation and composition) ..... ☐
- Philosophy or religion (for example, ethics, logic, and theology) ..... ☐
- Physical science (for example, astronomy, biochemistry, chemistry, geology, and physics) ..... ☐
- Preprofessional (for example, prelaw, predentistry, and premedicine) ..... ☐
- Psychology ..... ☐
- Social sciences (for example, anthropology, economics, government, history, political science, social work, sociology, and urban affairs) ..... ☐
- Vocational or technical (for example, automobile repair, carpentry, computer programming, drafting, plumbing, stenography, and television repair) ..... ☐

Other (WRITE IN) ..... ☐

121. Do you plan to use funds available from any of the following programs for further study beyond high school? (MARK ONE OVAL FOR EACH LINE)

	<u>No. I do not plan to use it</u>	<u>Yes. I plan to use it</u>	<u>I do not know enough about this program to answer the question</u>
<b>A. Loans:</b>			
a. National Direct Student Loan Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Federal Guaranteed Student Loan Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Nursing Student Loan Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. State Student Loan Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. College or University Student Loan Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Regular Bank Loan .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>B. Scholarships, Fellowships and Grants:</b>			
a. Basic Educational Opportunity Grant (BEOG) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Supplemental Educational Opportunity Grant .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. ROTC Scholarship .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Social Security Benefits for Children of Retired, Disabled or Deceased Parents .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Nursing Scholarship Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Veterans Administration Survivors' and Dependents Educational Assistance Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Veterans' Educational Assistance Program (VEAP) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. State Scholarship Program .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. College or University Scholarship .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Scholarships from Private Organizations .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Division of Vocational Rehabilitation Educational Benefits .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>C. Work Programs:</b>			
a. CETA-Sponsored Youth Employment Development .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. College Work-Study .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Cooperative Education Program (Co-Op Ed.) .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX B

Table A

High School and Beyond

Selected Variables and Descriptions



Table A  
High School and Beyond  
 Selected variables and Descriptions

Variables	Description
<u>Descriptive</u>	
Student Item 11	Grade (1) Sophomore (2) Senior
Student Item 404 (Question 83)	Sex (1) Male (2) Female
Student Item 416 (Question 89)	Race (1) Black (2) White (3) American Indian or Alaskan Native (4) Asian or Pacific Islander (5) Other
Student Item 511	SES Composite Score
Student Item 13 (Question 1)	When Expected to Graduate from H.S. (1) I will leave high school before I graduate. (2) Now through June 1980 (3) July or August 1980 (4) September 1980 through January 1981 (5) February through June 1981 (6) After June 1981
Student Item 17 (Question 2)	High School Program (1) General (2) Academic (3) Vocational (Recode agricultural occupation, business or office occupations, distributive education, health occupations, technical occupations, trade or industrial occupations)

Table A--continued

Variables	Description
<u>Descriptive</u>	
Student Item 240 (Question 50)	After High School Plans-Father (1) Go to college (2) Get a full-time job (3) Enter a trade school or an apprenticeship (4) Enter military service (5) They don't care (6) I don't know (7) Does not apply
Student Item 241 (Question 50)	After High School Plans-Mother (1) Go to college (2) Get a full-time job (3) Enter a trade school or an apprenticeship (4) Enter military service (5) They don't care (6) I don't know (7) Does not apply
Student Item 242 (Question 50)	(1) After High School Plans-Guidance Counselor (1) Go to college (2) Get a full-time job (3) Enter a trade school or an apprenticeship (4) Enter military service (5) They don't care (6) I don't know (7) Does not apply
Student Item 243 (Question 50)	After High School Plans-Teachers (1) Go to college (2) Get a full-time job (3) Enter a trade school or an apprenticeship (4) Enter military service (5) They don't care (6) I don't know (7) Does not apply

Table A--continued

Variables	Description
<u>Descriptive</u>	
Student Item 244 (Question 50)	After High School Plans--Friends Relatives (about your own age) (1) Go to college (2) Get a full-time job (3) Enter a trade school or an apprenticeship (4) Enter military service (5) They don't care (6) I don't know (7) Does not apply
Student Item 362 (Question 69)	Have Ability to Complete College (1) Yes, definitely (2) Yes, probably (3) Not sure (4) I doubt it (5) Definitely not
Student Item 364 (Question 71)	Main Activity in Year After H.S. (1) Working full-time (2) Entering an apprenticeship or on-the-job training (3) Going into regular military service (or service academy) (4) Being a full-time homemaker (5) Taking vocational or technical courses at a trade or business school full-time or part-time (6) Taking academic courses at a junior or community college full-time or part-time (7) Taking technical or vocational subjects at a junior or community college full-time or part-time (8) Attending a four-year college or university full-time or part-time (9) Working part-time, but not attending school or college (10) Other

Table A--continued

Variables	Description
Student Item 408 (Question 87)	Specific Learning Disability (0) No (1) Yes
Student Item 409 (Question 87)	Visual Handicap (0) No (1) Yes
Student Item 410 (Question 87)	Hard of Hearing (0) No (1) Yes
Student Item 411 (Question 87)	Deafness (0) No (1) Yes
Student Item 412	Speech Disability (0) No (1) Yes
Student Item 413 (Question 87)	Orthopedic Handicap (0) No (1) Yes
Student Item 414 (Question 87)	Other Health Impairment (0) No (1) Yes
Student Item 415 (Question 88)	Physical Condition Which Limits You (1) No (2) Yes
Student Item 115 (Question 11)	Taken Educationally Handicapped Program (1) No (2) Yes
Student Item 116 (Question 11)	Taken Physically Handicapped Program (1) No (2) Yes

Table A--continued

Variables	Description
<u>Dependent</u>	
Student Item 184 (Question 35)	School Provided Counseling for Education (1) Agree strongly (2) Agree somewhat (3) Disagree somewhat (4) Disagree strongly (5) Does not apply
Student Item 185 (Question 35)	School Provided Counseling for Work (1) Agree strongly (2) Agree somewhat (3) Disagree somewhat (4) Disagree strongly (5) Does not apply
Student Item 235 (Question 49)	Influenced Plans for After High School- Counselor (1) Not at all (2) Somewhat (3) A great deal

Note 1. Student items from the HSB information for users. Question numbers from senior questionnaire.

Note 2. Student items 408 through 415 (questions 87 and 88) were adapted through a weighting procedure to yield 13 independent variables. These were: 1. learning disabled; 2. learning disabled plus one or more physical handicaps: visual, hearing, speech, orthopedic, other health impairment, physical condition that limits; 3. visual; 4. visual and/or hearing, speech, orthopedic, other health impairment, physical condition that limits; 5. hearing; 6. hearing and/or speech, other health impairment, physical condition that limits; 7. speech; 8. speech and/or other health impairment, physical condition that limits; 9. orthopedic; 10. orthopedic and/or other health impairment; 11. other health impairment; 12. physical condition that limits; 13. physical condition that limits and other health impairment.

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