ABSTRACT

A STUDY OF THE NATURE AND DETERMINANTS OF ATTITUDES OF COLLEGE COUNSELORS TOWARD PHYSICALLY DISABLED PERSONS

by Keith E. Palmerton

This study was designed to study the nature and determinants of attitudes of college counselors toward physically disabled persons. The several possible determinants of attitudes considered were perceived amount and perceived nature of contact, attitudes toward traditional and progressive education, and amount of information or knowledge about disabled persons.

The population of college counselors used in this study was college counselors working in universities, in the Continental United States of America, with student populations of 15,000 or more, who were listed as "college counselors" in either the APA or the APGA membership directories or in the most recent issues of the colleges' (or the universities') catalogues. A total of 361 college counselors were so listed. A random sample of 130 college counselors was selected and instrument packets with self-administering directions were mailed to them. However, only 108 subjects actually received packets and, of this number, 81 subjects returned their instruments

in usable condition. Thus, 75% of the subjects who received instrument packets returned them.

The instrument packet mailed to the counselors included: (a) the Attitudes Toward Education Scale; (b) the Attitudes Toward Disabled Persons Scale (ATDP); (c) a Personal Questionnaire; (d) the General Information Inventory; (e) a mark-sense answer sheet; and (f) self-administering directions. The amount of time taken to complete the instruments varied from three-quarters of an hour to two hours.

Four hypotheses, based on several theoretical considerations, were formulated and tested. The first hypothesis stated that high frequency of contact with disabled persons would be positively related to more intense attitudes toward disabled persons. The second hypothesis stated that high frequency of contact with disabled persons, when combined with (a) enjoyment of the contact, (b) easy avoidance of the contact, and (c) available alternative rewarding contacts, would be positively related to positive attitudes toward disabled persons. The third hypothesis stated that unfavorable attitudes toward traditional education and favorable attitudes toward progressive education would be positively related to positive attitudes toward disabled persons. A fourth hypothesis stated that high amount of information or knowledge about disabled persons would be positively related to positive

attitudes toward disabled persons. The hypotheses were tested by means of analysis of variance, zero-order correlations, and multiple and partial correlations.

The first hypothesis was considered confirmed. The confirmation of this hypothesis suggests that, for college counselors, high frequency of personal contact with disabled persons does positively relate to increased intensity of attitudes. Contrary to the findings of two previous studies (Friesen, 1966; Sinha, 1966), a positive relation was found between high frequency of contact and positive attitudes toward disabled persons.

The second hypothesis was confirmed only conditionally. It was found that high frequency of contact, enjoyment of contact, and available alternative rewarding contacts did relate positively to positive attitudes toward disabled persons. However, ease of avoidance of contact related negatively at a significant level with positive attitudes toward disabled persons. It was suggested that a problem with concept equivalence accounted for the unexpected negative relationship. The suggestion was made that the "ease of avoidance" item, which was intended to refer to the matter of volition was interpreted by the college counselors as being concerned with acting professionally and responsibly toward disabled persons. That is, the college counselor may have interpreted the phrase "easy to avoid contact" as being similar to easy to "side-step"

or "dodge" or "turn one's back to" contact with disabled persons.

If the above considerations are valid, then the four contact variables may, in fact, join to predict positive attitudes toward disabled persons and the hypothesis may be conditionally confirmed.

The third hypothesis was not confirmed. The findings related to this hypothesis suggest that the relationship between attitudes toward education and attitudes toward disabled persons is unclear for college counselors. The relationships between unfavorable attitudes toward traditional education, favorable attitudes toward progressive education, and attitudes toward disabled persons were in the hypothesized direction, but they were not statistically significant.

The fourth and last hypothesis was also unconfirmed. The findings revealed, in fact, a small negative relationship between amount of knowledge and positive attitudes toward disabled persons. It was suggested that the negative relationship may be attributed to the possibility that better informed counselors actually see physically disabled persons as having special problems and as needing special treatment. The ATDP instrument, which attempts to measure attitudes toward disabled persons, is built on the assumption that viewing disabled persons as "different" than physically normal persons is equivalent

to holding negative attitudes toward disabled persons. Therefore, the instrument may ironically identify the well-informed, who see disabled persons as actually having unique problems and unique needs, as having negative attitudes toward disabled persons.

Two major recommendations are made for further study in this area. It is first recommended that more replications of the study be made with well defined groups so that problems of concept equivalence can be studied such as the problem was studied in the second hypothesis. Secondly, it is suggested that the assumptions underlying the ATDP scale be reconsidered.

# A STUDY OF THE NATURE AND DETERMINANTS OF ATTITUDES OF COLLEGE COUNSELORS TOWARD PHYSICALLY DISABLED PERSONS

By

Keith E. Palmerton

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# PREFACE

This study is one in a series, jointly designed by several investigators as an example of the concurrent replicative model of research. A common use of instrumentation and theoretical material, as well as technical and analysis procedures, was both necessary and desirable.

The authors, therefore, collaborated in many respects although the data were different in each study.

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# CHAPTER I

## INTRODUCTION

Physically disabled persons are increasingly applying for admission to American colleges and universities each year. And, gradually the colleges and universities are opening their doors to this special population. Rusalem in his book, Guiding the Physically Handicapped College Student, reports that a sampling of a few large colleges and universities suggests that the number of disabled students enrolled in such institutions runs into the tens of thousands. The personal limitations which accompany the disabilities are varied. Limitations in vision, hearing, mobility, manipulative ability, physical vigor and endurance are common (Rusalem, 1962, p. 1).

There are indications that the incidence of physically disabled college students will be increasing. For example, the growth of special education facilities for disabled children would suggest that more disabled children will be receiving the necessary pre-college preparation. Also, recent legislation has encouraged the expansion of rehabilitation services which may account for some increase in the disabled populations of colleges

and universities. In addition to the above, several studies suggest that the colleges and universities have been favorably impressed with their experiences with disabled students and that the disabled students appear to be benefiting from the experience (Rusalem, 1962, p. 23). Such findings could indicate that the disabled college student population will continue to grow.

The disabled student will, no doubt, find that he has many adjustments to make within the context of the university. Not only will he have some strenuous physical adjustments to make, but he may also find that, as a member of a new campus "minority group," he will have to make some difficult psychosocial adjustments. The attitudes of the student body, the faculty, and the staff toward the disabled student may well have some bearing on both the nature of his adjustment problems and the long-range benefits he might gain from his exposure to the university.

## Statement of Purpose

This study is an attempt to gain some insight into the nature and the determinants of the attitudes of one small yet perhaps significant segment of the college and university population, namely, the college counselors. Since there is some indication that disabled students, as a group, have a greater incidence of adjustment problems than nondisabled students, it may be hypothesized that disabled students will use counseling help more

frequently than nondisabled students (Rusalem, 1962, p. 103). This would suggest that the attitudes of college counselors toward disabled students may indeed be a significant factor influencing the attempts of a disabled person to adjust to and gain full benefit from campus life.

To add to the scope and perspective of this study, an attempt is also made to investigate the attitudes of college counselors toward education as a social institution. For the purpose of the present study, attitudes toward education are considered as independent variables.

Four hypotheses, based on several theoretical considerations, are formulated and tested. The first hypothesis states that high frequency of perceived contact with disabled persons is positively related to more intense attitudes toward disabled persons. The second hypothesis states that high frequency of perceived contact with disabled persons, when combined with (a) enjoyment of the contact, (b) easy avoidance of the contact, and (c) available alternative rewarding contacts, is positively related to positive attitudes toward disabled persons. The third hypothesis states that unfavorable attitudes toward traditional education and favorable attitudes toward progressive education are positively related to positive attitudes toward disabled persons. A fourth hypothesis states that high amount of information or

knowledge about disabled persons is positively related to positive attitudes toward disabled persons.

## The Long Range Study

This study of the attitudes of college counselors toward physically disabled persons is but one small portion of a larger, long range international study of attitudes toward education and toward disabled persons.[1]

The pilot project for the international study was conducted in 1964 in San Jose, Costa Rica. Focus of interest was on five types of questions:

1. What are the predominant attitudes within a country toward physical disability?
2. How do these attitudes vary among different groups within the population, principally in respect to sex and occupational groups?
3. Within these various groups, what correlates of attitudes toward disability can be found?
4. What "kinds" of people work with the disabled? For example, do they have any definite characteristics in respect to such things as interpersonal values, orientation toward education and work, as well as differences among various demographic characteristics, in relation to people who are not so closely involved with disabled persons?
5. What methodologies can be utilized in making cross-national comparisons of the above data? (Felty, 1965)

Underlying the entire international study is an interest in understanding attitudes toward education as a factor in developing, funding, and organizing

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[1]The long range study, under the direction of Dr. John E. Jordan, of the College of Education, Michigan State University, has already gathered samples from the United States, Belgium, Colombia, Costa Rica, Denmark, England, France, Holland, Japan, Peru, and Yugoslavia.

educational programs. Implicit in this interest is the assumption that educational programs can be developed more effectively where there is an awareness of these attitudes and how they are formed.

Both the long range study and the present study are pioneer surveys which are defined by Cattell (1966, p. 31) as multivariate-naturalistic-sequential designs. Therefore, such problems as attitude change and prediction of "overt" behavior have been omitted because they would call for both a longitudinal study and the use of measuring devices which are beyond the scope of this study.

## Definition of Terms

The following terms have either a specialized meaning or are in need of an operational definition as used in this study.

Attitude.--This general term is used as defined by Guttman (1950, p. 51) to refer to a "delimited totality of behavior with respect to something (author's italics). For example, the attitude of a person toward Negroes could be said to be the totality of acts that a person has performed with respect to Negroes." The variety of acts that a person can perform can include a wide range of behaviors extending from cognitive to verbal to physical acts. Guttman has considered the totality of behavior toward a social object as a universe which he has attempted to divide into subuniverses. This he has accomplished in the following manner:

I. Stereotype: Belief of (a white subject) that his own group (excels--does not excel) in comparison with Negroes on (desirable traits).
II. Norm: Belief of (a white subject) that his own group (ought--ought not) interact with Negroes in (social ways).
III. Hypothetical Interaction: Belief of (a white subject) that he himself (will--will not) interact with Negroes in (social ways).
IV. Personal Interaction: Overt action of (a white subject) himself (to--not to) interact with Negroes in (social ways)(Guttman, 1959, p. 319).

These definitions could be made relevant for this present study by simply substituting a nondisabled person for "a white subject" and "disabled persons" for "Negroes." The nature of the instruments used in this study largely confines the type of behavior being studied to subuniverse I--Stereotype, as defined above.

Attitude Component.--The definitions of the attitude components as used in this study are the same definitions Felty used in his cross-cultural study. Components of attitudes have been discussed by various investigators (e.g., Katz, 1960, p. 168; Rosenberg, 1960, pp. 320, ff; Guttman, 1950, Ch. 9). The two components typically considered are those of belief and intensity, although Guttman defines additional components according to certain mathematical properties. In this study, the first component is that of item content (or belief), the second that of item intensity (cf. Guttman, 1950, Ch. 9; Suchman, 1950, Ch. 7).

Attitude Content.--The attitude content component refers to the actual item statements within an attitude scale.

Attitude Intensity.--The attitude intensity component refers to the affective statements that a respondent makes regarding each content item; operationally, it consists of a separate statement for each attitude item on which the respondent may indicate how strongly or how certain he feels about his answer to the content statement.

Attitude Scale.--As used in this study, a scale is a set of items which fall into a particular relationship in respect to each other and in respect to the ordering of respondents. A set of items can be said to form a scale if each person's responses to each item can be reproduced from the knowledge of his total score on the test within reasonable limits of error (e.g., Guttman, 1950, Ch. 3; Stouffer, 1950, Ch. 1).

College Counselor.--The population studied is composed of individuals of both sexes who have as one of their vocational responsibilities the counseling of students enrolled in four-year colleges or universities. The counseling responsibilities are not only in the area of academic advisement, but encompass educational, vocational, and personal-social counseling. The counselors for this study have been chosen on the basis that they are, or have been until recently, counseling students in a college or university with a student population of 15,000 or more.

Demographic Variables.--In the present study this refers to certain statistical data frequently used in sociological studies. These variables are age, sex, academic degree earned, staff position with the counseling center, percentage of time given to counseling disabled and nondisabled students, and number of children.

Educational Progressivism and Traditionalism.--These two concepts are measured and thus defined by Kerlinger's Attitudes Toward Education Scale (1958). Kerlinger's model is built on a dichotomization (but not polarization) of attitudes toward education into traditional and progressive attitudes. He holds that traditional and progressive attitudes represent two relatively independent underlying factors or ideologies. Traditionalism affirms a stand which emphasizes a conservative and restrictive attitude toward education. Progressivism emphasizes a permissive, open, problem solving attitude toward education.

Handicap.--This term signifies the social disadvantage placed upon a physically impaired person by virtue of the impairment. A handicap is a consequence of culturally held values and attitudes which serve to define the physically impaired person socially.

Impairment.--This term signifies a defect in tissue or in body structure. As such, it has no particular social connotations.

Institutional Satisfaction.--This term is used to describe a set of variables on which the respondents are asked to indicate how well they feel that various kinds of local institutions are doing their job in the community. These institutions are schools, business, labor, government, health services, and churches.

Physically Disabled or Handicapped Persons.--"Disability" is used in this study as a functional term denoting some loss of the tool function of the body. This can be clearly distinguished from the above definition of handicap where a social disadvantage is inflicted as a result of the disability. However, in the instruments the term "handicap," is often used as a common term referring to both disability and handicap. This is done because it is felt that "handicap" is a more familiar term and that it would cause less confusion.

These terms refer to persons with any of the following disabilities:

1. Blind persons who have no useful sight at all.
2. Partly blind persons who have some sight but have trouble reading and getting about even with glasses.
3. Deaf persons who have no useful hearing at all.
4. Partly deaf persons who have some hearing but have trouble understanding other persons even with a hearing aid.

5. Cripples or amputees who have arms or legs that have been paralyzed or removed even though they may be of some use with artificial hands or legs.
6. Spastic (or cerebral palsy) who have poor control and coordination of their leg, arm, and head movements. Movements are often jerky and speech hard to understand.
7. Disfigured persons who have been obviously damaged about the face, such as with burns or scars, so that the face has been changed.
8. Persons who experience severe loss of physical vigor and endurance.

Rehabilitation.--This term signifies "restoration of the disabled to the fullest physical, mental, social, and vocational usefulness possible" (Jordan, 1964a).

Religiosity.--This is a term used to denote orientation to religion. Operationally, it is defined by two items: first, the importance of religion; second, the extent to which the rules and regulations of the church are followed.

## Organization of the Thesis

This thesis is organized according to the following plan.

Chapter I serves as an introduction to the nature of the problem involved in this study.

Chapter II is a summary of the theory and research related to this study. The areas of concern are:

1. Attitudes toward disabled persons
2. Measuring attitudes
3. Attitude determinants
4. Personal contact with disabled persons
5. Amount of information about disabled persons
6. Attitudes toward education

Chapter III is concerned with the procedures and methodology of the study. The instrumentation of the study and the statistical procedures used in the analysis of the data are included in this chapter. The major research hypotheses are also listed.

Chapter IV presents the research results in tabular and explanatory form.

Chapter V contains a summary of the results with conclusions and recommendations.

# CHAPTER II

## REVIEW OF THEORY AND RELATED RESEARCH

Societal reaction to visible physical disability existed, no doubt, long before recorded history. Studies of the history of rehabilitation and disability indicate that reactions to disability ranged from positive in some societies to extremely negative in other societies (Jaques, 1960; McGowan, 1960). Some societies found the disabled to be an unbearable economic burden and thus felt obliged to eliminate them. Other societies, having found "sharing" a useful means of survival, respected and cared for the physically disabled person. Still other societies treated disabled persons as sacred and agents of the gods (Jaques, 1960; McGowan, 1960).

### Attitudes Toward Disabled Persons

Jaques (1960) suggests that the advent of Christianity saw the first attempt to care for the disabled person as an individual human being of inherent worth. Even though practices of destroying disabled persons are mostly nonexistent in current societies, negative reactions to disability still exist and are manifested at behavioral, verbal, and attitudinal levels.

Auvenshine (1962), in his study of attitudes toward disability, notes that, "it is as important for rehabilitation workers, teachers, and student personnel workers to understand the psychosocial atmosphere in which a disabled person operates as it is to know the physical limitations of the student" (p. 5). With this and similar motives in mind, a number of scholars have attempted to study attitudes toward physically disabled persons.

Several authorities have noted an interesting relationship between having a physical disability and having membership in an ethnic minority group. Chesler's study (1965), for example, concludes that, ". . . the physically disabled can be conceptualized as a minority group subject to many of the same attitudinal and behavioral predispositions as are ethnic minorities" (p. 881). Also, much of what Wright (1960) said about the underprivileged status of the disabled person and the inclusion of disabled persons in stereotyped groups suggests that the disabled are, in fact, members of their own minority group. Barker, too, (1948) saw disabled persons as members of "an underprivileged minority." And Handel (1960) observed that investigating physical disability and its resulting nuances is like investigating a problem of race. Relative to the disabled person's social acceptability, Hamilton (1950) stated,

> . . . we set our own standard of what we consider normal and acceptable. The deviate is automatically, to some degree, repulsive to us. He, too, becomes a member of a minority group (p. 32).

There is, then, some agreement among the authorities that the person with a disability suffers not only the disadvantages associated with his physical disability, but he also suffers the loss of many privileges that accompany first-class citizenship. Added to this, at least in Western socieites, is the dehumanizing plight of being thought of as first a member of a group and only secondly as a person.

Several studies suggest that behavioral and personality disturbances in disabled persons are more often a product of family attitudes than a product of the nature or extent of disability (Allen and Pearson, 1928; Coughlin, 1941).

Another study reports that attitudes toward disabled persons are in general mildly favorable (Mussen and Barker, 1944). Yuker, Block and Campbell (1960), authors of the ATDP scale used in the present study, further conclude that favorable attitudes are significantly related to personal-data, psychological, and work-performance variables. They found that persons with favorable attitudes (as measured by the ATDP scale) were characterized by low anxiety, high verbal intelligence, and a high degree of job satisfaction. Auvenshine (1962) concluded from his study that females have more favorable attitudes toward disabled persons than do males.

A group of prominent scholars notes that:

> It is possible to point out several rather definite tendencies in data on attitudes toward physically disabled persons.
> 1. Public, verbalized attitudes toward disabled persons are on the average mildly favorable; an appreciable minority openly express negative attitudes.
> 2. Indirect evidence suggests that deeper unverbalized attitudes are more frequently hostile. This point requires further investigation.
> 3. The evidence is rather clear that the attitudes of parents toward their disabled children tend to be extreme more often than toward normal children, centering about the following patterns: oversolicitude, rejection, pressing for accomplishments beyond the child's abilities, inconsistent attitudes. Overprotection appears to occur more frequently than overt rejection.
> 4. The speculation has been advanced that some favorable attitudes and some oversolicitousness on the part of parents mask deep, inadmissible hostile attitudes.
> 5. The attitudes of disabled persons toward their own disabilities have been inadequately studied. The available evidence suggests that these attitudes (a) vary widely, (b) have little relation to the degree of disability, (c) are related to personality characteristics.
> 6. The attitudes of disabled persons and of their physically normal associates are frequently in conflict with respect to the meaning of help, curiosity, sympathy, and misfortune.
> 7. The attitudes of both the disabled person and his associates are influenced by the larger social situation in which interactions occur (Barker, Wright, Meyerson and Gonick, 1953, pp. 84, 85).

## Measuring Attitudes

Guttman (1950) has defined an attitude as a "delimited totality of behavior with respect to something" (p. 51). Thus, a subject's written response to an attitude scale can be one form of delimited behavior. According to Guttman (1959), however, the "attitude universe"

may consist of many forms of behavior which are more or less intercorrelated and which form separate subuniverses. If the attitude universe is to be adequately represented in the sample, it would follow that each of the possible subuniverses should be represented in the sample. Such inclusive sampling is beyond the scope of this study and thus the inferences one may make regarding any behavior other than "written responses" is limited. There may be a relationship between the statements one makes about a person with a disability, and how one behaves overtly toward that person, but the relationship cannot be assumed without empirical support.

Vinacke (1952) further defines the problems in attitude measurement by noting three major problems: (a) attitudes are inferred; they can never be observed directly; (b) attitudes are not composed of definite units and, if they were, the equality of the units would be questionable; (c) it is extremely difficult to make attitude tests valid and reliable (pp. 323-325).

Vinacke reports that Thurston coped with the first problem in the following manner:

> Let us use opinions (the response) as an index and for whatever it is worth. Assume that measurements are obtained only in situations where there is a reasonable expectation that subjects will tell the truth and hence provide a dependable basis for our inference (Thurston, 1928).

In an attempt to find a partial solution for the lack of definite and equal units in attitude measurement, Vinacke (p. 324) turns to McNemar:

> If A scores 4, B--6, and C--8, you can't say that C possesses twice as much of the attitude as A. You can say that B's value differs from that of C in the same direction that A's value differs from B's (McNemar, 1946).

"In this way, individuals can be ranked in terms of their responses, thus providing a basis for some kind of quantitative treatment" (Vinacke, 1952, pp. 323-324).

## Attitude Determinants

One of the main purposes of this study was to attempt to define some of the determinants of the attitudes described above. Stereotyped attitudes may be accounted for in part by the personality make-up of those holding the attitudes. This study, however, was concerned with several other theoretical attitude determinants. It was hypothesized that the amount and nature of personal contact with the "minority" group may be a determinant of attitudes. It was further hypothesized that the amount of knowledge or information about physically disabled persons and their needs may be an attitude determinant. Also, it was hypothesized that positive attitudes toward progressive education may correlate with favorable attitudes toward disabled persons.

## Attitude Intensity

The measure of attitude intensity was considered to be important for several reasons. First, Rosenberg (1960, p. 336) has proposed that the intensity component of an attitude may be considered as an action predictor. Also, Carlson (1965, p. 259) has found that initial intense attitudes are more resistant to change than moderately held attitudes. Guttman and Goa (1951) have shown, in addition, that intensity may be related to the amount of social contact with the attitude object. Felty (1964) further notes that research has also suggested that intensity may be an important component of internal attitude structure, determining the "zero point" of a scale that discriminates the psychologically "true" positive from negative attitude direction.

For the purposes of this study, intensity will be considered an important attitude component which may increase predictability.

## Personal Contact

Homans (1950, p. 112) has suggested that the more frequent the contact between persons or groups, the more favorable or unfavorable their attitudes toward each other may be. That is, personal contact appears to be related to attitude intensity. Allport (1958, pp. 250-268) has concluded from his study of inter-group contact that "equal status contact" creates more favorable attitudes

when the contact is in pursuit of common goals. Allport has further noted that casual intergroup contact is generally unpredictable in its effects, but casual contact may serve to reinforce adverse stereotypes. The status of the persons contacted within a given group was also found to be a significant factor. Allport found in his studies of attitudes toward Negroes that those having contact with high status or high occupational group Negroes held more favorable attitudes than those having contact with lower status Negroes.

Jacobson et al. (1960, pp. 210-213) add to Allport's findings by noting that equal status contacts are more likely to result in unfavorable attitudes if the basis of the status equality is uncertain, i.e., if one group does not fully accept the equality of status.

Zetterberg (1963) names two other independent variables which appear to shape attitudes. He describes the variables as being "cost of avoiding interaction, and availability of alternative rewards" (p. 13). He explains, "if the cost of avoiding interaction is low, and if there are available alternative sources of reward, the more frequent the interaction, the greater the mutual liking" (p. 13).

Felty (1965) summarized the foregoing as follows: "frequent contact with a person or group is likely to lead to more favorable attitudes if:

1. the contact is between status equals in pursuit of common goals (Allport, 1958, p. 267),

2. the contact is perceived as instrumental to the realization of a desired goal value (Rosenberg, 1960, p. 521),
3. contact is with members of a higher status group (Allport, 1958, pp. 254, 261-262),
4. the contact is among status equals and the basis of status is unquestioned (Jacobsen et al., 1960, pp. 210-213),
5. the contact is volitional (as reinterpreted from Zetterberg, 1963, p. 13),
6. the contact is selected over other rewards (as reinterpreted from Zetterberg, 1963, p. 13).

The Personal Questionnaire (Appendix C) was administered in an attempt to measure amount and type of personal contact.

## Amount of Information

Haring et al. (1958), in their study, hypothesized that one determinant of attitudes toward the handicapped may be, ". . . a more accurate and realistic knowledge and understanding of handicapped children including their educational, physical, emotional and social needs" (p. 6). Their study revealed, however, that "increased knowledge per se was not found to be a significant factor in effecting modifications of teachers' attitudes toward exceptional children" (p. 130). The investigators found that a workshop designed to modify attitudes of teachers toward exceptional children was effective when teachers had "classroom experiences with exceptional children concurrent with a workshop. . . ." It was then concluded that increased knowledge or information is likely to modify attitudes only when (a) the information presented to the subject is designed to bring

about a change in attitudes, and (b) the subject has one-to-one experiences with the attitude object group concurrent with the presentation of the information.

Nelson (1939), in an earlier report, summarized the literature on attitudes and claimed that the studies reviewed were in fair agreement that, "Information seems to reduce prejudice and increase tolerance toward other races and toward such issues as the amount of freedom to be allowed children" (p. 425).

## Attitudes Toward Education

In the present study "attitudes toward education" was considered an independent rather than a dependent variable (such as it was in Felty's study). However, Kerlinger's theoretical model, which was used in Felty's (1965) study, will still be used in the present study.

Kerlinger's model is built on a dichotomization (but not polarization) of attitudes toward education into traditional and progressive attitudes. He holds that traditional and progressive attitudes represent two relatively independent underlying factors or ideologies. Friesen (1966, pp. 18-22), in his study of attitudes toward the physically disabled, has a most helpful section on this subject. Friesen notes that traditionalism is not just the opposite of progressivism in education. Traditionalism seems to have an existence of its own. Rather than conceiving of traditionalism as simply the negation of progressivism,

it might better be conceived as the affirmative of a stand which emphasizes a conservative-traditional approach to educational issues and problems. Progressivism also seems to be a stand in its own right. When we say a man is an "educational progressivist" we do not simply mean that he is an anti-traditionalist. While this may be true, it is more important to suggest that progressivism is an independent stand in its own right (Kerlinger, 1958, p. 330).

Kerlinger defines the traditional factor as a conservative and restrictive attitude which emphasizes subject matter for its own sake. He also notes that the hierarchical nature of impersonal superior-inferior relationships is considered important. There is an emphasis on external discipline, and social beliefs are preserved through the maintenance of the status quo.

In contrast, the permissive-progressive factor emphasizes problem solving and de-emphasizes subject matter per se. From this perspective, education is seen as growth and the child's interest and needs are seen as basic to education. Equality and warmth in interpersonal relationships are valued. There is an orientation to internal rather than external discipline. Social beliefs tend to be liberal and emphasize education as an instrument of change (Kerlinger, 1958, p. 112).

Kerlinger's theory can be summarized in the following four propositions:

1. Individuals having the same or similar occupational or professional roles will hold similar attitudes toward a cognitive object which is significantly related to the occupational or professional role. Individuals having dissimilar roles will hold dissimilar attitudes.

2. There exists a basic dichotomy in the educational values and attitudes of people, corresponding generally to "restrictive" and "permissive," or "traditional" and "progressive" modes of looking at education.

3. Individuals will differ in degree or strength of dichotomization, the degree or strength of dichotomization being a function of occupational role, extent of knowledge of the cognitive object (education), the importance of the cognitive object to the subjects, and their experience with it.

4. The basic dichotomy will pervade all areas of education, but individuals will tend to attach differential weights to different areas, specifically to the areas of (a) teaching-subject matter--curriculum, (b) interpersonal relations, (c) normative, and (d) authority-discipline (Kerlinger, 1956, p. 290).

As a result of the implications of these observations, Kerlinger designed a study which examined the educational attitudes of professors and laymen. The sample consisted of 25 subjects chosen on the basis of occupational roles as well as known attitudes toward education.

He developed the following categories for the study:

ATTITUDES:

(1) Restrictive-traditional (dependence-heteronomy)

(2) Permissive-progressive (independence-autonomy)

AREAS:

(a) Teaching-Subject Matter Curriculum

(b) Interpersonal Relations

(k) Normative-Social (conventionalism-nonconventionalism)

(m) Authority-Discipline

An example of 1(a) would be: The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future. An illustration of 2(a) would be exemplified in the following statement: Knowledge and subject matter themselves are not so important as learning to solve problems. An illustration of 1(m) might be: One of the big difficulties with modern schools is that discipline is often sacrificed to the interest of the children. An example of 2(m) might be: True discipline springs from interests, motivation, and involvement in live problems.

Kerlinger summarizes the traditional-progressive issue as follows:

> A basic dichotomy seems to exist in educational attitudes corresponding generally to restrictive and permissive, or traditional and progressive ways of regarding education, and some individuals show the dichotomy more sharply than others depending on their occupational roles, their knowledge of and experiences with education, and the importance of education to them (Kerlinger, 1956, p. 312).

In a recent study, Kerlinger (1967) constructed a 46-item scale, administered it to a total of 1304 subjects and exposed the resulting raw data to factor analysis.

He discovered that the "traditional" and "progressive" concepts are multidimensional. However, a second-order factor analysis proved to Kerlinger's satisfaction that he had empirical evidence supporting the appropriateness of reducing a "multifaceted attitude domain to two basic factors," e.g., traditionalism and progressivism (Kerlinger, 1967, p. 203).

# CHAPTER III

## RESEARCH DESIGN AND METHODOLOGY

This study is an attempt to investigate the nature and determinants of attitudes toward physically disabled persons. The universe of subjects is composed of college counselors who are working in colleges with student populations of 15,000 or more. One of the implications of a study such as this is that the attitudes of the college counselors toward the disabled will have some bearing on the nature of the adjustments that disabled college students will be able to achieve. However, the present study is limited to an investigation of the nature and determinants of attitudes and will not be directly concerned with the adjustment problems of disabled students.

### Research Design

It was hypothesized that the amount and nature of contact with disabled persons, amount of information about disabled persons, and attitudes toward education are attitude determinants. It was further hypothesized that positive attitudes toward disabled students are positively correlated with (a) a high number of contacts with disabled persons that were enjoyed, easily avoided, and

(if remuneration was received) easily replaced with other rewarding alternatives; (b) a progressive attitude toward education; and (c) a high amount of information about disabled persons. Certain demographic factors, such as sex and educational degree, were also considered as possible determinants of attitudes.

## Instrumentation and Variables

The criterion measure was the Attitudes Toward Disabled Persons Scale (ATDP) as developed by Yuker et al. (1960). Attitudes toward education were measured by Kerlinger's Attitudes Toward Education Scale (ATE) (Kerlinger, 1958, 1961; Kerlinger and Kaya, 1959). The General Information Inventory (GII) developed by Haring et al. (1958) was revised and used as a measure of amount of information. The amount of and nature of personal contact, as well as certain demographic data, was identified by certain items in the personal questionnaire.

### Attitudes Toward Disabled Persons

This criterion measure was developed by Yuker et al. (1966) in an attempt to meet the need for an objective and reliable instrument to measure attitudes toward disabled persons as a group.

This scale measured the extent to which the disabled person was perceived to be different from the physically normal person. Wright (1960) suggests that,

with respect to disabled persons, this is the crucial attitudinal dimension; to be seen as different or set apart signified rejection. Each ATDP Scale statement (Appendix B) tests whether the respondent sees disabled persons to be the same as, or different from, non-disabled persons in personality or in need of special social relationships. The scale was scored such that a low score indicates that the respondent perceives disabled persons as being quite similar to non-disabled persons. A high score indicates that the respondent perceives disabled persons as being "different" from non-disabled persons. It may also be noted that

> . . . the majority of items on the ATDP suggest that where there is a difference perceived, this difference has negative connotations. Therefore, one may wish to extend the interpretation to suggest that a high score not only reflects the fact that the respondent perceives disabled persons as different but also to some degree "inferior" or "disadvantaged" (Yuker et al., 1966, p. 31).

Several well known measures of reliability were used to test the reliability of the ATDP scale. The immediate parallel measure of equivalence form, the test-retest measure of stability and the delayed parallel measure of stability-equivalence were all used, leading to the conclusion that "there is reasonably good evidence that the ATDP is a reliable scale" as compared with "attitude scales of comparable length and format" (Yuker et al., 1966, p. 34). For example, a study by the author of this scale shows test-retest reliability coefficients

ranging from .66 with a five-week interval between tests to .89 with a two-week interval between tests (Yuker et al., 1966, p. 120).

In an attempt to establish its validity, the ATDP scale was compared with other general measures of attitudes toward the disabled and other measures of attitudes toward disadvantaged or disabled groups. The relationship between the ATDP and these other scales appears to be substantial. The data also

> . . . suggest that acceptance of the physically disabled is positively related to acceptance of people who are different from the respondent, including such groups as the mentally ill, the aged, and a variety of ethnic groups (Yuker et al., 1966, p. 81).

Attitudes Toward Education

Kerlinger's Attitudes Toward Education Scale (ATE, Appendix A) (Kerlinger, 1958, 1961; Kerlinger and Kaya, 1959) was included for three reasons: first, because in a study so closely interwoven with educational concerns, the results are valuable in their own right; second, because there is a rationale for hypothesizing a positive relationship between progressive attitudes toward education and attitudes toward physical disability; and third, because it is short and simple to administer. The scales represent a factor analysis of a set of 40 items given to 598 subjects of varying backgrounds, but all apparently of above-average education. The scales have been found

to be adequate under cross-validation; however, there is no indication that persons of lower educational attainment have been adequately represented in the studies. The original intention was to submit the items of the three scales used in this study to Guttman scaling procedures, but two previous studies (Felty, 1965; Friesen, 1966) revealed that the scales do not form unidimensional scales as defined by the Multiple Scalogram Analysis program (Lingoes, 1963). The present study does not attempt a third replication of the Multiple Scalogram Analysis.

A study by the author of this scale reveals test-retest reliability coefficients ranging from .70 to .76 (Kerlinger, 1960, p. 12).

Scaling and Intensity

Various approaches have been adapted to obtain comparability of attitudinal data. Guttman (1954) has considered principal components of attitudes. The first principal component should provide a rank ordering of both people and questions so that knowledge of a person's rank predicts responses to the questions with reasonable confidence. The component requires obtaining a measure of intensity for each attitude question asked in addition to the measure of approval or agreement with the attitude content. Measures of intensity, when plotted against content, have been found to determine a point of "indifference" between positive and negative responses which is psychologically equivalent from one group to another.

> A simple approximation of the intensity function has been successfully attained by asking a question about intensity after each content question. One form used for an intensity question is simply: "How strongly do you feel about this?" with answer categories of "Very strongly," "Fairly strongly," and "Not so strongly." Repeating such a question after each content question yields a series of intensity answers. Using the same procedure as . . . for content answers, these are scored and each respondent is given an intensity score. The intensity scores are then cross tabulated with the content scores (Suchman, 1950, p. 219).

Contact with Disabled Persons

The "Personal Questionnaire" (Appendix C) was designed to operationalize variables involved in personal contact between respondents and physically disabled persons. Items included are conceptually distinct. Item 83 reports the kinds of relationship experienced; item 84, the frequency of contact; item 85, the ease with which the contact might have been avoided; items 86 and 87, the extent to which the respondent gained personally by the contact; item 88, the amount of enjoyment experienced in the contact; and item 89, the availability of alternatives. Though reliability data are unstable for such "single item scales" in any context, the pilot study (Felty, 1965) affords evidence of item validity in that workers in rehabilitation and special education responded to comparable items in patterns known to be accurate.

General Information Inventory

The General Information Inventory (GII, Appendix D) was developed by Haring et al. (1958) in an attempt to test the relationship between knowledge of disabled children and attitudes toward disabled children. For the present study, the GII was altered considerably, thus rendering any previous reliability or validity studies meaningless. A Kuder Richardson #20 reliability check on the items used in the present study revealed a coefficient of .67. As previously stated, the inventory was altered in two ways: (a) some items were omitted so that the inventory would test only knowledge of physical disabilities; (b) the wording of several items was altered to allow the items to refer to handicapped persons in general rather than to refer only to disabled children. The GII, as developed by Haring et al., originally contained 100 items. The number of items was subsequently reduced to 49 items.

Instrument Changes

Two of the instruments employed in the present study were essentially the same as those being used in the international study. Both the ATDP scale and the ATE scale were used intact with only slight changes in the format. No item was changed and the order of the items was not altered. However, in this study all items (both content and intensity items) for both scales were numbered sequentially while in the international study only the

content items were numbered and each scale was numbered separately. This change was made so that each item response could be indicated on a five choice, 1230 mark sense answer sheet. The answer sheets were employed to reduce the mailing costs and to facilitate scoring and card punching procedures (see section on presentation of instruments).

The Personal Questionnaire: HP and the Personal Questionnaire used in the international study were combined to form one questionnaire and were altered considerably. The alterations were made to serve two purposes. First, the questionnaire was altered to render it appropriate for use with a more homogeneous population of professional college counselors. The original questionnares were constructed to be appropriate for a heterogeneous cross section of society. Secondly, the questionnaire was altered in such a way as to render it usable with the five choice, mark sense answer sheets. For example, several items had to be collapsed from nine to five alternative responses because the answer sheet offered only five choices.

The Gordon Survey of Interpersonal Values was omitted because it was felt that the "test-sophisticated" population of college counselors would not respond favorably or validly to such a measuring device. In its place an altered form of Haring, Stern and Cruickshank's General

Information Inventory (GII) was used. The GII, originally constructed for a heterogeneous population of educators, was altered in such a way as to make it useful with a more homogeneous population of college counselors. In several instances a reference to handicapped children was changed to refer to handicapped persons. Also, all terms which were concerned with mentally retarded or emotionally disturbed were omitted.

Demographic Variables

The personal questionnaire (Appendix C) offered the respondents the opportunity to place themselves in an appropriate category on several variables. The variables of interest were sex (item 90), age (91), marital status (92), number of children (93), professional degree (107), professional duties (108), time given to counseling (109), time given to counseling the handicapped (110), and staff membership in the rehabilitation counselor training program (111). Due to time and space limitations, all of these variables will not be used in the present study. However, some of the unused variables may be used as part of the larger intended study.[1]

## Population and Sampling

The population universe for this study included all college counselors (see definitions, pp. 6, 7 above) in the continental United States who work in colleges or

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[1]See pp. 3 and 4 of the present study.

universities with a student population of 15,000 or more and who were listed as college counselors in either the American Psychological Association 1966 Directory, or the American Personnel and Guidance Association 1965-66 Directory of Members or in the most recent catalogues of schools with student populations of 15,000 or more. It was ascertained that there were 57 colleges and universities with student populations of the appropriate size. The above mentioned sources listed 361 college counselors. From this number, 130 counselors were selected at random using a random number table as the randomizing agent. The questionnaires were then mailed to the 130 counselors. The original plan was to use various follow-up procedures until 80% or 100% of the subjects returned their responses to the questionnaire. However, it soon became evident that the address and job listings in the above mentioned sources were often out-of-date and inappropriate. As a result, many of the questionnaire packets were returned marked "unknown" or "no forwarding address." Thirty more questionnaires were immediately mailed to randomly selected counselors to replace those counselors who never received a questionnaire. Many of these packets were also returned as "unknown." One month after the initial mailing, follow-up letters were mailed (see Appendix E) to the subjects who had not responded at all. A return post card was included in this mailing giving the subjects an opportunity

to refuse to respond or to note that they were not appropriate subjects for the sample. Again the sources proved inaccurate for many subjects replied that they were not appropriate subjects. Two weeks after the follow-up letters were mailed the remaining non-responses were phoned to encourage them to reply. Here again, a number of the non-responses were unknown at the universities at which they had been listed as being counselors.

The final result was that 108 college counselors received the questionnaire. No more replacements were mailed due to prohibitive costs and time limitations. Nineteen of the 108 subjects refused to respond and eight subjects indicated they would respond but did not do so. Eighty-one usable responses were received. Thus a 75% return was achieved rather than the originally planned 80% return.

## Processing the Data

As has been previously mentioned, the subjects were asked to indicate their responses to the questionnaire on a five-choice, 1230 mark sense answer sheet. The item responses were precoded in such a way that the responses could be punched by machine directly from the answer sheets to IBM cards. Thus the chance of error was substantially reduced as card punching, scoring, and coding of data by hand were eliminated.

## Statistical Analysis

### Descriptive

Frequency distributions for every item were compiled by two frequency column count programs designated as FCC I and FCC II (Clark, 1964). The frequency distributions were then used as a basis for dichotomizing variables for analysis and as a means of establishing "clinical contact" with the data.

### MDSTAT Program

This program was specially designed for missing data which yields correlation coefficients, means, and standard deviations. The CDC 3600 MDSTAT program developed by Ruble and Rafter (1966) is both flexible and broad in its possible usage. All basic variables in the present study were processed by this program.

### Analysis of Variance

A one-way analysis of variance was used on the variables related to the major research hypotheses. The UNEQI routine (Ruble, Kiel, Rafter, 1966) was used to calculate these statistics. An additional one-way analysis of variance was run on two of the variables (sex and educational degree) thought to be determinants of scale and test score differences.

### Multiple Regression and Partial Correlation

Partial correlation is one of the outputs of the general multiple regression model used in the CDC 3600 program at Michigan State University (Ruble, Kiel, Rafter, 1966). The variables involved in hypothesis 2 were processed by this program.

## Major Research Hypotheses

### 1. Hypotheses Related to Contact Frequency and Attitude Scores

#### Contact--Intensity Interactions

H-1: The more frequent the contact with disabled persons, the higher will be the scores on the intensity statements of the attitude-toward-disabled-persons (ATDP) scale, regardless of whether attitude content is favorable or unfavorable.

Hypothesis Derivation.--This hypothesis was an attempt to operationalize considerations of Rosenberg (1960), Foa, (1950), and Guttman and Foa (1951), to the effect that contact frequency is directly related to attitude intensity, regardless of content directions.

Instrumentation.--Contact frequency was measured by a direct question, number 84, of the Personal Questionnaire (Appendix C); ATDP intensity scores were obtained through independent intensity questions following each attitude content statement (Appendix B).

Contact--Frequency Interactions

H-2: High frequency of contact with disabled persons will lead to favorable attitudes if high frequency is concurrent with (a) alternative rewarding opportunities, (b) enjoyment of the contact, and (c) ease of avoidance of contact.

Hypothesis Derivation.--This hypothesis was derived from considerations of Homans (1950), Zetterberg (1963), and various studies in special education.

Instrumentation.--Attitudes toward disabled persons were mentioned by a 20-statement attitude instrument developed by Yuker et al. (1960) and modified for the purposes of the present study (Appendix B). The contact variable was measured by direct questions in the Personal Questionnaire (Appendix C): frequency by question number 84, alternatives by question number 89, enjoyment by number 88, and avoidance by number 85.

## 2. Hypothesis Related to Attitudes Toward Education and Disabled Persons

H-3: Persons who score high in traditional and low in progressive attitudes toward education will also tend to score low on favorable attitudes toward disabled persons.

Hypothesis Derivation.--This hypothesis was built on the assumption that persons who score low on "progressive" and high on "traditional" attitudes toward education

are persons who tend to want to maintain the status quo and are persons who tend to value social structure above persons. Thus they also tend to evaluate persons in terms of what they do to help maintain the social structure. The disabled person, therefore, who may not be able to play a known role in maintaining the social structure may be devalued (Wright, 1960).

Instrumentation.--Attitudes toward education were measured by a 20-statement attitude instrument developed by Kerlinger (1959) and modified for the purpose of the larger international study. Also used was the ATDP attitude instrument (see H-2).

### 3. Hypothesis Related to Knowledge of Disabled Persons and Attitudes Toward Disabled Persons

H-4: Persons who score high on the General Information Inventory (GII) test of knowledge will tend to score high in favorable attitudes toward disabled persons.

Hypothesis Derivation.--This hypothesis was proposed by Haring et al. (1958) in their study of attitudes toward exceptional children (Appendix D). The assumption underlying this hypothesis was that lack of information or misinformation is one factor that allows unfavorable attitudes to develop and/or exist.

Instrumentation.--The General Information Inventory (Appendix D) tested the knowledge variable. The ATDP scale (Appendix B) tested the attitudes of college counselors.

## Limitations of the Present Study

Several of the limitations of this study appear to be related to the somewhat bulky size of the collected instruments to which the subjects were asked to respond. Respondents reported that the amount of time needed to complete the instrument series ranged from 45 mintues to two hours. Thus, because of personal time limitations and as a result of negative feelings engendered by the 169-item instrument, some subjects chose not to respond. The somewhat inadequate return brings into question the representativeness of the cooperating subjects in the sample. However, some comparative demographic data was gathered by phone on 11 of the 27 non-respondents and it appears that the non-respondents are not different from the respondents in terms of sex, marital status, age, educational degree, professional duties, and amount of time given to counseling handicapped persons.

Felty (1965) has noted that all the items, both on the ATDP scale and the ATTE scale, were not scalable for the particular sample that he selected. For the ATDP scale, the Multiple Scalogram Analysis program for the CDC 3600 computer found one seven-item and one three-item scale (Felty, 1965, pp. 87, 88). For the ATTE scale, one six-item scale was discovered. It was felt, however, that both scales should be used in their original entirety since the population to be tested is quite different than

the population in Felty's study. Also, for the sake of research and scale development, the items should be exposed to a relatively homogeneous population such as the population of college counselors.

As a result of extensive alterations, the General Information Inventory (Haring et al., 1958) was rendered in essence a new instrument. Therefore, all previous reliability and validity measures on the GII are rendered useless.

An item analysis (FO 303 Item Analysis, Michigan State University Evaluation Services) of the GII reveals a mean item difficulty of .32.[1] This suggests that the test was somewhat too easy for the sophisticated sample of college counselors. To determine each item's index of discrimination, the percentage of correct responses made by the highest scoring 27% of the sample was compared with the percentage of correct responses made by the lowest scoring 27% of the sample. The mean item difficulty, which was the difference between the percentage right in the upper group and the percentage right in the lower group, was .24. The Kuder Richardson reliability #20 was found to be .672.

A final limitation of the study may be attributed to the type of scales employed to measure attitudes toward

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[1]This indicates that, on the average, 32% of the sample missed each item and 68% answered each item correctly.

education and disabled persons. Written responses from several subjects indicated that a negative response was engendered in the subjects by what Guttman (1959) defines as stereotypical and normative type scales. It appears that this particular group of subjects might respond more readily to scales structured on the hypothetical interaction level (see Chapter I, p. 5). It could be reasoned that college counselors are more accustomed to functioning on the hypothetical interaction level, i.e., college counselors may feel uncomfortable in responding to a scale that attempts to compare their "group" with another "group," but they may feel quite comfortable in responding to a scale that attempts to measure how they will or will not interact with given social objects.

# CHAPTER IV

## ANALYSIS OF THE DATA

This chapter is organized into two main sections: (a) descriptive data on designated characteristics of the sample; and (b) the testing of the hypotheses presented at the end of Chapter III. This includes comparisons of mean differences of the various scores of the respondents as well as zero-order, partial, and multiple correlations for selected variables.

### Section 1: Descriptive Data

The descriptive characteristics of the research sample are presented in this section. The data to be used were derived from a combination of the FCC I and the FCC II programs (see p. 38), the CDC 3600 MDSTAT program which provides a number of statistics (see p. 39) useful for simple demographic description, the CDC 3600 UNEQI program (see p. 38) which yields one-way analysis of variance, and the CDC 3600 Least Squares program (see p. 39) which yields multiple and partial regression coefficients.

In Table 1 a breakdown of the amount of contact the counselors had with physically disabled persons was presented.

TABLE 1.--Distribution of subjects according to amount of contact with physically disabled persons.

| Number of Contacts | 0-9 | 10-49 | 50-99 | 100-499 | 500 or more |
|---|---|---|---|---|---|
| Number of Subjects | 12 | 27 | 11 | 10 | 21 |

The data in Table 1 indicate that the amount of contact was spread over the full range of possibilities presented.

The data in Table 2, in which the amount of time given to counseling with disabled persons was presented, do not indicate such an even distribution. Only 14 counselors have given any appreciable amount of time to counseling disabled persons.

TABLE 2.--Distribution of subjects according to percentage of time given to counseling with disabled persons.

| % of Time Counseling Disabled Persons | No Response | Little or None | 10-25 | 25-50 | 50-75 | 75-100 |
|---|---|---|---|---|---|---|
| Number of Subjects | 1 | 66 | 13 | 0 | 0 | 1 |

In Table 3 the distribution of subjects according to sex was presented, and in Table 4 the distribution of subjects according to educational degree was presented. Both variables have enough subjects in each category to permit

comparisons on the basis of sex difference and educational degree difference.

TABLE 3.--Distribution of subjects according to sex.

| Sex | Male | Female |
|---|---|---|
| Number of Subjects | 55 | 26 |

TABLE 4.--Distribution of subjects according to educational degree earned.

| Degree | M. A. or Better | Ph.D. |
|---|---|---|
| Number of Subjects | 22 | 59 |

As a group, the respondents were relatively homogeneous, i.e., all had M. A. degrees or better, few had any extensive experience in counseling with disabled persons, 98% of the group was between the ages of 20 and 60, and all respondents worked in a large college or university as a counselor to students. However, the ranges of the various scale scores were not unlike those of the heterogeneous groups tested in previous attitudinal studies (Felty, 1965; Friesen, 1966). Presented in Table 5 were the total possible and actual score ranges for each instrument.

TABLE 5.--Actual and total possible range for each instrument.

| Score Range | ATPE[1] Content | ATTE[2] Content | ATDP[3] Content | ATDP[4] Intensity | GII[5] |
|---|---|---|---|---|---|
| Actual | 22-40 | 12-35 | 28-56 | 26-76 | 17-44 |
| Possible | 10-40 | 10-40 | 20-80 | 20-80 | 0-49 |

[1]Attitudes Toward Progressive Education Content.

[2]Attitudes Toward Traditional Education Content.

[3]Attitudes Toward Disabled Persons Content.

[4]Attitudes Toward Disabled Persons Intensity.

[5]General Information Inventory.

Differences in Mean ATPE Content, ATTE Content, ATDP Content, ATDP Intensity, and GII Scores Between Male and Female Groups

In Tables 6 through 15 were presented the data for comparison of mean differences on selected variables when the subjects were divided according to sex.

TABLE 6.--Means and standard deviations of content scores on the attitudes toward progressive education (ATPE) scale comparing males with females.

| Variable | N | Mean of ATPE Content Scale | Standard Deviation |
|---|---|---|---|
| Male | 55 | 32.072 | 3.877 |
| Female | 26 | 33.692 | 3.171 |
| Total | 81 | 32.593 | 3.724 |

TABLE 7.--Analysis of variance of the ATPE content scores comparing male and female scores.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 46.308 | 1 | 46.308 | 3.440 | 0.067 |
| Within Categories | 1063.248 | 79 | 13.459 | | |
| Total | 1109.556 | 80 | | | |

TABLE 8.--Means and standard deviations of content scores on the attitudes toward traditional education (ATTE) scale comparing males with females.

| Variable | N | Mean of ATTE Content Scale | Standard Deviation |
|---|---|---|---|
| Male | 55 | 22.818 | 3.963 |
| Female | 26 | 23.077 | 4.029 |
| Total | 81 | 22.901 | 3.961 |

TABLE 9.--Analysis of variance of the ATTE content scores comparing male and female scores.

| Source of Variance | Sum of Squares | Degree of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 1.181 | 1 | 1.182 | 0.074 | 0.786 |
| Within Categories | 1254.028 | 79 | 15.874 | | |
| Total | 1255.210 | 80 | | | |

TABLE 10.--Means and standard deviations of content scores on the attitudes toward disabled persons (ATDP) scale comparing males with females.

| Variable | N | Mean of ATDP Content Scale[1] | Standard Deviation |
|---|---|---|---|
| Male | 55 | 41.782 | 5.130 |
| Female | 26 | 41.577 | 3.602 |
| Total | 81 | 41.716 | 4.672 |

[1]Low score on ATDP content scale indicates positive attitude.

TABLE 11.--Analysis of variance of the ATDP content scores comparing male and female scores.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 0.741 | 1 | 0.741 | 0.034 | 0.855 |
| Within Categories | 1745.728 | 79 | 22.098 | | |
| Total | 1746.469 | 80 | | | |

TABLE 12.--Means and standard deviations of intensity scores on the attitudes toward disabled persons (ATDP) scale comparing males with females.

| Variable | N | Mean of ATDP Intensity Scale | Standard Deviation |
|---|---|---|---|
| Male | 55 | 55.218 | 9.888 |
| Female | 26 | 56.230 | 7.112 |
| Total | 81 | 55.543 | 9.057 |

TABLE 13.--Analysis of variance of the ATDP intensity scores comparing male and female scores.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 18.102 | 1 | 18.102 | 0.219 | 0.641 |
| Within Categories | 6543.997 | 79 | 82.835 | | |
| Total | 6562.099 | 80 | | | |

TABLE 14.--Means and standard deviation of scores on the General Information Inventory (GII) comparing males and females.

| Variable | N | Mean of GII Scores | Standard Deviation |
|---|---|---|---|
| Male | 55 | 32.345 | 4.142 |
| Female | 26 | 35.230 | 5.736 |
| Total | 81 | 33.272 | 4.868 |

TABLE 15.--Analysis of variance of the GII scores comparing male and female scores.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 146.973 | 1 | 146.973 | 6.638 | 0.012 |
| Within Categories | 1749.052 | 79 | 22.140 | | |
| Total | 1896.025 | 80 | | | |

## Summary of Data in Tables 6-15

Although the sex variable was not of direct concern for this study, the data in Tables 6-15 help to determine the part sex, as an independent variable, may have played in determining the mean differences in the various scale and test scores. Study of Tables 6-13 suggests that sex difference was not a significant variable in determining the mean scores on the ATPE content scale, the ATTE content scale, the ATDP content scale and the ATDP intensity scale. However, study of Tables 14 and 15 indicates that the sex variable may be significant in determining the GII test score since the mean score for females on this test of knowledge was significantly higher at the .01 level of significance than the mean score for males.

## Difference in Mean ATPE Content, ATTE Content, ATDP Content, ATDP Intensity, and GII Scores Between Educational Degree Groups

Presented in Tables 16 through 25 were the data for comparison of mean differences on selected variables when the subjects were divided into two groups according to educational degree earned by the subject. One group was composed of those subjects with an M. A. degree or more, and the other group was composed of those subjects with Ph.D. degrees.

TABLE 16.--Means and standard deviations of content scores on the attitude toward progressive education (ATPE) scale comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Variable | N | Mean of ATPE Content Scale | Standard Deviation |
|---|---|---|---|
| M. A. | 22 | 32.500 | 3.635 |
| Ph.D. | 59 | 32.627 | 3.787 |
| Total | 81 | 32.593 | 3.724 |

TABLE 17.--Analysis of variance of ATPE content scores comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 0.259 | 1 | 0.259 | 0.018 | 0.892 |
| Within Categories | 1109.297 | 79 | 14.042 | | |
| Total | 1109.556 | 80 | | | |

TABLE 18.--Means and standard deviations of content scores on the attitudes toward traditional education (ATTE) scale comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Variable | N | Mean of ATTE Content Scale | Standard Deviation |
|---|---|---|---|
| M. A. | 22 | 24.500 | 4.405 |
| Ph.D. | 59 | 22.305 | 3.645 |
| Total | 81 | 22.901 | 3.961 |

TABLE 19.--Analysis of variance of ATTE content scores comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 77.201 | 1 | 77.201 | 5.177 | 0.026 |
| Within Categories | 1178.008 | 79 | 14.911 | | |
| Total | 1255.210 | 80 | | | |

TABLE 20.--Means and standard deviations of content scores on the attitudes toward disabled persons (ATDP) scale comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Variable | N | Mean of ATDP Content Scale | Standard Deviation |
|---|---|---|---|
| M. A. | 22 | 40.000 | 3.532 |
| Ph.D. | 59 | 42.356 | 4.905 |
| Total | 81 | 41.716 | 4.672 |

TABLE 21.--Analysis of variance of ATDP content scores comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 88.944 | 1 | 88.944 | 4.239 | 0.043 |
| Within Categories | 1657.525 | 79 | 20.981 | | |
| Total | 1746.469 | 80 | | | |

TABLE 22.--Means and standard deviations of intensity scores on the attitudes toward disabled persons (ATDP) scale comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Variable | N | Mean of ATDP Intensity Scale | Standard Deviation |
|---|---|---|---|
| M. A. | 22 | 58.863 | 8.254 |
| Ph.D. | 59 | 54.305 | 9.096 |
| Total | 81 | 55.543 | 9.057 |

TABLE 23.--Analysis of variance of ATDP intensity scores comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 332.999 | 1 | 332.999 | 4.223 | 0.043 |
| Within Categories | 6229.099 | 79 | 78.849 | | |
| Total | 6562.099 | 80 | | | |

TABLE 24.--Means and standard deviations of scores on the General Information Inventory (GII) test comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Variable | N | Mean of GII Test Score | Standard Deviation |
|---|---|---|---|
| M. A. | 22 | 33.773 | 5.154 |
| Ph.D. | 59 | 33.085 | 4.790 |
| Total | 81 | 33.272 | 4.868 |

TABLE 25.--Analysis of variance of GII test scores comparing subjects holding M. A. degrees with subjects holding Ph.D. degrees.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 7.585 | 1 | 7.585 | 0.317 | 0.575 |
| Within Categories | 1888.440 | 79 | 23.904 | | |
| Total | 1896.025 | 80 | | | |

Summary of Data in Tables 16-25

The educational degree variable, like the sex variable, was not of direct concern for this study. However, the data in Tables 16-25 help to determine the part educational degree may have played in determining the mean differences in the various scale and test scores. Study of Tables 16-25 indicates that no mean differences based on educational degree grouping were significant at the .01 level of significance. However, study of Tables 18 and 19 reveals that subjects holding M. A. degrees have a significantly higher mean score, at the .05 level of significance, on the ATTE scale content scores than do subjects holding Ph.D. degrees. Study of Tables 20 and 21 indicates that subjects holding Ph.D. degrees have a significantly higher mean score, at the .05 level of significance, on the ATDP scale content scores than do subjects holding M. A. degrees. The ATDP content scale is scored such that lower scores indicate positive attitudes. Tables 22 and 23 reveal that subjects holding M. A. degrees have significantly higher mean scores, at the .05 level of significance, on the ATDP scale intensity scores. The ATDP intensity scale is so scored that higher scores indicate more intensive feelings.

## Zero-Order Correlations Between Instrument Scores and Selected Variables

TABLE 26.--Zero-order correlations between instrument scores and demographic and contact variables.

| Variable | | ATPE Content Scale | ATTE Content Scale | ATDP Content Scale | ATDP Intensity Scale | GII Test of Knowledge |
|---|---|---|---|---|---|---|
| Sex | N | 81 | 81 | 81 | 81 | 81 |
| | r | 0.204 | 0.031 | -0.021 | 0.052 | 0.278* |
| Educational Degree | N | 80 | 80 | 80 | 80 | 80 |
| | r | 0.026 | -0.305** | 0.261* | -0.196 | -0.132 |
| Age | N | 81 | 81 | 81 | 81 | 81 |
| | r | 0.031 | 0.009 | 0.015 | -0.179 | -0.062 |
| Number of Children | N | 80 | 80 | 80 | 80 | 80 |
| | r | -0.014 | -0.167 | 0.019 | 0.071 | -0.029 |
| Contact Amount | N | 81 | 81 | 81 | 81 | 81 |
| | r | 0.038 | -0.063 | -0.328** | 0.332** | 0.148 |
| Contact Avoidance | N | 80 | 80 | 80 | 80 | 80 |
| | r | -0.062 | 0.057 | 0.388** | -0.096 | 0.052 |
| Contact Alternative | N | 56 | 56 | 56 | 56 | 56 |
| | r | -0.027 | 0.094 | -0.028 | 0.042 | 0.084 |
| Contact Enjoyment | N | 79 | 79 | 79 | 79 | 79 |
| | r | 0.140 | 0.003 | -0.274* | 0.216 | -0.038 |

*p < .05.
**p < .01.

Study of Table 26 indicates that the age variable and the number of children variable have little relationship to the various scale scores.

TABLE 27.--Zero-order correlations between selected demographic variables and amount of contact with disabled persons.

| Variable | | Sex | Educational Degree | Age | No. of Children | Contact Amount |
|---|---|---|---|---|---|---|
| Sex | N | 81 | | | | |
| | r | 1.000 | | | | |
| Educational Degree | N | 80 | 80 | | | |
| | r | -0.388** | 1.000 | | | |
| Age | N | 81 | 80 | 81 | | |
| | r | 0.074 | 0.036 | 1.000 | | |
| Number of Children | N | 80 | 79 | 80 | 80 | |
| | r | -0.595** | 0.176 | -0.076 | 1.000 | |
| Contact Amount | N | 81 | 80 | 81 | 80 | 81 |
| | r | -0.116 | -0.176 | 0.081 | 0.142 | 1.000 |

*p < .01.

Study of Table 27 reveals that none of the selected variables correlate with amount of contact at the .05 level of significance. Educational degree is the variable with the largest correlation with contact amount, but it fails to achieve even the .10 level of significance.

## Section 2: Hypotheses Tested, Mean Differences, and Correlational Analyses

### Hypotheses Related to Contact Frequency and Attitude Scores

H-1: The more frequent the contact with disabled persons, the higher will be the scores on the intensity

statements of the attitude toward disabled persons (ATDP) scales, regardless of whether attitude content is favorable or unfavorable.

In testing this hypothesis, perceived contact frequency scores were regarded as the independent variable and intensity scores on the ATDP scale were regarded as the dependent variable. Presented in Tables 28 and 29 were the data for comparison of mean differences of the ATDP intensity scores when the subjects were divided into two groups according to the frequency of contact with disabled persons. Subjects with 0 to 49 contacts with disabled persons were placed in the low-frequency of contact group and subjects with 100 to 500 or more contacts were placed in the high-frequency of contact group. The mean difference indicated by the significant $F$ ($p < .0005$) indicates that frequency of contact with disabled persons does influence ATDP intensity scores. Therefore, H-1 was confirmed.

TABLE 28.--Means and standard deviations of intensity scores on the attitudes toward disabled persons (ATDP) scale comparing high and low frequency of contact with disabled persons.

| Contact Variable | N | Mean of ATDP Intensity Scale | Standard Deviation |
|---|---|---|---|
| High Frequency of Contact | 31 | 59.968 | 7.574 |
| Low Frequency of Contact | 39 | 52.641 | 8.857 |
| Total | 70 | 55.886 | 9.032 |

TABLE 29.--Analysis of variance of the ATDP intensity scores comparing high and low frequency of contact with disabled persons.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 927.144 | 1 | 927.144 | 13.408 | <0.0005 |
| Within Categories | 4701.942 | 68 | 69.146 | | |
| Total | 5629.086 | 69 | | | |

H-2: High frequency of contact with disabled persons will lead to favorable attitudes if high frequency is concurrent with (a) alternative rewarding experiences, (b) enjoyment of the contact, and (c) ease of avoidance of contact.

Study of Table 30 indicates that the multiple correlation relating the combined contact variables and favorableness of attitudes toward disabled persons was significant at the .01 level of significance. Study of Table 30 also reveals that ease of avoidance and enjoyment of contact, when partialled out contributed most to predicting attitudes toward disabled persons. Both the ease of avoidance and the enjoyment of contact variables made contributions which were significant at the .01 level of confidence. However, since these two major variables were not consistent in the direction of their relationships with the dependent variable, it could be assumed that the hypothesis was not confirmed (see further discussion of this hypothesis in Chapter V).

The zero-order correlations of the variables related to this hypothesis were presented in Table 31. Study of this table reveals a negative correlation between the ATDP variable and each of the contact variables except ease of avoidance.

TABLE 30.--Partial and multiple correlations between contact variables (in respect to disabled persons) and content scores on the attitudes toward disabled persons (ATDP) scale.[1]

| ATDP Contact Variable | N=81 | Partial Correlations |
|---|---|---|
| Amount of contact | | -0.118 |
| Avoidance of contact | | 0.378** |
| Alternative to contact | | -0.103 |
| Enjoyment of contact | | -0.388** |
| Multiple correlation | | R = 0.585** |

**p < .01.

[1]Low scores on the ATDP content scale indicate positive attitudes.

TABLE 31.--Zero-order correlations between contact variables and content scores on the ATDP scale.

| Variables | | ATDP Content | Amount of Contact | Avoidance of Contact | Alternative to Contact | Enjoyment of Contact |
|---|---|---|---|---|---|---|
| ATDP Content | N | 81 | | | | |
| | r | 1.000 | | | | |
| Amount of Contact | N | 81 | 81 | | | |
| | r | -0.329** | 1.000 | | | |
| Avoidance of Contact | N | 80 | 80 | 80 | | |
| | r | 0.388** | -0.414** | 1.000 | | |
| Alternative to Contact | N | 56 | 56 | 56 | 56 | |
| | r | -0.028 | 0.069 | 0.129 | 1.000 | |
| Enjoyment of Contact | N | 79 | 79 | 78 | 56 | 79 |
| | r | -0.274* | 0.116 | 0.098 | -0.040 | 1.000 |

*p < .05.
**p < .01.

Hypothesis Related to Attitudes Toward Education and Disabled Persons

H-3: Persons who score high[1] in traditional and low[2] in progressive attitudes toward education will also tend to score low[3] in favorable attitudes toward disabled persons.

Presented in Tables 32 and 33 were the data for comparison of mean differences of the ATDP content scores when the subjects were divided into two groups defined by high (a score of 25 and above) and low (a score of 22 and below) scores on the ATTE scale. Presented in Tables 34 and 35 were the data for comparison of mean differences of the ATDP content scores when the subjects were divided into two groups defined by high (a score of 33 and above) and low (a score of 30 and below) scores on the ATPE scale. Study of Tables 32-35 reveals that mean differences for both educational scales were in the hypothesized direction. However, the mean differences were not significant at the .05 level of confidence. Therefore, the hypothesis was not confirmed.

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[1]High score on ATTE scale indicates favorable attitudes toward traditional education.

[2]Low score on ATPE scale indicates unfavorable attitudes toward progressive education.

[3]The ATDP scale is reversed so that a low score actually indicates favorable attitudes toward disabled persons. Therefore, a high score on the ATDP scale would indicate a "low score in favorable attitudes."

TABLE 32.--Means and standard deviations of content scores on the attitudes toward disabled persons (ATDP) scale comparing high scores with low scores on the attitudes toward traditional education (ATTE) scale.

| ATTE Variable | N | Mean of ATDP Content Score[1] | Standard Deviation |
|---|---|---|---|
| High ATTE Score (25 and above) | 30 | 42.100 | 4.188 |
| Low ATTE Score (22 and below) | 31 | 41.710 | 5.527 |
| Total | 61 | 41.902 | 4.878 |

[1]Low score on ATDP content scale indicates positive attitudes.

TABLE 33.--Analysis of variance of the ATDP content scores comparing high and low ATTE scores.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Squares | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 2.323 | 1 | 3.323 | 0.096 | 0.758 |
| Within Categories | 1425.087 | 59 | 24.154 | | |
| Total | 1427.410 | 60 | | | |

TABLE 34.--Means and standard deviations of content scores on the attitudes toward disabled persons (ATDP) scale comparing high scores with low scores on the attitudes toward progressive education (ATPE) scale.

| ATPE Variable | N | Mean of ATDP Content Score[1] | Standard Deviation |
|---|---|---|---|
| High ATPE Score (33 and above) | 39 | 40.974 | 4.881 |
| Low ATPE Score (30 and below) | 25 | 42.800 | 4.094 |
| Total | 64 | 41.688 | 4.472 |

[1]Low score on ATDP content scale indicates positive attitudes.

TABLE 35.--Analysis of variance of the ATDP content scores comparing high and low ATPE scores.

| Source of Variance | Sum of Square | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 50.776 | 1 | 50.776 | 2.604 | 0.112 |
| Within Categories | 1208.974 | 62 | 19.500 | | |
| Total | 1259.750 | 63 | | | |

Hypothesis Related to Knowledge of Disabled Persons and Attitudes Toward Disabled Persons

H-4: Persons who score high on the General Information Inventory (GII) test of knowledge will tend to score high[1] in favorable attitudes toward disabled persons.

Tables 36 and 37 presented the data for comparison of mean differences of the ATDP content scores when the subjects were divided into two groups defined by high (a score of 36 and above) and low (a score of 32 and below) scores on the GII test. Study of Tables 36 and 37 reveals that the mean difference in the ATDP content scores was not significant at the .05 level of confidence. Further study reveals that the relationship between GII scores and ATDP content scores was, in fact, the reverse of what was hypothesized. That is, high GII scores correlated with high scores on the ATDP content scale, and high scores on the ATDP content scale indicate unfavorable attitudes toward disabled persons. Therefore, H-4 was not confirmed.

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[1]Low scores on the ATDP content scale actually indicate favorable attitudes.

TABLE 36.--Means and standard deviations of content scores on the attitudes toward disabled persons (ATDP) scale comparing high scores with low scores on the GII test.

| GII Variable | N | Mean of ATDP Content Score[1] | Standard Deviation |
|---|---|---|---|
| High GII Score (36 and above) | 30 | 43.067 | 5.030 |
| Low GII Score (32 and below) | 33 | 41.030 | 4.283 |
| Total | 63 | 42.000 | 4.728 |

[1]Low score on ATDP scale indicates positive attitudes.

TABLE 37.--Analysis of variance of the ATDP content scores comparing high and low GII scores.

| Source of Variance | Sum of Squares | Degrees of Freedom | Mean Square | F | Sig. of F |
|---|---|---|---|---|---|
| Between Categories | 65.164 | 1 | 65.164 | 3.009 | 0.088 |
| Within Categories | 1320.836 | 61 | 21.653 | | |
| Total | 1386.000 | 62 | | | |

# CHAPTER V

# DISCUSSION, RECOMMENDATIONS, AND SUMMARY

As the chapter title suggests, this chapter will be divided into three major sections. Section 1 is a discussion of the nature of the sample and the results of hypothesis testing. Section 2 deals with recommendations for changes in future studies based on a discussion of theoretical and methodological issues. The final part, Section 3, presents the concluding summary in reference to the primary purpose of the study.

## Section 1: Discussion of Research Findings

The raw data were first analyzed by frequency-distribution procedures. Several tables were derived from the frequency analysis. The frequency analysis was also used as an aid to variable dichotomization. The data were next exposed to the MDSTAT program for the CDC 3600 computer at Michigan State University. The resulting mean scores and zero-order correlations were used as a basis for determining which variables, other than those involved in hypotheses, might be considered as determinants

of the various scale and test scores. Two variables, sex and educational degree, were then subjected to a one-way analysis of variance. Lastly, the research hypotheses were tested by mean comparisons and multiple and partial correlations.

The Nature of the Sample

Study of Table 1 reveals no unusual patterns of contact of college counselors with physically disabled persons. Study of Table 5 similarly reveals that the sample of college counselors selected for this study was not unlike more heterogeneous samples used in earlier studies (Felty, 1965; Friesen, 1966) regarding the range of scores achieved on the various scales. Over 80% of the sample has had little or no contact with physically disabled persons on a professional level as a counselor.

Although not hypothesized, two variables, sex and educational degree, emerge as possible determinants of the scale and test scores. Comparisons of mean score differences between males and females on the various scales and the GII test revealed that sex differences accounted for a significant mean difference on only the GII test of knowledge. On the GII test of knowledge, the female mean score was significantly higher at the .01 level of significance. This would suggest that, if there is a possible relationship between GII scores and attitude

toward disabled persons (ATDP) content scores, sex difference might be considered a complicating factor.

A comparison of mean scale and test score differences was made between subjects holding Ph.D. degrees and subjects holding M. A. degrees. Educational degree, as an independent variable, appears to account for several significant mean differences. M. A. degree holders have a significantly higher mean score on the attitudes toward traditional education (ATTE) content scale at the .05 level of significance. M. A. degree holders also have significantly lower mean scores (indicating more positive attitudes) on the ATDP content scale at the .05 level of confidence than do Ph.D. degree holders (Tables 20 and 21).

Study of Tables 22 and 23 reveals that the mean scores on the ATDP intensity scale were significantly higher at the .05 level of significance for M. A. degree holders than for Ph.D. degree holders. This mean difference suggests that educational degree may complicate the relationship between the ATDP intensity scale scores and other independent variables.

## Hypothesis Related to Contact Frequency and Intensity Scores on the ATDP Scale (H-1)

The hypothesis related to contact frequency and intensity scores on the ATDP scale states that higher frequency of contact with disabled persons will produce greater intensity of attitude irrespective of the

attitude content. Subjects with high frequency of contact did have a significantly higher mean score at the .0005 level of confidence on the ATDP intensity scale. Examination of the correlational data reveals that the contact amount variable correlated with the ATDP intensity score at the .01 level of significance. However, no other demographic or contact variable had a zero-order correlation at even the .05 level of significance with the ATDP intensity score.

The fact that subjects holding M. A. degrees had significantly higher mean scores on the ATDP intensity scale may indicate that the educational degree variable accounted for part of the positive correlation between contact amount and the ATDP intensity score. However, examination of Table 27 (p. 61) reveals that the -0.176 correlation between contact amount and educational degree was not significant at the .05 level of significance.

The above discussion would seem to suggest that, for this sample of college counselors, frequency of contact was a significant determinant of intensity of attitudes as measured by the ATDP intensity scale. Study of Table 26 (p. 60) suggests that intensity of attitude is not entirely a function of frequency of contact. It may be related to a number of factors such as educational degree, age, enjoyment of contact, and, perhaps, some factors not considered in this study.

Hypothesis Related to Contact Variables and ATDP Content Scores (H-2)

This hypothesis states that high frequency of contact with disabled persons is associated with favorableness of attitude if (a) there are other rewarding activities in which to engage, (b) the contact was enjoyable, and (c) the interaction could be easily avoided. The assumption underlying this hypothesis was that the amount of contact with physically disabled persons does not by itself produce favorable attitudes. Such factors as enjoyment of the contact and ability to avoid the contact determine whether the resulting attitude will be positive or negative.

The multiple correlation of 0.585 between the combined contact variables and the criterion measure was significant. These several variables do relate positively (at the .01 level of significance) to attitudes toward disabled persons as measured by the ATDP content scale. But, the partial correlations revealed that the two predictors that contributed most significantly to the multiple correlation related to the criterion in opposite directions. Therefore, the hypothesis was considered not confirmed. It should be noted that the distribution of scores in Table 1 (p. 45) is bi-modal. This poses difficulties of interpretation for all correlation analyses which are built on the assumption of normality of distribution.

The difficulties in multiple correlation are further complicated by the unpredictable manner in which the individual predictors enter into the correlation.

The enjoyment of contact predictor had a -0.388 correlation with the criterion which was significant at the .01 level of confidence. This predictor correlated with the ATDP content scores in the hypothesized direction. High enjoyment of contact correlated with low scores (indicating favorable attitudes) on the ATDP scale. The avoidance of contact predictor, however, had a positive 0.378 correlation with the criterion measure which was also significant at the .01 level of confidence. This predictor correlated with the ATDP content scores in a direction which was opposite to what was hypothesized. Subjects who find it easy to avoid contact with disabled persons tend to score high (indicating unfavorable attitudes) on the ATDP content scale and subjects who find it hard to avoid contact with disabled persons tend to score low (indicating favorable attitudes) on the ATDP content scale.

It is difficult to explain the relationship between the ease of avoidance variable and the criterion measure. Two other studies tested this hypothesis with different populations, using the same methodology, and found this variable to correlate with the criterion measure in the hypothesized direction (Friesen, 1966; Sinha, 1966). It may be that the population of college counselors can

account for the difference. It may be that the college counselors in the sample responded to the ease of avoidance variable in quite a different manner than did the more heterogenous, less sophisticated subjects of the two previous studies.

The present study would suggest that item #85 in the questionnaire, which attempts to define the ease with which respondents can avoid contact with disabled persons, could be interpreted in two different ways. Item #85 reads as follows:

85. When you have been in contact with physically handicapped people, how <u>easy</u> for you, in general, would it have been <u>to have avoided</u> being with these handicapped persons?

I could generally have avoided these personal contacts only at great cost or difficulty . . . . . 1

I could generally have avoided these personal contacts only with considerable difficulty . . . . . 2

I could generally have avoided these personal contacts, but with some inconvenience . . . . . 3

I could generally have avoided these personal contacts without any difficulty or inconvenience . . . . . 4

In the previous studies (Friesen, 1966; Sinha, 1966), the respondents apparently responded to the item in the way the authors had anticipated they would respond. They viewed contact with disabled persons which were "hard to avoid" as unpleasant. Contacts which they could avoid "only at great cost or difficulty" were thought of as

contacts they were forced to have. These contacts were not a matter of personal choice so they gave birth to negative feelings toward those with whom they could not avoid having contact. On the other hand, contacts resulting from choice (avoided without difficulty or inconvenience) sponsored positive feelings toward disabled persons.

College counselors, it is suggested, are likely to be inclined to move toward people. The word "avoid" may have suggested to them an attempt to side-step or dodge or even to turn their backs to personal contacts with disabled persons. Thus, the subjects of the present study may have felt it most inappropriate to move away from or to avoid contact with disabled persons. As a result, the counselors who have positive feelings toward disabled persons stated they "could have avoided these personal contacts only at great cost or difficulty." Inversely, those counselors who could avoid (side-step) personal contacts with disabled persons "without any difficulty or inconvenience" are those counselors who have negative feelings toward physically disabled persons.

The above argument may be further supported by the -0.414 zero-order correlation between the ease of avoidance variable and the amount of contact variable. The correlation, which is significant at the .01 level of significance, may indicate that counselors who find it easy to avoid (side-step) contact with disabled persons are

counselors who manage to have little contact with disabled persons.

If the above argument is valid, then it can be argued that the "difficulty of avoidance" variable is a fair predictor of positive attitudes of college counselors toward physically disabled persons. Therefore, the predictors do all relate to the criterion measure in the same direction (the avoidance variable was simply coded the wrong way) and the multiple correlation of .585 is both significant and meaningful. If the above can be assumed to be true, then the hypothesis can be considered confirmed.

Hypothesis Related to Attitudes Toward Education and Disabled Persons (H-3)

Hypothesis H-3 states that persons who score high in traditional and low in progressive attitudes toward education will also tend to score low in favorable attitudes toward disabled persons. This hypothesis was built on the assumption that persons who score low on "progressive" and high on "traditional" attitudes toward education were persons who tend to want to maintain the status quo and were persons who tend to value social structure above persons. Thus, they tend to evaluate persons in terms of what they do to help maintain the social structure. The handicapped person, therefore, who may not be able to play a known or familiar role in

maintaining the social structure, may be devalued (Wright, 1960).

Mean differences for both educational scales were in the hypothesized direction, but neither mean difference was significant at the .05 level of significance (Tables 32-35). This hypothesis, therefore, was not confirmed.

It was noted in an earlier discussion in this chapter that subjects holding M. A. degrees have significantly higher mean scores on the ATTE content scale (indicating positive attitudes) than do subjects holding Ph.D. degrees. This may indicate that college counselors who hold M. A. degrees favor traditional education as defined by the ATTE content scale more than do college counselors who hold Ph.D. degrees. This significant mean difference may also suggest that the small positive relationship between ATTE content scores and unfavorable scores (high scores) on the attitudes toward disabled persons (ATDP) content scale can be accounted for by difference in educational degree.

The above findings were, however, complicated by the fact that M. A. degree holders have significantly lower mean scores (indicating more positive attitudes) on the ATDP content scale at the .05 level of confidence than do Ph.D. degree holders. Therefore, it is suggested that the role that educational degree plays in the

relationship between ATTE content scale scores and ATDP content scale scores is unclear.

Hypothesis Related to Knowledge of Disabled Persons and Attitudes Toward Disabled Persons (H-4)

This hypothesis is concerned with the relationship between measured amount of knowledge of disabled persons and attitudes toward disabled persons. The hypothesis states that persons who score high on the GII test of knowledge will tend to score high in favorable attitudes toward disabled persons. The assumption underlying this hypothesis is that lack of information or misinformation is one factor that allows unfavorable attitudes to exist.

Not only was this hypothesis unconfirmed, but the relationship between the GII test of knowledge scores and the criterion measure was the reverse of what was hypothesized. This unexpected relationship may be a function of several factors. First, it may be that those subjects who had the most knowledge of disabled persons were subjects who responded negatively to the stereotypical and normative type scales that were employed (see discussion in Chapter III under "Limitations of the Present Study"). Secondly, it may be true that the lack of information or misinformation is a factor that allows unfavorable attitudes to exist. It does not necessarily follow, though, that to be well informed is a factor that encourages

favorable attitudes. The process of attitude change is, perhaps, far more complicated than this. Thirdly, it may be speculated that those college counselors who had more knowledge about disabled persons tended to feel that disabled persons, due to their unique physical condition as well as the unique response they elicit from society, do have special needs and do need special treatment. It may be that the better informed college counselor does feel that the physically disabled person is by his very nature in a "special group." The ATDP scale, which equates "seeing disabled persons as different" with "negative attitudes toward disabled persons" may, then, erroneously define the better informed college counselor as having negative attitudes toward physically disabled persons. Lastly, it appears that the GII test of knowledge was not altogether appropriate for this population. The Kuder Richardson #20 test of reliability was marginally acceptable, but the index of difficulty was far too low to be acceptable (see discussion in Chapter III under "Limitations of the Present Study").

An earlier discussion in the present study (p. 73) was concerned with the part which sex difference might play in determining mean differences of ATDP content score when the subjects are divided according to high and low GII scores. This concern grew out of the fact that the female mean score was significantly higher at the .01 level of significance on the GII test of knowledge.

However, since there was no meaningful relationship between the GII test and the ATDP content scores, the mean difference in female GII test scores was not considered further.

## Section 2: Theoretical and Methodological Issues, and Recommendations

### Theoretical Issues

The principal concern of this study was the nature and determinants of attitudes toward physically disabled persons. Study of the perceived nature of attitudes toward physically disabled persons was considered in terms of intensity of attitude and whether the attitudes were positive or negative. Attitude determinants considered were perceived amount and perceived nature of contact with disabled persons, attitudes toward education, and amount of knowledge of the needs and conditions of various disabilities. For the purposes of this study, Guttman's definition of attitude as a "delimited totality of behavior with respect to something" (1950, p. 51) was accepted. "Behavior," as Guttman (1950) uses the term, includes cognitive, verbal, and physical acts. The scope of the present study was limited to cognitive attitudinal acts defined by Guttman as "stereotypical" and "normative" in nature (1959, p. 319). This matter was discussed in more detail in Chapter I (p. 5) and in Chapter III (pp. 43, 44) of the present study.

Contact Amount and Attitude Intensity

Attitude intensity was considered to be important for several reasons (see discussion in Chapter II). For the present study, the interest in attitude intensity was primarily a result of a suggested relationship between attitude intensity and amount of personal contact (Guttman and Foa, 1951) with the added assumption that the intensity component of an attitude may be considered as an action predictor (Rosenberg, 1960, p. 336). Two recent studies of the relationship between amount of contact and intensity of attitudes suggested that more frequent contact sometimes reduces intensity of attitudes (Sinha, 1966, p. 245; Friesen, 1966, p. 225). The present study, however, reported that, for college counselors, increased frequency of contact may be a determinant of more intense attitudes. It is possible that the difference between the previous studies and the present study can be accounted for by the nature of the college counselor and his work. It may be that for the "man in general" more frequent contact leads to a lessening of fears, suspicions, and stereotypes which in turn reduces intensity of attitudes. The college counselor may find, however, that more frequent contact leads to more involvement and thus attitudes may become more intense. This suggestion may be further strengthened by the fact that there was a significant (at the .01 level of confidence) zero-order

correlation between high frequency of contact and positive attitudes toward disabled persons. That is, for college counselors frequency of contact does seem to have some bearing on the nature of attitudes both in terms of intensity and content.

Contact Variables and Attitude Content

Several studies have suggested that the nature as well as the frequency of contacts with disabled persons may combine to determine whether the resulting attitudes will be positive or negative (Allport, 1958; Rosenberg, 1960; Jacobson et al., 1960; Zetterberg, 1963). As a result, several contact variables were combined with contact amount and it was predicted that these variables as a group would correlate positively with favorable attitudes toward disabled persons. Zetterberg (1963, p. 13) had suggested that one factor influencing the nature of attitudes resulting from personal contact could be the "cost of avoiding interaction." In his opinion, the attitude resulting from personal contact would be more likely to be positive if the cost of avoiding interaction were low. However, when the cost of avoidance variable was combined with an enjoyment of contact variable, an alternative job available variable, and an amount of contact variable, it was found that the cost (or ease) of avoidance variable alone did not relate to the criterion measure in the predicted positive direction. The suggestion

was then made that perhaps college counselors were responding to this item, which attempts to measure the cost (or ease) of avoidance variable, in a manner which differs considerably from the response of more heterogenous populations.

There is good reason to suggest that both the theory underlying the cost (or ease) of avoidance variable and the item which attempts to measure the variable should be exposed to more rigorous testing.

The fact still remains that the combined contact variables, with further refinement, may prove to be useful predictors of positive and negative attitudes toward specified social objects.

### Attitudes Toward Education and Attitudes Toward Disabled Persons

Kerlinger's theoretical model was used as a basis for this aspect of the present study (Kerlinger, 1958). The model is built on a dichotomization, but not polarization, of attitudes toward education into "traditional" and "progressive" attitudes (see Chapter II, pp. 21-25 for a summarization of Kerlinger's propositions concerning traditional and progressive education).

The present study hypothesized that favorable attitudes toward traditional education and unfavorable attitudes toward progressive education would combine to predict unfavorable attitudes toward disabled persons. This

hypothesis, however, did not prove to be supported with the sample of college counselors used in the present study.

Kerlinger proposes that occupational or professional role will be one of the predictors of attitudes toward education. He contends that, "individuals having the same or similar occupational or professional roles will hold similar attitudes toward a cognitive object which is significantly related to the occupational or professional role" (Kerlinger, 1956, p. 290). The sample of college counselors used in the present study had similar occupational and professional roles and this may account in part for the considerable difference in mean scores on the traditional (22.901 mean score) and the progressive (32.593 mean score) scales. That is, the sample subjects appear to stand together in less favorable attitudes toward traditional and more favorable attitudes toward progressive education.

It should be noted that Kerlinger's theory does not fully make allowance for a finding such as the significant mean difference on the ATTE scale between counselors with M. A. degrees and counselors with Ph.D. degrees. It was reported in Chapter IV that counselors with M. A. degrees had significantly higher mean scores (at the .05 level of confidence) on the ATTE scale than did counselors with Ph.D. degrees. This matter clearly calls for further study.

## Amount of Information and Attitudes Toward Disabled Persons

There was some evidence to suggest that increased knowledge or information reduces prejudice and sponsors favorable attitudes (Nelson, 1939). Haring et al. (1958), however, concluded that "increased knowledge per se was not found to be a significant factor in effecting modification of (teachers') attitudes toward exceptional children" (p. 130).

The finding of the present study further suggests that knowledge per se is not a significant factor in determining attitudes toward disabled persons. It appears that the matter may be far more complicated than the author of the present study had first supposed it to be. Perhaps the knowledge variable ought to be further defined and treated as a group variable such as was the contact variable. Such matters as the nature of the knowledge, the way in which it was obtained, and the context in which it was obtained might be considered.

## Methodological Issues

One of the primary methodological issues was the adequacy of the research design. The present study was defined as pioneering and investigative in nature. A single exposure to a lengthy set of self-administered instruments, however, is not considered to be a strong design for any research attempt. One positive note is

the fact that this study was in large part a replication of several other studies. This study finds some of its strength and justification, therefore, in the fact that it was but one small part of a much larger effort. Each part of the larger effort tends to be a cross-check on the other parts.

Much has already been said about the selection of instruments and their psychometric properties. It has already been suggested that stereotypical and normative type scales used in the present study may not be altogether appropriate for a sample of college counselors. Unsolicited written responses from several sample subjects indicate a strong distaste for responding to instruments which ask the respondent to think in stereotypical concepts about individuals.

The reliability and the validity of the General Information Inventory as revised for the present study is under considerable question. It is possible that the GII would be more appropriate for more heterogeneous populations.

Further discussion of the rationale for the instrument selection and the limitations of the various instruments can be found in Chapter III (pp. 41-43). A discussion of the problems of measuring attitudes can be found in Chapter II, pp. 15-17.

The question of concept equivalence was brought to the fore in the discussion in Chapter V of the "ease of avoidance" variable (pp. 76-79). There is good reason to suppose that the meaning of many of the significant mean differences and the meaning of the significant zero-order correlations were considerably complicated by inconsistent attitudinal reactions of the subjects. That is, it is difficult to know whether or not the subject responded to the specific items in the instrument as the researcher intended. It is also difficult to predict the extent of and the meaning of varied responses. In the discussion of the "ease of avoidance variable," (Chapter V, pp. 76-79) the present study has suggested that the subjects responded in a way that was opposite to what was anticipated.

Another problem to be considered was the extent to which the instrument items adequately sample the attitude universe in the specified area of concern. It is difficult to suppose that Kerlinger's ten-item traditional and progressive education scales were, in fact, representative of the attitude universe in these specified areas. More consideration, also, could be given to the assumed unidimensionality of the several scales. Kerlinger has, in fact, discovered that his education scales are multidimensional. He feels, however, that he is still able to treat the scales as though they were unidimensional (Kerlinger, 1967, p. 203).

Sampling procedures were discussed in Chapter III (pp. 34-36). Needless to say, more efficient methods could be employed. It is conceivable that more current lists of qualified counselors could have been obtained directly from the administrative heads of the various counseling centers.

Recommendations

The following recommendations are an outgrowth of the foregoing discussion of theoretical and methodological issues.

Research Design.--It is recommended that more replications of the study of attitudes toward disabled persons be made with distinct subgroups. This type of design affords a more sensitive check on the possible misinterpretation of data that results from problems with concept equivalence.

It is further suggested that an attempt to cross validate one of the studies of a specific subgroup would be most useful in evaluating the usefulness of the instruments. Comparisons of the known attitudes of certain subgroups toward other social objects with the subgroup's attitudes toward disabled persons might also be useful in interpreting data findings.

Selection and Analysis of Instruments.--It is suggested that serious consideration be given to constructing scales which will attempt to measure attitudes on the

hypothetical interaction level (see Guttman, 1959, p. 319). It would also seem appropriate to consider some attempts to operationalize the assumptions underlying attitudes by attempting to measure the overt actions of specified attitudinal groups.

Study of the unexpected (even though statistically insignificant) relationship between amount of knowledge and attitudes toward disabled persons leads to the speculation that better informed college counselors may, in fact, see physically disabled persons as "different" than physically normal persons. Therefore, it is suggested that the assumption underlying the ATDP scale be given further consideration.

It is recommended that the instrument which was designed to measure amount of knowledge in the present study, namely the revised form of the General Information Inventory, be replaced with a more sophisticated instrument. It is suggested that the new instrument should attempt to measure not only amount of knowledge, but also the nature of the knowledge, the way in which it was obtained, and the context in which it was obtained.

It is also suggested that the educational scales could be enlarged and analyzed to attempt to improve the extent to which they are representative of the attitude universe (see Friesen, 1966, pp. 242-250, for a discussion of scale analysis).

## Section 3: Concluding Summary

Four hypotheses were stated in this study in an effort to gain some insight into the nature and the determinants of attitudes toward physically disabled persons. One hypothesis was considered confirmed. The confirmation of this hypothesis suggests that the impact of personal contact does increase the attitude intensity of college counselors. It was further speculated that the perceived nature of college counselors and their work is such that increased perceived contact may lead to more favorable attitudes.

In a previous discussion it was suggested (p. 84) that intensity might be considered a predictor of action. The significant relationship between perceived amount of contact, nature of contact and intensity of attitudes, may suggest that the population of college counselors sampled by this study are likely to act positively toward physically disabled persons. However, the study of the relationship between intensity of attitudes and behavior is beyond the scope of this study.

The second hypothesis was confirmed only conditionally. It was strongly suggested that a problem with concept equivalence interfered with the confirmation of this hypothesis. If a reinterpretation of the data analysis can be considered acceptable, the findings may, indeed, have some meaning. It appears that enjoyment of contact, availability

of alternative rewards and difficulty of avoiding (sidestepping) contacts with disabled persons may combine with amount of contact to predict favorable attitudes of college counselors toward physically disabled persons.

The third hypothesis was left unconfirmed. The findings related to this hypothesis suggest that the relationship between attitudes toward education and attitudes toward disabled persons is unclear for college counselors. The relationships between the independent variables and the criterion measure were in the hypothesized direction, but they were not statistically significant.

The last hypothesis was also unconfirmed. The findings were such that the relationship between high amount of knowledge and positive attitudes toward disabled persons was not only unclear, but a small negative correlation suggests that the hypothesis is under serious question.

A major suggestion, resulting from the research findings, is that more replications of the study be made with distinct subgroups in an effort to more clearly define the problems surrounding concept equivalence.

A second suggestion is that consideration be given to the validity of the assumption underlying the ATDP scale: that viewing the disabled person as being different from the physically normal person is equivalent to holding negative attitudes toward the physically disabled person.

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# APPENDICES

# APPENDIX A

## EDUCATION SCALE

# EDUCATION SCALE

Instructions: Given below are some statements of opinion about education. We all think differently about schools and education. Here you are asked to express how you think by choosing one of the four possible answers following each statement. These answers indicate how much you agree or disagree with the statement. Please mark your answer by placing a heavy black mark after the corresponding number on the answer sheet.

You are also asked to indicate for each statement how strongly you feel about your marking of the statement. Please mark this part of your answer in the same way as before, by placing a heavy black mark after the number you select on the answer sheet.

---

1. The goals of education should be dictated by children's interests and needs as well as by the larger demands of society.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

2. About how strongly do you feel about your answer (above)?

   1. Not strongly at all
   2. Not very strongly
   3. Fairly strongly
   4. Very strongly

3. No subject is more important than the personalities of the pupils.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

4. About how strongly do you feel about your answer?

   1. Not strongly at all
   2. Not very strongly
   3. Fairly strongly
   4. Very strongly

5. Schools of today are neglecting reading, writing, and arithmetic: the three R's.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

6. About how strongly do you feel about your answer?

   1. Not strongly at all
   2. Not very strongly
   3. Fairly strongly
   4. Very strongly

7. The pupil-teacher relationship is the relationship between a child who needs direction, guidance, and control and a teacher who is an expert supplying direction, guidance, and control.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

8. About how strongly do you feel about your answer?

   1. Not strongly at all
   2. Not very strongly
   3. Fairly strongly
   4. Very strongly

9. Teachers, like university professors, should have academic freedom--freedom to teach what they think is right and best.

   1. Strongly disagree
   2. Disagree
   3. Agree
   4. Strongly agree

10. About how strongly do you feel about your answer?

    1. Not strongly at all
    2. Not very strongly
    3. Fairly strongly
    4. Very strongly

11. The backbone of the school curriculum is subject matter; activities are useful mainly to facilitate the learning of subject matter.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

12. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

13. Teachers should encourage pupils to study and criticize our own and other economic systems and practices.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

14. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

15. The traditional moral standards of our culture should not just be accepted; they should be examined and tested in solving the present problems of students.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

16. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

17. Learning is experimental; the child should be taught to test alternatives before accepting any of them.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

18. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

19. The curriculum consists of subject matter to be learned and skills to be acquired.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

20. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

21. The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

22. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

23. One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

24. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

25. The curriculum should be made up of an orderly sequence of subjects that teach to all students the best of our cultural heritage.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

26. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

27. Discipline should be governed by long-range interests and well established standards.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

28. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

29. Education and educational institutions must be sources of social ideas; education must be a social program undergoing continual reconstructions.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

30. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

31. Right from the very first grade, teachers must teach the child at his own level and not at the level of the grade he is in.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

32. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

33. Children should be allowed more freedom than they usually get in the execution of learning activities.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

34. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

35. Children need and should have more supervision and discipline than they usually get.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

36. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

37. Learning is essentially a process of increasing one's store of information about the various fields of knowledge.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

38. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

39. In a democracy, teachers should help students understand not only the meaning of democracy but also the meaning of the ideologies of other political systems.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

40. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

# APPENDIX B

## HANDICAPPED PERSONS SCALE

# HANDICAPPED PERSONS SCALE

Instructions: Given below are some statements of opinion about physically handicapped persons. We all think differently about persons with physical handicaps. Here you are asked to express how you think by choosing one of the four possible answers following each statement. These answers indicate how much you agree or disagree with the statements. Please mark your answer by placing a heavy black mark after the corresponding number on the answer sheet.

You are also asked to indicate for each statement how strongly you feel about your marking of the statement. Please mark this part of your answer in the same way as before, by placing a heavy black mark after the number you select on the answer sheet.

---

41. Parents of handicapped children should be less strict than other parents.

    1. Strongly disagree
    2. Disagree
    3. Agree
    4. Strongly agree

42. About how strongly do you feel about your answer?

    1. Not strongly at all
    2. Not very strongly
    3. Fairly strongly
    4. Very strongly

43. Physically handicapped persons are just as intelligent as non-handicapped ones.

    1. Strongly disagree
    2. Disagree
    3. Agree
    4. Strongly agree

44. About how strongly do you feel about your answer?

    1. Not strongly at all
    2. Not very strongly
    3. Fairly strongly
    4. Very strongly

45. **Handicapped people are usually easier to get along with than other people.**

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

46. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

47. **Most physically handicapped people feel sorry for themselves.**

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

48. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

49. **Physically handicapped people are the same as anyone else.**

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

50. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

51. There shouldn't be special schools for physically handicapped children.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

52. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

53. It would be best for physically handicapped persons to live and work in special communities.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

54. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

55. It is up to the government to take care of physically handicapped persons.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

56. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

57. Most physically handicapped people worry a great deal.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

58. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

59. Physically handicapped people should not be expected to meet the same standards as non-handicapped people.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

60. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

61. Physically handicapped people are as happy as non-handicapped ones.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

62. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

63. Severely physically handicapped people are no harder to get along with than those with minor handicaps.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

64. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

65. It is almost impossible for a handicapped perons to lead a normal life.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

66. About how strongly do you feel about your answers?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

67. You should not expect too much from physically handicapped people.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

68. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

69. Physically handicapped people tend to keep to themselves much of the time.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

70. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

71. Physically handicapped people are more easily upset than non-handicapped people.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

72. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

73. Physically handicapped persons cannot have a normal social life.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

74. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

75. Most physically handicapped people feel that they are not as good as other people.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

76. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

77. You have to be careful of what you say when you are with physically handicapped people.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

78. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

79. Physically handicapped people are often grouchy.

1. Strongly disagree
2. Disagree
3. Agree
4. Strongly agree

80. About how strongly do you feel about your answer?

1. Not strongly at all
2. Not very strongly
3. Fairly strongly
4. Very strongly

# APPENDIX C

## PERSONAL QUESTIONNAIRE

PERSONAL QUESTIONNAIRE

This questionnaire has two parts to it. The first part deals with your contacts with physically handicapped persons, and what you know about them. Perhaps you have had much contact with physically handcapped persons, or you may have studied about them. On the other hand, you may have had little or no contact with physically handicapped persons, and may have never thought much about them at all.

For the purposes of this investigation, the answers of all persons are important, so even if you know very little or nothing about physically handicapped persons your answers are important.

The second part of the questionnaire has to do with personal information about you. Since the questionnaire is completely anonymous, you may answer all of the questions freely without any concern about being identified. It is important to the study to obtain your answer to every question.

Please read each question carefully and do not omit any questions. Please answer by placing a heavy black mark after the corresponding number on the answer sheet.

81. Some physically handicapping conditions are listed below. In respect to these various handicaps, which have you had the most actual experience with. Choose only one.

    1. blind and partially blind
    2. deaf (and deaf-mute) and partially deaf
    3. crippling, orthopedic, spastic, and disfiguring handicaps
    4. speech disorders
    5. none

82. Which other group have you also had some experience with? Please choose the number of one additional group with which you have had some experience.

    1. blind and partially blind
    2. deaf (and deaf-mute) and partially deaf
    3. crippled, orthopedic, spastic, and disfiguring handicaps
    4. speech disorders
    5. none

83. The following question has to do with the kinds of experience you have had with physically handicapped persons. Please choose the experience with the largest number that applies to you.

I have read or heard about physically handicapped persons or have studied about physically handicapped persons through reading, movies, lectures, or observations . . . . . 1

A friend or relative is physically handicapped. . 2

I have personally worked with physically handicapped persons, as a teacher, counselor, volunteer, child care, etc. . . . . 3

My father, mother, brother, sister, wife (husband) or child is physically handicapped. . . . . 4

I, myself, have a physical handicap . . . . . 5

84. Considering all of the time you have talked, worked, or in some other way had personal contact with physically handicapped persons, about how many times has it been altogether? Please choose the single best answer.

Less than 10 occasions . . . . . 1

Between 10 and 50 occasions . . . . . 2

Between 50 and 100 occasions . . . . . 3

Between 100 and 500 occasions. . . . . 4

More than 500 occasions. . . . . 5

85. When you have been in contact with physically handicapped people, how easy for you, in general, would it have been to have avoided being with these handicapped persons?

I could generally have avoided these personal contacts only at great cost or difficulty . . . 1

I could generally have avoided these personal contacts only with considerable difficulty. . . 2

I could generally have avoided these personal contacts but with some inconvenience. . . . . 3

I could generally have avoided these personal contacts without any difficulty or inconvenience. 4

86. During your contact with physically handicapped persons, did you gain materially in any way through these contacts, such as being paid, or gaining academic credit, or some such gain?

No, I have never received money, credit, or any other material gain . . . . . 1

Yes, I have been paid for working with handicapped persons . . . . . 2

Yes, I have received academic credit or other material gain . . . . . 3

Yes, I have both been paid and received academic credit . . . . . 4

87. If you have never been paid for working with handicapped persons go on to the next question. If you have been paid, about what percent of your income was derived from contact with physically handicapped persons during the actual period when working with them?

Less than 10% . . . . . 1

Between 10 and 25% . . . . . 2

Between 25 and 50% . . . . . 3

Between 50 and 75% . . . . . 4

More than 75% . . . . . 5

88. How have you generally felt about your experiences with handicapped persons?

I definitely have disliked it . . . . . 1

I have not liked it very much . . . . . 2

I have liked it somewhat . . . . . 3

I have definitely enjoyed it . . . . . 4

89. If you have ever worked with the physically handicapped for personal gain (for example, for money or some other gain), what opportunities did you have (or do you have) to work at something else instead; that is, something else that was (or is) acceptable to you as a job?

I do not know what other jobs were available or acceptable . . . . . 1

No other job was available. . . . . 2

Other jobs available were not at all acceptable to me. . . . . 3

Other jobs available were not quite acceptable to me. . . . . 4

Other jobs available were fully acceptable to me 5

90. Please indicate your sex:

Male . . . . . 1

Female . . . . . 2

91. How old are you?

20-30 . . . . . 1

31-40 . . . . . 2

41-50 . . . . . 3

51-60 . . . . . 4

61 and above . . . . . 5

92. What is your marital status?

Married . . . . . 1

Single . . . . . 2

Divorced. . . . . 3

Widowed . . . . . 4

Separated . . . . . 5

93. How many children do you have?

None . . . . . 1

One . . . . . 2

Two . . . . . 3

Three . . . . . 4

Four or more . . . . . 5

94. What is your religion?

Catholic . . . . . 1

Protestant. . . . . 2

Jewish . . . . . 3

None. . . . . 4

Other . . . . . 5

95. About how important is your religion to you in your daily life?

I have no religion . . . . . 1

Not very important . . . . . 2

Fairly important . . . . . 3

Very important . . . . . 4

96. How important is it to you to work with people you feel personally close to?

Not at all important . . . . . 1

Not very important . . . . . 2

Fairly important. . . . . 3

Very important . . . . . 4

97. Creditable evidence shows that the number of handicapped persons able to benefit from college or university training is increasing. Some people feel that special services such as ramps for wheelchairs, special transportation services and other related facilities should be provided for handicapped students. What is your feeling about providing such specialized services for handicapped persons?

Strongly disagree . . . . . 1

Slightly disagree . . . . . 2

Slightly agree . . . . . 3

Strongly agree . . . . . 4

98. In respect to your religion, about to what extent do you observe the rules and regulations of your religion?

I have no religion. . . . . 1

Seldom . . . . . 2

Sometimes. . . . . 3

Usually . . . . . 4

Almost always . . . . . 5

99. Health experts say adding certain chemicals to drinking water results in less decay in people's teeth. If you could add these chemicals to your water with little cost to you, would you be willing to have the chemicals added?

Probably not . . . . . 1

No . . . . . 2

Maybe . . . . . 3

Yes . . . . . 4

100. Some people feel that in bringing up children, new ways and methods should be tried whenever possible. Others feel that trying out new methods is dangerous. What is your feeling about the following statement?

"New methods of raising children should be tried out whenever possible."

Strongly disagree . . . . . 1

Slightly disagree . . . . . 2

Slightly agree . . . . . 3

Strongly agree . . . . . 4

101. Family planning on birth control has been discussed by many people. What is your feeling about a married couple practicing birth control? Do you think they are doing something good or bad? If you had to decide, would you say they are doing wrong, or rather, that they are doing right?

It is always right. . . . . 1

It is probably all right. . . . . 2

It is usually wrong . . . . . 3

It is always wrong. . . . . 4

102. People have different ideas about what should be done concerning automation and other new ways of doing things. How do <u>you feel</u> about the following statement?

"Automation and similar new procedures should be encouraged (in government, business, and industry) since eventually it creates new jobs and raises the standard of living."

Disagree strongly . . . . . 1

Disagree slightly . . . . . 2

Agree slightly . . . . . 3

Agree strongly . . . . . 4

103. Running a village, city, town, or any governmental organization is an important job. What is your feeling on the following statement?

"Political leaders should be changed <u>regularly</u>, even if they are doing a good job."

Strongly disagree . . . . . 1

Slightly disagree . . . . . 2

Slightly agree . . . . . 3

Strongly agree . . . . . 4

104. Some people believe that more <u>local</u> government income should be used for education even if doing so means raising the amount you pay in taxes. What are your feelings on this?

Strongly disagree . . . . . 1

Slightly disagree . . . . . 2

Slightly agree . . . . . 3

Strongly agree . . . . . 4

105. Some people believe that more <u>federal</u> government income should be used for education even if doing so means raising the amount you pay in taxes. What are your feelings on this?

Strongly disagree . . . . . 1

Slightly disagree . . . . . 2

Slightly agree . . . . . 3

Strongly agree . . . . . 4

106. People have different ideas about planning for education in their nation. Which one of the following do you believe is the best way? Answer only one.

Planning for education should be left entirely to the parents . . . . . 1

Educational planning should be primarily directed by the individual city or other local governmental unit . . . . . 2

Educational planning should be primarily directed by the national government . . . . 3

107. What is your professional relationship to the counseling center: Choose one that best describes you.

Counselor with M. A. . . . . 1

Pre-doctoral intern . . . . . 2

Post-doctoral intern . . . . . 3

Counselor with Ph.D. . . . . 4

108. How are your responsibilities divided?

Counselor-professor . . . . . 1

Counselor-administrator . . . . . 2

Counselor-other . . . . . 3

Counselor only . . . . . 4

109. What percentage of your time is given to counseling students?

Up to 25% . . . . . 1

Up to 50% . . . . . 2

Up to 75% . . . . . 3

Up to 100%. . . . . 4

110. What percentage of the time assigned to you in the center is spent in counseling physically handicapped persons?

Little or none . . . . . 1

10% - 25%. . . . . 2

25% - 50%. . . . . 3

50% - 75%. . . . . 4

75% - 100% . . . . . 5

111. Are you a staff member in a rehabilitation counselor training program?

Yes. . . . . 1

No . . . . . 2

# APPENDIX D

# GENERAL INFORMATION INVENTORY

GENERAL INFORMATION INVENTORY*

This is an attempt to determine the amount of information you possess about handicapped persons.

Choose the single best answer for each question and mark your answer by placing a heavy black mark after the corresponding number on the answer sheet.

*Modified from N. Haring, G. Stern and W. Cruickshank, Attitudes of Educators Toward Exceptional Children (Syracuse: Syracuse University Press, 1958), with the express permission of George G. Stern.

112. The congenital deaf person will probably display:

1. articulation errors
2. voice abnormalities
3. retarded language
4. all of the above

113. The deaf, deafened, and hard-of-hearing are different categories based mainly on:

1. degree of hearing loss
2. speech development
3. lip reading ability
4. amount of hearing loss and age of onset

114. Hard-of-hearing persons usually have a decibel loss of:

1. 0-15
2. 20-60
3. 70-90
4. 90-100

115. The criticism of the manual method of teaching the deaf is that:

1. it is too difficult to learn
2. it is difficult for these pupils to communicate with hearing people
3. few teachers know the method
4. it is too symbolic

116. **Educating** and rehabilitating the hard-of-hearing is **primarily:**

1. developing language
2. fitting hearing aids
3. giving audiometric tests
4. teaching lip reading and speech correction and auditory training.

117. The Oral method of teaching the deaf refers to:

1. teaching by means of speech and lip reading
2. only by auditory training
3. developing speech and language
4. teaching of arithmetic and reading

118. The criterion used for placement of a child in a class for the deaf is:

1. speech development, intelligence and hearing loss
2. disease causing the loss and intelligence
3. speech development alone
4. hearing loss alone

119. Speech correctionists in the public schools do all of the following but one:

1. give speech corrections to individual children
2. give lip reading to hard-of-hearing children
3. instruct teachers in methods of speech correction that they can use in their regular classes
4. teach classes for the deaf

120. Disorders of articulation refer to all of the following but one:

1. omission of sounds
2. pitch
3. distortion of sounds
4. substitutions of sounds

121. Stuttering is often the result of:

1. cleft palate
2. emotional problems
3. malformations of the teeth
4. brain lesions

122. With respect to chronological age, the following sounds last to be produced correctly by the child are:

1. r and l
2. p and b
3. m, n, and g
4. f and v

123. The most common speech problem among elementary school children is:

1. functional articulatory problems
2. cleft palate speech
3. stuttering
4. voice problems

124. According to contemporary research which of the following is the principal etiological factor in stuttering:

1. endocrine disturbances
2. inadequate cerebral dominance
3. acquired anxiety relating to speech fluency
4. hereditary predisposition

125. The symptom most diagnostic of stuttering is:

1. repetition of parts of words
2. prolonging vowel sounds
3. attempts to avoid non-fluencies in speech
4. hesitations between words and phrases

126. Teachers help the stuttering person most effectively by:

1. supplying him with words which he cannot say
2. urging him to relax and speak more slowly
3. give him as much practice as possible by calling upon him to read more often
4. waiting for the person to finish speaking regardless of the difficulty he is experiencing.
5. have the person stop and think of what he is going to say

127. Functional nasality is usually associated with:

1. inadequate naso-pharyngeal closure
2. blockage of the nasal pharynx by excessive adenoid tissue
3. misuse of the vocal cords
4. speaking on inspiration

128. The most important etiological factor of cerebral palsy is:

1. Rh factor
2. birth injury
3. rubella during the first trimester
4. hereditary

129. Which one of the following is not a clinical type of cerebral palsy:

1. spasticity
2. athetosis
3. poliomyelitis
4. rigidity

130. The intellectual ability of cerebral-palsied persons as a group is:

1. normal
2. below normal
3. above normal
4. impossible to evaluate

131. The principal reason that severe spastics with normal intelligence are sometimes found in institutions for the feebleminded is:

1. the parents do not want them around
2. they cannot be helped anyway
3. it is impossible to obtain an adequate mental test on them
4. the institution has the best training facilities for them

132. The most common clinical type of cerebral palsy is:

1. ataxia
2. athetosis
3. rigidity
4. spasticity

133. Anoxia is a condition in which the brain:

1. receives insufficient oxygen
2. is underdeveloped
3. is too large
4. has suffered from hemorrhage

134. Which one of the following men is <u>not</u> noted for research with regard to brain injury:

1. Martin Palmer
2. W. M. Cruickshank
3. Lewis Terman
4. A. A. Strauss

135. Studies have shown that the emotional adjustment of the cerebral palsied as a group is:

1. normal
2. inadequate
3. above normal
4. more adequate in spastics than athetoids

136. The emotional adjustment in the home of the cerebral palsied would be expected to be:

1. about the same as the average home
2. more stable than the average home
3. probably less stable than the average home
4. extremely unstable

137. The reaction of society as a whole toward the cerebral palsied is:

1. somewhat rejecting
2. as accepting as toward the normal
3. completely accepting
4. completely rejecting

138. Poliomyelitis is caused by:

1. heredity
2. Rh negative
3. a virus
4. lack of rest

139. Epilepsy is caused by:

1. brain injury
2. seizures
3. Rh factor
4. malnutrition

140. Epilepsy occurs in approximately:

1. one person in every 200
2. one person in every 20
3. one person in every 400
4. one person in every 10

141. If one of your students has an epileptic seizure you should:

1. run out of the room for help
2. keep him from getting into a dangerous position
3. stick your fingers in his mouth to keep him from biting his tongue
4. rush all of the students out of the room

142. After a student has had an epileptic seizure in your room you should:

1. reassure the student and calm his classmates
2. see that a doctor is called
3. point out to his classmates that he may be dangerous
4. send the student home for a week

143. Tuberculosis is more prevalent:

1. in cities
2. in rural areas
3. areas near water
4. areas of high altitude

144. The major debilitating factor in rheumatic fever:

1. is the weakening of the lungs
2. involvement of the heart
3. weakening of the limbs
4. weakening of the eyes

145. In young people there are many instances, particularly in adolescence, of obesity which are most frequently caused by:

1. pituitary disorders
2. excessive intake of food
3. lack of activity
4. rapid development

146. The gland that has to do with the general metabolic activity is the:

1. thyroid gland
2. pituitary gland
3. lymph gland
4. pancreatic gland

147. Social and emotional maladjustment in physically handicapped persons:

1. is present in all cases
2. can be related to their mental ability
3. is dependent upon the number and severity of the problems
4. is less of a problem than in normal children

148. Studies by means of interviews, observations, and reports of informants indicate that physically disabled persons are:

1. better adjusted than normal persons
2. as well adjusted as normal persons
3. all maladjusted
4. more frequently maladjusted than physically normal persons

149. The attitudes of parents toward their disabled children tend to be:

1. oversolicitous, rejecting
2. accepting, understanding
3. the same as toward their normal children
4. more positive than toward their normal children

150. The attitude of teachers toward handicapped students is:

1. verbalized acceptance but somewhat rejecting
2. completely accepting
3. the same as toward normal students
4. more understanding

151. The attitudes of disabled persons toward themselves tend to be:

1. not significantly different from normal persons
2. negative
3. accepting
4. more positive than normal persons

152. The plan in which the blind child is enrolled with a teacher of blind children in a special room from which he goes to the regular classroom for a portion of his school day is the:

1. cooperative plan
2. itinerant teacher plan
3. Dalton plan
4. flexible plan

153. The plan in which the blind child is enrolled in the regular class in his home school where his needs are met through the cooperative efforts of the regular teacher and those of the teacher who is made available at certain times to offer this special service is the:

1. cooperative plan
2. itinerant teacher plan
3. Dalton plan
4. integrated plan

154. The plan in which the blind child is enrolled in the regular classroom, and has available to him and to his regular teachers a full-time qualified teacher of blind children and also a resource room, is the:

1. itinerant teacher plan
2. cooperative plan
3. integrated plan
4. the sharing plan

155. An educationally blind person is one who has a visual acuity after correction of:

1. 20/70 to 20/150
2. 20/150 to 20/200
3. 20/20 to 20/70
4. 20/200 or less

156. A partially-seeing person is one who has a visual acuity after correction of:

1. 20/20 to 20/60
2. 20/70 to 20/200
3. 20/200 to 20/300
4. 20/300 or less

157. The blind:

1. have superior sensory acuity
2. pay attention to auditory cues more than do seeing people
3. develop a sixth sense
4. have markedly superior musical ability

158. The school in which the program for the education of the blind is housed should be one in which the enrollment:

1. is made up of blind or partially sighted children
2. is made up of sighted children
3. is made up of crippled children
4. is made up of mentally retarded children

159. The realistic goal of the educational program of the blind person should be:

1. to de-emphasize the handicap to the extent that attention is focused on the person
2. to help the person forget about his blindness
3. train the person's sixth sense
4. integrate the person with physically handicapped persons

160. The most helpful attitude toward the blind person's achievement is:

1. sympathetic
2. non-sentimental
3. emotional
4. narcissistic

In every community each group (for example, schools, businessmen, labor, the local government) has a different job to do for the community. In your community, would you say that the schools are doing an excellent, good, fair, or poor job? How about businessmen? Labor? The local government? The doctors and hospitals? The church? (Please choose the appropriate number to indicate how you feel each job is being done.) Please choose one for each group.

161. Elementary Schools

| | |
|---|---|
| Do not know . . . . . | 1 |
| Poor . . . . . | 2 |
| Fair . . . . . | 3 |
| Good . . . . . | 4 |
| Excellent. . . . . | 5 |

The instructions on the previous page apply to sections 162-168.

162. Secondary Schools

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

163. Universities

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

164. Businessmen

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

165. Labor

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

166. Local Government

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

167. National Government

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

168. Health Services (Doctors and Hospitals)

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

169. Churches

| | |
|---|---|
| Do not know | 1 |
| Poor | 2 |
| Fair | 3 |
| Good | 4 |
| Excellent | 5 |

# APPENDIX E

## LETTERS AND INSTRUCTIONS

# INTRODUCTION TO THE STUDY

For a research project now being considered at Michigan State University, we need to know the attitudes of college counselors (located in colleges with student populations of 15,000 or more) toward persons with physical handicaps. You are one of the 130 persons chosen at random; usefulness of the results will depend heavily on your willingness to participate.

This research is part of a larger international study of attitudes toward handicapped persons. The purpose of the research is to study the nature and the determinants of these attitudes.

At no time will your name be associated with your answers. You will always remain completely anonymous.

If you are interested, a summary of the findings will be made available upon request.

Thank you for your help.

Dr. John E. Jordan
Research Director

# INSTRUCTIONS

Enclosed are four instruments which have been numbered and arranged in such a way that all the answers can be recorded on the enclosed answer sheet.

Every question has a purpose in the effort to study determinants of attitudes toward physically handicapped persons. Therefore, your answer to every question is important.

Please mark your choice for each question clearly on the answer sheet with a number two pencil. Do not use a ball point or fountain pen.

Answer each question quickly with your first reaction.

After you have completed the items please discard the questionnaires and place the answer sheet in the addressed, stamped envelope. Then seal it and mail it immediately. Do not sign your name to the answer sheet as we want you to remain anonymous.

The director of this research is Dr. John E. Jordan, College of Education, Department of Counseling and Personnel Services, Michigan State University. The person handling this part of the data is Keith E. Palmerton, a doctoral student at Michigan State University. Therefore, all correspondence should be addressed to:

Keith E. Palmerton
c/o Dr. John E. Jordan
College of Education
Michigan State University
East Lansing, Michigan 48823

Thank you again for your help.

FOLLOW-UP LETTER

April, 1967

(Address)

Dear :

On March 22, 1967, I mailed you a questionnaire concerned with attitudes of college counselors toward physically disabled persons. I need your help if this piece of research is to be at all meaningful. This study is an honest attempt to do some pioneer work in a crucial area. The findings would be most helpful both in aiding the disabled college student and in developing attitude scales.

Please fill out and mail the answer sheet as soon as possible. I must have your response on or before April 26. If I have not received your response before that time I will phone you to see if I can be of any assistance to you or answer any questions you may have. If you have misplaced any part of the mailing (the answer sheet, the questionnaire, or the return envelope) I will be happy to replace it.

Sincerely,

Keith E. Palmerton
c/o Dr. John E. Jordan
Erickson Hall, M. S. U.
East Lansing, Michigan

# APPENDIX F

## CODE BOOK

# CODE BOOK

## Attitudes of College Counselors Toward Physically Disabled Persons

Keith E. Palmerton

Directed by
John E. Jordan
College of Education
Michigan State University
May 5, 1967

CARD 1 1

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 1,2,3,4 | None-Constant | Study Number | 0020 - College Counselors in U. S. |
| 5,6,7 | Student Number | Respondent's Number | 001 - 160 |
| 8,9 | None-Constant | Group Number | 01 - Sample of 130 Counselors |
| 10 | None | Deck Number | 1 |
| 11 | Q'aire-90 | Sex | 1 - Male<br>2 - Female |
| 12 | Q'aire-91 | Age | 1 - (20-30)<br>2 - (31-40)<br>3 - (41-50)<br>4 - (51-60)<br>5 - (61 and above) |
| 13 | Q'aire-92 | Marital Status | 1 - Married<br>2 - Single<br>3 - Divorced<br>4 - Widowed<br>5 - Separated |
| 14 | Q'aire-93 | Number of Children | 1 - None<br>2 - 1<br>3 - 2<br>4 - 3<br>5 - 4 or more |
| 15 | Constant | Machine | 1 |
| 16 | Q'aire-107 | Role & Degree | 1 - Counselor w/M.A.<br>2 - Pre-doctoral Intern<br>3 - Post-doctoral Intern<br>4 - Counselor w/Ph.D. |
| 17 | Q'aire-108 | Responsibilities | 1 - Counselor-Professor<br>2 - Counselor-Administrator<br>3 - Counselor-Other<br>4 - Counselor, only |

CARD 1 (continued) 2

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 18 | Q'aire-109 | Time-Counseling | 1 - Up to 25%<br>2 - Up to 50%<br>3 - Up to 75%<br>4 - Up to 100% |
| 19 | Q'aire-110 | Time-Counseling handicapped | 1 - Little or none<br>2 - 10% - 25%<br>3 - 25% - 50%<br>4 - 50% - 75%<br>5 - 75% - 100% |
| 20 | Q'aire-111 | Rehabilitation Staff | 1 - Yes<br>2 - No |
| 21,22 | Blank | | |
| 23,24 | Blank | | |
| 25 | Card No. | | 1 - 2 or blank |
| 26 | Ed. Scale-1 | Content (Prog.-Scale 1*)<br>Note: Content items or even number columns 26-64 will be coded exactly as item 26 | 1 - Strongly disagree<br>2 - Disagree<br>3 - Agree<br>4 - Strongly agree |
| 27 | Ed. Scale-2 | Intensity (Prog.-Scale 2*)<br>Note: Intensity items on odd numbers 27-65 will be coded exactly as item 27 | 1 - Not strongly at all<br>2 - Not very strongly<br>3 - Fairly strongly<br>4 - Very strongly |
| 28 | Ed. Scale-3 | Content | (P-1) |
| 29 | Ed. Scale-4 | Intensity | (P-2) |

*The Education Scale is broken down into four different scales of ten items each: (1) Content Progressive; (2) Intensity Progressive; (3) Content Traditional; (4) Intensity Traditional.

CARD 1 (continued) 3

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 30 | Ed. Scale-5 | Content | (T-3*) |
| 31 | Ed. Scale-6 | Intensity | (T-4*) |
| 32 | Ed. Scale-7 | Content | (T-3) |
| 33 | Ed. Scale-8 | Intensity | (T-4) |
| 34 | Ed. Scale-9 | Content | (P-1) |
| 35 | Ed. Scale-10 | Intensity | (P-2) |
| 36 | Ed. Scale-11 | Content | (T-3) |
| 37 | Ed. Scale-12 | Intensity | (T-4) |
| 38 | Ed. Scale-13 | Content | (P-1) |
| 39 | Ed. Scale-14 | Intensity | (P-2) |
| 40 | Ed. Scale-15 | Content | (P-1) |
| 41 | Ed. Scale-16 | Intensity | (P-2) |
| 42 | Ed. Scale-17 | Content | (P-1) |
| 43 | Ed. Scale-18 | Intensity | (P-2) |
| 44 | Ed. Scale-19 | Content | (T-3) |
| 45 | Ed. Scale-20 | Intensity | (T-4) |
| 46 | Ed. Scale-21 | Content | (T-3) |
| 47 | Ed. Scale-22 | Intensity | (T-4) |
| 48 | Ed. Scale-23 | Content | (T-3) |
| 49 | Ed. Scale-24 | Intensity | (T-4) |
| 50 | Ed. Scale-25 | Content | (T-3) |
| 51 | Ed. Scale-26 | Intensity | (T-4) |
| 52 | Ed. Scale-27 | Content | (T-3) |
| 53 | Ed. Scale-28 | Intensity | (T-4) |

CARD 1 (continued) 4

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 54 | Ed. Scale-29 | Content | (P-1) |
| 55 | Ed. Scale-30 | Intensity | (P-2) |
| 56 | Ed. Scale-31 | Content | (P-1) |
| 57 | Ed. Scale-32 | Intensity | (P-2) |
| 58 | Ed. Scale-33 | Content | (P-1) |
| 59 | Ed. Scale-34 | Intensity | (P-2) |
| 60 | Ed. Scale-35 | Content | (T-3) |
| 61 | Ed. Scale-36 | Intensity | (T-4) |
| 62 | Ed. Scale-37 | Content | (T-3) |
| 63 | Ed. Scale-38 | Intensity | (T-4) |
| 64 | Ed. Scale-39 | Content | (P-1) |
| 65 | Ed. Scale-40 | Intensity | (P-2) |
| 66 | HP Scale-41 | Content (Scale 5*)<br>Note: Content items in even number columns 66-80 on card 1 and in odd number columns 27-49 on card 2 will be coded exactly as item 66. | 1 - Strongly disagree<br>2 - Disagree<br>3 - Agree<br>4 - Strongly agree |
| 67 | HP Scale-42 | Intensity (Scale 6*)<br>Note: Intensity items in odd number columns 67-79 on card 1 and in even number columns 26-50 on card 2 will be coded exactly as item 67. | 1 - Not strongly at all<br>2 - Not very strongly<br>3 - Fairly strongly<br>4 - Very strongly |

*The HP Scale is divided into two scales of 20 items each: (5) H.P. Content; (6) H. P. Intensity.

CARD 1 (continued) 5

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 68 | HP Scale-43 | Content | (5) |
| 69 | HP Scale-44 | Intensity | (6) |
| 70 | HP Scale-45 | Content | (5) |
| 71 | HP Scale-46 | Intensity | (6) |
| 72 | HP Scale-47 | Content | (5) |
| 73 | HP Scale-48 | Intensity | (6) |
| 74 | HP Scale-49 | Content | (5) |
| 75 | HP Scale-50 | Intensity | (6) |
| 76 | HP Scale-51 | Content | (5) |
| 77 | HP Scale-52 | Intensity | (6) |
| 78 | HP Scale-53 | Content | (5) |
| 79 | HP Scale-54 | Intensity | (6) |
| 80 | HP Scale-55 | Content | (5) |

CARD 2 6

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 1,2,3,4 | None-constant | Study Number | 0020 - College Counselors in U. S. |
| 5,6,7 | Student No. | Respondent's No. | 001 - 160 |
| 8,9 | None-constant | Group Number | 01 - 09 Sample of 130 Counselors |
| 10 | None | Deck Number | 2 |
| 11 | Q'aire-90 | Sex | (all columns 11-24 coded as on card 1) |
| 12 | Q'aire-91 | Age | |
| 13 | Q'aire-92 | Marital Status | |
| 14 | Q'aire-93 | Number of Children | |
| 15 | Constant | Machine | |
| 16 | Q'aire-107 | Role & Degree | |
| 17 | Q'aire-108 | Responsibilities | |
| 18 | Q'aire-109 | Time-Counseling | |
| 19 | Q'aire-110 | Time-Counseling Handicapped | |
| 20 | Q'aire-111 | Rehabilitation Staff | |
| 21,22,23,24 | | | |
| 25 | | | |
| 26 | HP Scale-56 | Intensity | (6) |
| 27 | HP Scale-57 | Content | (5) |
| 28 | HP Scale-58 | Intensity | (6) |
| 29 | HP Scale-59 | Content | (5) |
| 30 | HP Scale-60 | Intensity | (6) |

CARD 2 (continued) 7

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 31 | HP Scale-61 | Content | (5) |
| 32 | HP Scale-62 | Intensity | (6) |
| 33 | HP Scale-63 | Content | (5) |
| 34 | HP Scale-64 | Intensity | (6) |
| 35 | HP Scale-65 | Content | (5) |
| 36 | HP Scale-66 | Intensity | (6) |
| 37 | HP Scale-67 | Content | (5) |
| 38 | HP Scale-68 | Intensity | (6) |
| 39 | HP Scale-69 | Content | (5) |
| 40 | HP Scale-70 | Intensity | (6) |
| 41 | HP Scale-71 | Content | (5) |
| 42 | HP Scale-72 | Intensity | (6) |
| 43 | HP Scale-73 | Content | (5) |
| 44 | HP Scale-74 | Intensity | (6) |
| 45 | HP Scale-75 | Content | (5) |
| 46 | HP Scale-76 | Intensity | (6) |
| 47 | HP Scale-77 | Content | (5) |
| 48 | HP Scale-78 | Intensity | (6) |
| 49 | HP Scale-79 | Content | (5) |
| 50 | HP Scale-80 | Intensity | (6) |

CARD 3 8

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 1,2,3,4 | None-constant | Study Number | 0020 |
| 5,6,7 | Student Number | Respondent No. | 001-160 |
| 8,9 | None-constant | Group Number | 01 - Sample of 130 Counselors |
| 11 : : 25 | See card 1 | | |
| 26 : 32 | Q'aire-81 | Contact Group (Primary Contact w/HP) | 1 - Blind & partially blind<br>2 - Deaf & partially deaf<br>3 - Crippled, orthopedic, spastic, disfiguring<br>4 - Speech<br>5 - None |
| 27 | Q'aire-82 | Contact Group (secondary contact w/HP) | 1 - Blind & partially blind<br>2 - Deaf & partially deaf<br>3 - Crippled, orthopedic, spastic, disfiguring<br>4 - Speech<br>5 - None |
| 28 : 30 | Q'aire-83 | Contact (Varieties of HP) | 1 - Read or studied<br>2 - Friend or relative<br>3 - Worked with<br>4 - Immediate family<br>5 - Self |
| 29 : 31 | Q'aire-84 | Contact (Amount) | 1 - 0-9<br>2 - 10-49<br>3 - 50-99<br>4 - 100-499<br>5 - 500-above |

CARD 3 (continued) 9

| Column | Source | Item Detail | Code |
|---|---|---|---|
| 30 | Q'aire-85 | Contact (ease of avoidance) | 1 - Great difficulty<br>2 - Considerable difficulty<br>3 - Some inconvenience<br>4 - No inconvenience |
| 31 | Q'aire-86 | Contact (Gain from ) | 1 - No rewards<br>2 - Paid<br>3 - Credit<br>4 - Paid & credit |
| 32 | Q'aire-87 | Contact (% income) | 1 - Less than 10%<br>2 - 10-25%<br>3 - 25-50%<br>4 - 50-75%<br>5 - 75-100% |
| 33 | Q'aire-88 | Contact (enjoyment) | 1 - Dislike, great<br>2 - Dislike, little<br>3 - Like, some<br>4 - Definitely enjoyed |
| 34 | Q'aire-89 | Contact (Alternative) | 1 - No information on alternatives<br>2 - None available<br>3 - Available but not acceptable<br>4 - Available but not fully acceptable<br>5 - Available and fully acceptable |
| 35 | Q'aire-90 | Sex | 1 - Male<br>2 - Female |
| 36 | Q'aire-91 | Age | 1 - 20-30<br>2 - 31-40<br>3 - 41-50<br>4 - 51-60<br>5 - 61-above |
| 37 | Q'aire-92 | Marital Status | 1 - Married<br>2 - Single<br>3 - Divorced<br>4 - Widowed<br>5 - Separated |

CARD 3 (continued) 10

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 38 | Q'aire-93 | Number of Children | 1 - none<br>2 - one<br>3 - two<br>4 - three<br>5 - four or more |
| 39 | Q'aire-94 | Religion | 1 - Catholic<br>2 - Protestant<br>3 - Jewish<br>4 - None<br>5 - Other |
| 40 | Q'aire-95 | Religion (importance) | 1 - None<br>2 - Not very<br>3 - Fairly<br>4 - Very |
| 41 | Q'aire-96 | Feel personally close to peers (importance) | 1 - Not at all<br>2 - Not very<br>3 - Fairly<br>4 - Very |
| 42 | Q'aire-97 | HP at university (specialized services for) | 1 - Strongly disagree<br>2 - Slightly disagree<br>3 - Slightly agree<br>4 - Strongly agree |
| 43 | Q'aire-98 | Religion (observe rules) | 1 - No religion<br>2 - Seldom<br>3 - Sometimes<br>4 - Usually<br>5 - Almost always |
| 44 | Q'aire-99 | Health Practice Change | 1 - Probably no<br>2 - No<br>3 - Maybe<br>4 - Yes |
| 45 | Q'aire-100 | Child Rearing Practices Change | 1 - Strongly disagree<br>2 - Slightly disagree<br>3 - Slightly agree<br>4 - Strongly agree |

CARD 3 (continued) 11

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 46 | Q'aire-101 | Birth Control Practices | 4 - Always right<br>3 - Probably all right<br>2 - Usually wrong<br>1 - Always wrong |
| 47 | Q'aire-102 | Automation Change | 1 - Disagree strongly<br>2 - Disagree slightly<br>3 - Agree slightly<br>4 - Agree strongly |
| 48 | Q'aire-103 | Change Political Leaders | 1 - Strongly disagree<br>2 - Slightly disagree<br>3 - Slightly agree<br>4 - Strongly agree |
| 49 | Q'aire-104 | Local Aid to Education | Same |
| 50 | Q'aire-105 | Federal Aid to Education | Same |
| 51 | Q'aire-106 | Education Planning | 1 - Parents<br>2 - Local gov't.<br>3 - National gov't. |
| 52 | Q'aire-107 | Professional Relationship | 1 - Counselor w/M.A.<br>2 - Pre-doctoral Intern<br>3 - Post-doctoral Intern<br>4 - Counselor 2/Ph.D. |
| 53 | Q'aire-108 | Responsibilities | 1 - Counselor-Professor<br>2 - Counselor-Administrator<br>3 - Counselor-Other<br>4 - Counselor-only |
| 54 | Q'aire-109 | Time to Counseling | 1 - Up to 25%<br>2 - Up to 50%<br>3 - Up to 75%<br>4 - Up to 100% |
| 55 | Q'aire-110 | Time Counseling Handicapped | 1 - Little or none<br>2 - 10-25%<br>3 - 25-50%<br>4 - 50-75%<br>5 - 75-100% |

CARD 3 (continued) 12

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 56 | Q'aire-111 | Rehabilitation Staff | 1 - Yes<br>2 - No |
| 57<br>:<br>77 | Q'aire-112<br>:<br>132 | General Information Inventory | |
| 78,79,80 | None | GII Score | 0-49 number of correct responses on GII |

CARD 4 13

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 1,2,3,4 | None-constant | Study Number | 0020 |
| 5,6,7 | Student Number | Respondent No. | 0-160 |
| 8,9 | None-constant | Group Number | 01 |
| 10 | None | Deck Number | 4 |
| 11<br>:<br>25 | See card 1 | | |
| 26<br>:<br>53 | Q'aire-133<br>:<br>Q'aire-160 | | |
| 54 | Q'aire-161 | Institutional Satisfaction (Elem. Schools) | 1 - Do not know<br>2 - Poor<br>3 - Fair<br>4 - Good<br>5 - Excellent |
| 55 | Q'aire-162 | (Secondary Schs.) | Same |
| 56 | Q'aire-163 | (Universities) | Same |
| 57 | Q'aire-164 | (Businessmen) | Same |
| 58 | Q'aire-165 | (Labor) | Same |
| 59 | Q'aire-166 | (Local Gov't) | Same |
| 60 | Q'aire-167 | (National Gov't) | Same |
| 61 | Q'aire-168 | (Health Services) | Same |
| 62 | Q'aire-169 | (Churches) | Same |
| 63<br>:<br>77 | Blank<br>:<br>Blank | | |
| 78,79,80 | None | GII Score | |

CARD 5 14

| Column-Source | | Item Detail | Code |
|---|---|---|---|
| 1,2,3,4 | None-constant | Study Number | 0020 |
| 5,6,7 | Student Number | Respondent No. | 0-160 |
| 8,9 | None-constant | Group Number | 01 |
| 10 | None | Deck Number | 5 |
| 11<br>:<br>:<br>25 | See card 1 | | |
| 26,27,28 | None | Scale 1 Score (Ed. Prog. Cont.) | 10-40 |
| 29 | Blank | | |
| 30,31,32 | None | Scale 2 Score (Ed. Prog. Int.) | 10-40 |
| 33 | Blank | | |
| 34,35,36 | None | Scale 3 Score (Ed. Trad. Cont.) | 10-40 |
| 37 | Blank | | |
| 38,39,40 | None | Scale 4 Score (Ed. Trad. Int.) | 10-40 |
| 41 | Blank | | |
| 42,43,44 | None | Scale 5 Score (HP Cont.) | 20-80 |
| 45 | Blank | | |
| 46,47,48 | None | Scale 6 Score | 20-80 |
| 49<br>:<br>:<br>80 | Blank<br>:<br>:<br>Blank | | |

# FCC I and II

Variable-computer print-out code form

John E. Jordan
College of Education
Michigan State University

Keith E. Palmerton

FCC I Counselors 1 of 3

| Field No. | Questionnaire No. | Variable Name | Column |
|---|---|---|---|
| | | CARD 1 | |
| 1 | 90 | Sex | 11 |
| 2 | 91 | Age | 12 |
| 3 | 92 | Marital | 13 |
| 4 | 93 | Children | 14 |
| 5 | 107 | Degree | 16 |
| 6 | 108 | Responsibilities | 17 |
| 7 | 109 | Time-Counseling | 18 |
| 8 | 110 | Time-Counseling HP | 19 |
| 9 | 111 | Rehab. Staff? | 20 |
| 10-49 | 1-40 | Ed. Scale: Prog. Content, Intensity Trad. Content, Intensity | 26-65 |
| 50-64 | 41-55 | HP Scale: HP Content-- Intensity | 66-80 |
| | | CARD 2 | |
| First 25 Columns SAME as CARD 1 except for Col. 10 (i.e., Deck or Card No.) | | | |
| 65-89 | 56-80 | HP Scale: HP Content-- Intensity | 26-50 |
| ----- | None | Blank | 51-80 |
| | | CARD 3 | |
| First 25 Columns SAME as CARD 1 except for Col. 10 (i.e., Deck or Card No.) | | | |
| 90 | 81 | Contact Group (Primary) | 26 |
| 91 | 82 | Contact Group (Secondary) | 27 |
| 92 | 83 | Contact (Variety) | 28 |
| 93 | 84 | Contact (Amount) | 29 |
| 94 | 85 | Contact (Ease of Avoidance) | 30 |
| 95 | 86 | Contact (Gain) | 31 |
| 96 | 87 | Contact (% Income) | 32 |
| 97 | 88 | Contact (Enjoy) | 33 |
| 98 | 89 | Contact (Alternative) | 34 |

FCC I Counselors 2 of 3

| Field No. | Questionnaire No. | Variable Name | Column |
|---|---|---|---|
| 99 | 90 | Sex | 35 |
| 100 | 91 | Age | 36 |
| 101 | 92 | Marital | 37 |
| 102 | 93 | Children | 38 |
| 103 | 94 | Religion | 39 |
| 104 | 95 | Religion (Importance) | 40 |
| 105 | 96 | Close to Peers (Importance) | 41 |
| 106 | 97 | HP at University | 42 |
| 107 | 98 | Religion (Observe) | 43 |
| 108 | 99 | Health-Change | 44 |
| 109 | 100 | Child Rearing-Change | 45 |
| 110 | 101 | Birth Control-Change | 46 |
| 111 | 102 | Automation-Change | 47 |
| 112 | 103 | Political Leaders-Change | 48 |
| 113 | 104 | Local aid to Ed. | 49 |
| 114 | 105 | Federal aid to Ed. | 50 |
| 115 | 106 | Ed. Planning | 51 |
| 116 | 107 | Degree | 52 |
| 117 | 108 | Responsibilities | 53 |
| 118 | 109 | Time-Counseling | 54 |
| 119 | 110 | Time-Counseling HP | 55 |
| 120 | 111 | Rehab. Staff? | 56 |
| 121 | 112-132 | GII | 57-77 |

CARD 4

First 25 Columns SAME as CARD 1 except for Col. 10 (i.e., Deck or Card No.)

| | | | |
|---|---|---|---|
| 142-169 | 133-160 | GII | 26-53 |
| 170 | 161 | Institutional Satisfaction (Elem. Schools) | 54 |
| 171 | 162 | (Secondary Schools) | 55 |
| 172 | 163 | (Universities) | 56 |
| 173 | 164 | (Businessmen) | 57 |
| 174 | 165 | (Labor) | 58 |
| 175 | 166 | (Local Gov't) | 59 |
| 176 | 167 | (National Gov't) | 60 |
| 177 | 168 | (Health Services) | 61 |
| 178 | 169 | (Churches) | 62 |

FCC II Counselors 3 of 3

| Field No. | Questionnaire No. | Variable Name | Column |
|---|---|---|---|
| | | CARD 3 | |
| 1 | GII | GII Score | 79-80 |
| | | CARD 4 | |
| 2 | GII | GII Score | 79-80 |
| | | CARD 5 | |
| 3 | Ed. Scale | Prog. Cont. | 27,28 |
| 4 | Ed. Scale | Prog. Int. | 31,32 |
| 5 | Ed. Scale | Trad. Cont. | 35,36 |
| 6 | Ed. Scale | Trad. Int. | 39,40 |
| 7 | HP Scale | HP Cont. | 43,44 |
| 8 | HP Scale | HP Int. | 47,48 |