ABSTRACT

THE SOCIAL-PSYCHOLOGICAL NATURE AND DETERMINANTS OF ATTITUDES TOWARD EDUCATION AND TOWARD PHYSICALLY DISABLED PERSONS IN BELGIUM, DENMARK, ENGLAND, FRANCE, THE NETHERLANDS, AND YUGOSLAVIA

by Paul Edward Kreider

The dissertation task was to study the relationship between attitudes, interpersonal values, personal contact, change orientation, and certain demographic variables. A social-psychological theoretical framework was used to study attitudes toward progressive and traditional education and toward physically disabled persons. The assumption was made that both value and contact serve as determinants of attitudes.

The study was conducted in six European countries with the help of research assistants in each country. A battery of five research instruments consisted of (a) the Attitudes Toward Disabled Persons scale, (b) the Education scale, (c) the Survey of Interpersonal Values, (d) the Personal Questionnaire (General), and (e) the Personal Questionnaire (HP). Respondents were selected from known occupational groupings: (a) special education and rehabilitation (SER), (b) education (E), (c) manager-executives (M), and (d) labor (L).

There were a total of 18 hypotheses which were divided into four major categories pertaining to: (a) contact frequency, contact intensity and attitude scores, (b) attitude-value interactions, (c) change orientation and attitude, and (d) differences between SER and other occupational groups regarding attitudes, values, change orientation, and contact.

Statistical procedures utilized the two frequency Column Count Programs, FCC I and FCC II in tabulating frequency distributions for every item. The one- and two-way analysis of variance was used for testing hypotheses about the difference between group means. A two-way analysis of variance design for unequal N's was used to analyze group-sex interaction. Since the samples were not equal in size or in sex ratio within groups, an "adjusted mean" was computed on which to base all significant F tests. The adjusted mean equalizes or accounts for the variance in the size of the group samples as well as the unequal sex distribution within the samples. The F test procedure for testing for significance among multiple adjusted means is approximately equal to Duncan's Multiple Means test up to and including three treatment means. Relational and predictive statistics were obtained by zero-order, partial, and multiple correlation analyses.

Hypothesis testing indicates a significant relationship between contact frequency and intensity of attitude toward physically disabled persons. The results do not

indicate a relationship between contact frequency and attitudes toward education.

There is some support in the findings to the theoretical position which stresses the volitional nature of contact as related to attitudes. Enjoyment of contact and the ease of avoidance of contact was frequently related to attitude favorableness.

Hypotheses were tested relating value orientation to attitudes toward disabled persons and attitudes toward progressive and traditional education. The Gordon Survey of Interpersonal Values was used to assess asset and comparative orientation. While few hypotheses were confirmed in the countries, the results were sufficiently in the direction of the hypotheses to suggest that refinement of instrumentation and sampling procedures could possibly produce significant results.

It was hypothesized that women would score significantly higher than men on attitudes toward disabled persons and toward progressive education. The findings generally confirm or support this hypothesis.

It was felt that high scores on change orientation represents departure from the status quo and high relationship to new ideas (i.e., progressivism) and concern for the disabled. The multiple correlation for the combined change orientation variables indicates support for this theoretical position.

It was hypothesized that the SER group would score significantly different than all other occupational groups in regard to the following: (a) more favorable attitudes toward disabled persons; (b) higher mean Benevolence and lower mean Leadership and Recognition value scores; (c) higher mean progressive and lower mean traditional attitudes toward education; (d) higher mean score on change orientation variables; (e) higher mean scores on amount of contact with mentally retarded or emotionally disturbed persons. While it is evident from the data that group membership may be an important factor in values, personal contact, attitudes, and change orientation, very few hypotheses comparing the SER group with other groups within countries were confirmed.

Recommendations have been made relating to instrumentation, sampling procedures, statistical analysis, cross-national comparisons, and to the findings of the study. The model for the selection and scaling of attitude items as developed by Guttman would be useful for further study. This model, known as "facet design" attempts to substructure an attitude universe into logically established components.

It is recommended that an effort be made to obtain a representative sample for the next stage of the study, preferably by the interview method, which will allow for data collection from the total population and enable a more detailed clinical analysis of the data.

It is suggested that further differentiation of occupational groups be made. There is some indication in the present study that the SER group was too diverse in composition and interests. This was no doubt influential in the rejection of a number of hypotheses.

The findings cast some doubt on the relationship between contact and intensity with attitudes toward education, both traditional and progressive. On the other hand, contact and intensity seemed to be related to attitudes toward physically disabled persons. Further exploration should be made into the human or personal versus the conceptual or institutional dimension in the contact-intensity relationship.

This study is part of an international cross-cultural study of attitudes toward education and toward physically disabled persons in progress under the direction of Dr. John E. Jordan of Michigan State University.

THE SOCIAL-PSYCHOLOGICAL NATURE AND DETERMINANTS OF ATTITUDES TOWARD EDUCATION AND TOWARD PHYSICALLY DISABLED PERSONS IN BELGIUM, DENMARK, ENGLAND, FRANCE, THE NETHERLANDS, AND YUGOSLAVIA

By

Paul Edward Kreider

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Personnel Services,
and Educational Psychology

1967

ACKNOWLEDGMENTS

I am deeply indebted to the following professional personnel in Europe who cooperated with the research study: Dr. Francine Robaye, Department of Differential Psychology, the Free University of Brussels; Miss Karen Hansen, Section of Special Education, Ministry of Education in Copenhagen, Denmark and Mr. N. E. Söndergaard, Director of the Geelsgard Boarding School in Virum, Denmark; Mr. S. Moore-Coulson and Mr. J. J. Q. Fox who worked with Mr. James A. Loring of The Spastic Society in London; Madame Jacqueline Fabia, M. D. and Annik Rouillon, M. D. of the International Children's Centre in Paris; Professor Pierre Oleron, Faculte des Lettres et Sciences Humanies, The Sorbonne, University of Paris; A. Th. Schweizer, M. D. of the University of Leiden and Dr. Sheldon D. Rose and Mr. T. Fris of the Sociaal-Pedogogisch Instituut, University of Amsterdam; Professor Angelina Boric, Dean of the Institute of Defectology of the University of Zagreb, Dr. Sulejman Masovic of the Institute, and Mr. Roman Boben of Celje.

I am especially grateful to Dr. John E. Jordan who has always given encouragement and inspiration at every stage of the doctoral program while serving as my major advisor. I am also indebted to Dr. Bill Kell, Dr. Gregory

Miller, and Dr. Edgar Schuler who served as members of the doctoral committee.

I wish to thank Miss Susan Speer for her assistance as computer programmer for the project. Appreciation is also expressed to Miss Katherine Morris for her work in scoring and tabulating.

The study was made possible due to a two-year training grant from the Vocational Rehabilitation Administration.

I am deeply aware of the love and support given to me by my wife and son, Marilyn and Kevin. To them and our future together, this thesis is dedicated.

PREFACE

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

The authors, therefore, collaborated in many respects although the data were different in each study as well as certain design, procedural, and analyses approaches. The specific studies are discussed more fully in the review of literature chapter in each of the individual investigations.

The interpretations of the data in each country and the description of the socio-economic and political characteristics of each nation are strictly those of the author of this thesis and must not be attributed to any person in the respective countries.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

The dynamic of change with its economic, social and political implications, confronts everyone with a practical and intellectual challenge. One great struggle of our generation is with attitudes and ideas that incessantly diffuse themselves into daily life and emerge as cultural change.

We no longer debate the inevitability of change. We are not given the choice of whether or not change should occur. The choice is whether we will accept the challenge to use all our resources to guide change in socially responsible ways.

Bennis points out that "the predicament we confront, then, concerns method; methods that maximize freedom and limit as little as possible the potentialities of growth; methods that will realize man's dignity as well as bring into fruition desirable social goals" (Bennis et al., 1961).

Nature of the Problem

Berg has noted that obstacles to change, such as social customs, religious beliefs and values, economic needs, and illiteracy are chiefly attitudinal in nature

and, as such, their removal becomes a task for the psychologist.

> At present, we know something of attitudes and how to measure them. Now we must discover how to change them efficiently. We shall have to gain this knowledge rapidly and we shall have to work against difficulties inherent in our own culture which are raised against such studies. One difficulty, for example, will very likely be sharp criticism of proposals to "waste" good American dollars on research for changing attitudes in foreign lands--after all, attitudes are not important. Perhaps it will help to remind such criticis that attitudes toward meat as food have caused many thousands of people in India to die of starvation rather than eat the Brahma cattle which were grazing in their grain fields. Critics or not, psychologists must accept the challenge of producing attitude change (Berg, 1965, p. 203).

Public interest in attitudes toward education and in the concept of rehabilitation of the disabled has greatly intensified in recent years. Advances in medical science have enhanced the potential for physical and psychological rehabilitation. There appears to be a growing awareness of the meaning of disability to personal, family, and community well-being, hence, a greater emphasis on the importance of the social functioning of the disabled and their families. Current trends seem to suggest that rehabilitation of the disabled will be placed in a broader social frame of reference identified with the problems of adaptation to technological change and with national and international goals of achieving a greater degree of health, economic security, and equality of opportunity for all.

Elley, writing on "Attitude Change and Education for International Understanding," reviewed definitions of

international understanding found in UNESCO publications and social studies guides and found the following commonly accepted components of primary theoretical and practical importance:

1. Recognition of the futility and barbarism of warfare in the contemporary world.
2. Faith in the efficacy of international machinery to solve problems which threaten world peace.
3. Realization of the economic, political and cultural interdependence of the nations of the modern world.
4. Belief that all peoples have similar needs and problems, but that their methods of meeting them depend on local environmental and cultural factors.
5. Need for tolerance amongst all national groups, based on recent knowledge of their way of life (Elley, 1964).

The value of international cooperation, the concept of cultural interdependence, the need for greater understanding of factors affecting attitudes and values, and the cross-cultural implications of these, are all basic to the purposes of the present study.

Statement of the Problem

An attempt will be made to investigate technical, methodological, and theoretical considerations relating to the cross-cultural investigation of attitudes toward education and physical disability. A set of instruments will be employed to elicit these attitudes and enable comparison between one cultural group and another. An effort will also be made to relate these attitudes to

other variables which from a theoretical standpoint should serve either as correlates or predictors. A final objective is to develop a set of techniques to facilitate the collection, processing, and analysis of data in subsequent cross-national studies.[1]

This exploratory study is part of a comprehensive attempt to research attitudes in differing cultures in an effort to find inter-relationships between:

1. Differing national or socio-economic patterns, that is developing vs. developed nations, rural vs. urban patterns, non-industrialized vs. industrialized nations, etc.

2. Differing value systems, both intra-national and international.

3. Differing "contact" methods and systems for experience with the social object called the "physically disabled" and with "education" as a social institution.

4. Differing norms of the various countries and groups specified in respect to various psychological, sociological, and economic measures and indices.

A pilot study of attitudes toward physical disability and their determinants was made by Felty (1965) in Costa Rica with primary interest in several types of questions. What are the predominant attitudes within a country toward physical disability? How do these attitudes vary among different groups within the population, principally in respect to sex and occupational groups? What correlates

---

[1]The broader research program is being developed by Dr. John E. Jordan and a number of his doctoral students at Michigan State University.

of attitudes toward disability can be found within these groups? What kind of people work with the disabled? Do they have any definitive 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?

Fundamental to the program of social development in Latin America and to the establishment of cooperative exchanges among professionals in the United States, Europe, and Latin America, is the acquisition of normative data about attitudes of various occupational groups toward education, special education and rehabilitation, and toward the physically handicapped. This was considered the foremost cross-national research need by the research group of the Second International Seminar on Special Education at Nyborg, Denmark, in July, 1963.

Such data are indispensable to a coherent approach to international cooperation in a health-related field such as special education and rehabilitation. It involves the knowledge of what is permissible within a culture, and of the characteristics and orientation of those who are most accepting and sympathetic toward effective program development and social change.

A study by the American Psychological Association on Psychological Research and Rehabilitation suggested that "there would be great value in cross-cultural studies of

adaptation to disability . . . and in studying these attitudinal and belief variables in their extreme states" (Kelly et al., 1960, p. 184). By "extreme states" the authors were referring to different cultural groups.

Social-psychological theory suggests that values are important determinants of attitudes. In respect to the physically disabled, it has been suggested that persons who generally value others as having intrinsic worth are likely to hold more favorable attitudes toward the disabled than are those who value others according to more absolute comparative standards. An attempt will be made to determine whether this value-attitude relationship can be confirmed.

Theory has also suggested that the amount and kind of interpersonal contact with a subgroup are determinants of attitudes. An effort will be made to ascertain the amount and kind of experiences that respondents have with education and with disabled persons and how these data are related to attitude scores.

It will also be possible to obtain interrelationships between various kinds of personal and demographic data in addition to the information specified by the main purposes of the study. Modern computer analysis techniques make it possible to study vast amounts of data not directly used in the testing of hypotheses.

It is necessary to meet the social problems confronting man today with a merging of the arts of social practice

and the science of behavior. Concern with the behaving individual and the context in which this behavior takes place, the social setting, implies the social-psychological approach of the present study.

Definition of Terms

Since the concepts and terms used in this study have been variously defined in the literature, it will be useful to define these terms operationally.

Attitude.--Guttman (1950, p. 51) defined an attitude as a "delimited totality of behavior with respect to something. 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."

Attitude Component.--Components of attitudes have been discussed in accordance with theoretical considerations (e.g., Katz, 1960, p. 168; Rosenberg, 1960, pp. 320 ff.; Guttman, 1950). The two components typically considered are those of belief and intensity. In this study, the first component will be that of item content (or belief), while intensity will be the second.

Attitude Content.--The actual item statements within an attitude scale have been referred to as the attitude content component.

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).

Demographic Variables.--Certain statistical data frequently employed in sociological studies will be used in the present research. These variables are age, education, income, rental, occupation, number of siblings, occupational and residential mobility, and whether the respondent spent his youth in a rural or urban setting.

Educational Progressivism.--A ten-item scale of progressive attitudes toward education developed by Kerlinger (1958).

Educational Traditionalism.--A ten-item scale of traditional attitudes toward education developed by Kerlinger (1958). These two educational measures do not constitute scales in the Guttman sense, but rather are made up of two independent clusters of items which appeared in Kerlinger's factor analytic studies, and which Kerlinger characterized by the terms progressivism and traditionalism.

Handicap.--This term is indicative of the social disadvantage placed upon a physically impaired person as a result of 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; and as such it has no particular social connotations.

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

Interest Group.--Any group that, on the basis of one or more shared attitudes, makes certain claims upon other groups in society to engage in particular forms of behavior. Associational interest groups work as collectivities to exert influence (e.g., Almond and Coleman, 1960).

Occupational Personalism.--This term is operationally defined by two questionnaire items designed to ascertain: first, about what per cent of the time people work with others with whom they feel personally involved; second, how important it is to work with people with whom one is personally involved. A personalistic orientation to life is sometimes considered as a distinguishing characteristic of traditional social patterns (e.g., Loomis, 1960).

Physical Disability.--This term denotes some loss of the tool function of the body. An approximate synonym is "physically incapacitated."

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

Relational Diffusion.--This term is operationally defined by a questionnaire item designed to determine the extent to which personal relations on the job diffuse into a person's non-job social milieu. A personalistic diffusion between the social milieu and occupational milieu is sometimes considered as a distinguishing characteristic of traditional social patterns (e.g., Loomis, 1960).

Special Education.--Kirk (1962, p. 29) states that this term characterizes educational practices "that are unique, uncommon, of unusual quality, and in particular are in addition to the organizational and instructional procedures used with the majority of children." Jordan (1964a, p. 1) has commented that "the basic aim of special education is to prevent a disability from becoming a handicap."

Value.--According to Kluckholn (1961, p. 411), "a value-orientation may be defined as a generalized and organized conception, influencing behavior, of nature, of man's place in it, of man's relation to man, and of the desirable and nondesirable as they may relate to man-environment and interhuman relations." Within the

framework of this general definition, the present study has focused upon the value sub-set of "man's relation to man," or, interpersonal values.

Essentially, the interpersonal value categories of asset and comparative values were adopted for study. Asset values predispose a person to evaluate others according to their own unique potentiality and characteristics. Comparative values predispose a person to evaluate others according to external criteria of success and achievement (Wright, 1960, pp. 128-133). Operationally, these values are defined by three scales on the survey of Interpersonal Values (Gordon, 1960). Asset values will be measured by the Benevolence Scale, comparative values by the Recognition and Leadership Scales.

Dissertation Organization

The dissertation is organized into five chapters. A statement of the problem is set forth in Chapter I.

Chapter II is a review of theoretical considerations of the study and related research under several divisions:

1. A theoretical framework for attitudes toward education.
2. Integration of theory from social psychology with theory and research in special education and rehabilitation.
3. Empirical research from social psychology relating the variable of value and personal contact to attitudes.
4. Empirical research on attitudes toward the physically handicapped.

5. Cross-cultural measurement of attitudes.

Chapter III describes the methodology and procedures of the study. A general description is given of each country as well as information about the research population. An explanation relative to instrumentation is given and research hypotheses are stated with statistical procedures to be used in data analysis.

Chapter IV organizes the research data into tabular form with some description and interpretation.

Chapter V is a discussion of the data, and a summary with conclusions, recommendations and implications.

CHAPTER II

REVIEW OF THEORY AND RELATED RESEARCH

A science without a theoretical framework lacks that which is necessary to organize data and give direction to research. The term theory is not used in this study in a highly rigorous or speculative sense. Most of the theory considered is at a level of partially verified propositions which have been placed within a perspective which suggests a kind of interrelationship and order among them. The term theory will be used as a tool of scientific research as suggested by Goode and Hatt (1952) in their basic text on sociological research. They stated:

> (a) it defines the major orientation of a science, by defining the kinds of data which are to be abstracted; (b) it offers a conceptual scheme by which the relevant phenomena are systematized, classified, and interrelated; (c) it summarizes facts into empirical generalizations and systems of generalizations; (d) it predicts facts; and (e) it points to gaps in our knowledge (Goode and Hatt, 1952, p. 8).

Attitude is a central concept of social psychology. Katz and Stotland (1959) have stated that "an adequate social psychology must include the concept of attitude or some very similar construct. Efforts to deal with the real world show a need for a concept more flexible and more covert than habit, more specifically oriented to

social objects than personality traits, less global than value systems, more directive than beliefs, and more ideational than motive pattern." Stressing emotional and personality aspects of attitude, Katz and Stotland seem to view attitudes as a mechanism which serves to insure the stability of the individual's emotional, cognitive and behavioral organization.

One of the foremost writers on the "science of attitudes" in social psychology suggested that "attitudes are never directly observed, but, unless they are admitted, through inference, as real and substantial ingredients in human nature, it becomes impossible to account satisfactorily either for the consistency of any individual's behavior, or for the stability of any society" (Allport, 1935).

The following sections discuss the theoretical orientations of the study and related research. These considerations have resulted in the development of the research hypotheses.

A Theoretical Framework for Attitudes Toward Education

The History of Education is the story of man in the process of becoming enlightened and of the institutions he has created in order to sustain that which he has come to value. This is a story of exciting innovative process and social change. Much is being said currently about the relationship of international values, social

reconstruction, and education. Adams (1965) points out that both developed and developing nations believe that education is the key to progress, although the precise relationship of education to economic, social, and political development is not well researched.

In discussing major sociological problems raised by twentieth century ideological movements, Zimmerman (1961) suggests that a new social science is needed for the guidance of the cultures of the world and also needed is "an academic group with a larger and more adequate view of the human problems now impinging upon us." Even with the vast amount of literature exploring relationships between education and social change, there has been little study of the basic dimensions or factors underlying attitudes toward education.

Kerlinger (1958) has developed an Attitudes Toward Education Scale based upon a dichotomy of progressive and traditional dimensions of attitudes toward education. His theory can be briefly presented in the following 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).

Kerlinger suggested that traditionalism should not be viewed as simply the negation of progressivism, but as an affirmation of a conservative-traditional approach to educational issues and change. Progressivism is not simply anti-traditionalism but it also is an independent concept in its own right.

Kerlinger designed a study in which he examined the attitudes of professors and laymen toward education. His theoretical model defined the restrictive-traditional factor and the permissive-progressive factor. The former emphasizes subject matter for its own sake, while the latter emphasizes problem solving and individual interests and needs. Warmth in interpersonal relationships, equality, and internal rather than external discipline are characteristics of the permissive-progressive dimension. Social beliefs tend to be liberal and emphasize education as an instrument of change. The restrictive-traditional dimension includes the hierarchical nature of impersonal superior-inferior relationships and places emphasis on

external discipline. Social beliefs are preserved through maintenance of the status quo (Kerlinger, 1956).

The results of the study indicated that occupational roles and role expectations are potent independent variables influencing attitudes. Individuals having similar roles might be expected to have similar attitudes and a similar attitude structure.

> 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).

Smith (1963) hypothesized that progressivism and traditionalism were basic dimensions of educational attitudes that would emerge and remain factorially invariant under different conditions of item and subject sampling. A relationship between attitudes toward education and general social attitudes was also expected. In two Q-sorts consisting of 140 attitude statements toward education, she found that progressive and traditional factors did remain invariant. On a third Q-sort, she found that liberalism and conservatism did emerge as basic dimensions of social attitudes and were highly related to educational attitudes in the direction of the hypotheses.

Kramer (1963) used Rokeach's Dogmatism Scale and Kerlinger's Q-Sorts in an attempt to measure the relation of belief systems and educational values of teachers. He

found that "open-minded" teachers were more consistent and held permissive-progressive attitudes. He reported that the more "open-minded" the belief system, the more likely the existence of internal consistency of an educational attitude structure in a progressive direction.

Lawrence (1963) used Kerlinger's Education Scale II in an effort to measure progressive educational attitudes and attitude consistency. She reported that her result did not seem to differentiate progressive and traditional attitudes toward education.

Anderson (1964) studied attitude change of student teachers in respect to education and teaching in secondary schools. She found that student teachers did not change significantly in their attitudes toward education and teaching.

Attitudes of elementary school teachers toward children, teaching and supervision was reported by Classon (1963). She concluded that careful study of teacher attitudes should be made before attempting to change or develop any programs because success is so dependent upon teacher acceptance and general attitudes.

Hand (1964) observed that a tendency toward more progressive beliefs was a factor in teacher attitude change. Purcell (1964) found that curriculum content and teaching methods were important considerations in attitude change of prospective teachers.

The literature on changing attitudes of students in college is only indirectly related to the present study, but can be mentioned as somewhat implicitly providing foundations for theoretical constructs in this study.

Integration of Theory from Social Psychology with Theory and Research in Special Education and Rehabilitation

Investigators in special education and rehabilitation have urged that efforts be intensified to design studies with theoretical relevance and consequently greater generality and practicality (Block, 1955; Kvaraceus, 1958; Levine, 1961; Meyerson, 1963). The theoretical framework of Wright (1960) and Meyerson (1948, 1963) in the area of physical disability is basic to the present study. Concepts central to their approach are those of self, other, reference groups, role, attitude and value. These concepts are presumed to arise from, and to be related to, interpersonal interaction, with emphasis on interpersonal activity.

Meyerson (1963) and Shibutani (1961) share basic underlying assumptions regarding interactional propositions. Shibutani (1961, pp. 22-25) describes these as follows:

1. Behavior is motivated through the give and take of interpersonal adjustment, both the person and society are products of communication.

2. Personality is continually reorganized and constructed in the day-by-day interactions with others.

3. Culture consists of models of proper conduct hammered out and reinforced by communications and by collective grappling with life conditions.

Underlying all these assumptions is a belief in the rational and active nature of the individual as a determiner of his own fate, and as an agent of change in his physical and social environment.

Levine suggests a relationship between social role, role perception, role value, and attitude. "'Being a family head' and 'being a good citizen' are two of many roles which are generally felt to be of value in maintaining society" (Levine, 1961, p. 84). Role fulfillment is therefore perceived by some as the fulfillment of an obligation to society and people are evaluated by others to the extent that they are perceived as meeting these role obligations.

This frame of reference suggests that disability is not a thing in itself but a social value judgment. Groups are therefore stereotyped according to their social contribution. Where an individual does not measure up to role expectation, or where there is some indication of inadequacy, there will be some devaluation of him on the part of society. It might be stated that persons with some defining characteristic, such as blindness, crippling condition, or any other group characteristic, are categorized according to how others perceive they will be able to maintain valued social roles.

The present study will place emphasis upon results which can be organized or explained within the context of

interpersonal contact, value organization, social norm, or role behavior, as determined by perceptions of the respondents.

Empirical Research from Social Psychology Relating the Variables of Value and Personal Contact to Attitude

The Question of Values

The scientific study of values has taken on far-reaching dimensions in our day. It is now very proper for the social psychologist and the psychologist to ask whether an understanding of human personality is complete without a thorough analysis of the valuing person (Allport, 1955; Maslow, 1959).

The measurement of values has been attempted in a wide variety of studies. Allport (1951, 1955, 1958) has been a leader in the area of the study of values. Other studies include cross-cultural studies (Morris, 1956; Watts, 1962), studies of individual differences (Allport, Vernon, and Lindzey, 1951), societal characteristics (Morris, 1956), aspects of counseling (Rogers, 1951; Stefflre, 1958; Super, 1961), and the impact of education (Jacob, 1957).

The value concept is closely interrelated with social behavior and motivational aspects of human personality. Values are seen as basic to a "theory of action" in which "value-orientations" are viewed as the basis of "attitudes"

taken toward various social objects (Parsons and Shils, 1951).

When dealing with the value question it is helpful to understand the meaning assigned to values and attitudes in value theory and research. Spranger's (1928) psychological classification of values suggests a categorization into six basic value types: (a) theoretical, (b) economic, (c) esthetic, (d) political, (e) social, and (f) religious. The instrument for measuring values developed by Allport, Vernon, and Lindzey (1951) is based on Spranger's classification.

Tisdale (1961) arranges both theory and research into tentative clusters or categories, each tending to emphasize a particular variable as being critical to defining values. He arranges these into five groups: (a) group one defines values as needs or need satisfactions (Maslow, Goldstein, Murphy and Fromm are representative of this position); (b) group two, while granting the biological basis of values, prefers to stress their motivational nature as predispositions operating prior to behavior (Spranger and Allport have stimulated research for this group); (c) group three holds that values arise only when problem situations demand behavioral choices; (d) group four, while equating values with concepts or beliefs with little emphasis on motivational significance, virtually ignores the organism and its behavior; (e) group five sees values as different kinds of situational relationships. A

summary definition was given in which it was stated that "values are inferred motivational constructs associated with perceived differences in goal directed behavior and indicated by the selection of action alternatives with social situations" (Tisdale, 1961).

It has been observed that values are a synthesizing element that ties together the individual and the culture.

> If there is a single synthesizing element that ties together an individual's perceptions of cultural promptings, motivating needs, mediating symbols, differentiating characteristics, and sense of resolution, that relates perceptions to self-concepts, and that accounts most directly for a particular decision or for a mode of choosing, it is here suggested that that element is the individual's value system (Katz, 1963).

Barry and Wolf would support this contention that values and attitudes are a function of the individual's experience interacting with the culture. They state: "A person's attitudes are a gradual development from his own experiences and the immediate and broad culture in which he lives" (Barry and Wolf, 1962).

Values are spoken of as having a "value-expressive function" (Katz, 1960, p. 173). They clarify to the self and others those things most important and basic to one's personal image. Values are also an expression of needs: "Values may be regarded as characteristic outer expressions and culturally influenced manifestations of needs. They are teleologically described in terms of the goal or the satisfaction that is sought rather than the motivating

drive. They are often stated on different levels of complexity and abstraction" (Katz, 1963).

One of the chief purposes of the present study is to investigate what relationship values may have to attitudes toward education and the physically disabled. Allport (1958) believes that values are very important sources of prejudice or negative stereotype. He states:

> The most important categories a man has are his own personal set of values. He lives by and for his values . . . evidence and reason are ordinarily found to conform to them . . . the very act of affirming our way of life often leads us to the brink of prejudice (Allport, 1958, p. 27).

He further states that "one type of categorization that predisposes us to make unwarranted prejudgments is our personal values."

Katz discusses the relationship of attitude change to values. He stated: "People are much less likely to find their values uncongenial than they are to find some of their attitudes inappropriate to their values" (Katz, 1960, p. 189). This suggests that people are generally more inclined to change or give up attitudes inconsistent or unrelated to central values. However, one should expect a great deal of consistency between a basic value, such as <u>equality</u>, and a more specific attitude, such as favorableness toward opportunities for handicapped persons.

Shartle (1959) speaks of every society as having a value climate. The pressures, pushes and pulls of this

environment are very powerful. The value climate is a complex expression of the good, the worthwhile, and the desirable. The value climate is concerned with "matters of importance as distinct from matters of fact" (Allport, 1951).

Ordway sees values as being essential to the decision making process.

> A value is sentiment, prompting, idea, motive--so cherished and held to the fore in consciousness as to be influential in shaping the choices of one's prospective conduct or one's decisions toward rational judgments. A value is a conduct determiner and canalizer and thus may range in source from the promptings of the pangs of hunger to the desire to be well regarded in the eyes of God (Ordway, 1959).

Rosenberg (1956, 1960) found an instrumental relationship between attitude and value, with stable positive attitides perceived as instrumental to positive value attainment and the blocking of negative values, while unstable negative attitudes were perceived as instrumental to negative value attainment and the blocking of positive values. "The individual tends to relate positive attitude objects to goal attainment and negative attitude objects to frustration of his goal orientation" (Rosenberg, 1960, p. 321).

Rosenberg has postulated the positive-negative <u>affective</u> component and the <u>belief</u> component of attitudes. Generally, attitudes have been thought of as concerned with the affective component and beliefs have been considered somewhat separately. Rosenberg's position has

been supported by the findings of Cartwright (1949), Smith (1949) and Woodruff and DiVesta (1948). Guttman (1950) speaks of a broad concept of attitude, on logical rather than experimental bases. Osgood (1957, p. 190) restricts attitude to mean "the evaluative dimension of the total semantic space." Allport (1958, pp. 12-13) in considering prejudice, states: "There must be an attitude of favor or disfavor; and it must be related to an overgeneralized (and therefore erroneous) belief."

Rosenberg studied hypnosis and post-hypnotic suggestion in respect to changing either belief or affective components. His conclusions supported the concept that the instrumentality of a belief to a valued goal is associated with a corresponding and direction-related affective component.

Carlson (1956) studied changes in prejudicial attitudes (affective and belief components) toward Negro mobility according to perceived instrumentality to a value involving property valuation. Attitudes toward Negro movement into white neighborhoods became more favorable as the subjects' beliefs were changed from the view that Negroes tend to lower property values, to the view that Negroes tend to raise property values. An inconsistency between the cognitive (belief) component and the affective value component was confirmed.

Value Variation in Society

Classical sociological and typological formulations of societies are often stated in terms of value orientations. Values have been found to vary among groups and society. Role behavior is perceived differently from group to group (Kluckhohn and Strodtbeck, 1961; Morris, 1956).

For purposes of this study, three types of societies may be considered: the traditional, the transitional, and the modern. These terms represent points along a continuum of modernization. Persons in a modern society have been represented as holding values that are more affectively neutral, achievement oriented, change oriented, more materialistic and instrumental, more universalistic than those in a traditional society. European culture can be described as typically modern, and Latin American society as traditional or transitional (e.g., Williams, 1963, pp. 415-470; Parsons and White, 1961; Loomis, 1960; Almond, 1960).

Jordan (1963) has suggested that in Latin America, those persons actively involved in the areas of rehabilitation and special education differ in values from the majority. He has referred to the work of Almond and Coleman (1960) in the characterization of various types of groups and associations in society, and to the work of Rogers (1962) regarding the diffusion process of innovation. Jordan hypothesizes that rehabilitation and special education

groups in Latin America are characterized by modern social values of "democracy, constitutionalism, humanism, the scientific process and universal suffrage" (p. 17) and by "specificity, universalism, achievement, and affective neutrality" (1963).

A conceptual value framework has been suggested as specifically related to attitudes toward physical disability. Values can be clustered according to whether they are derived from comparisons or intrinsic assets (Dembo, Leviton, Wright, 1956; Wright, 1960).

> If the evaluation is based on comparison with a standard, the person is said to be invoking comparative values. . . . On the other hand, if evaluation arises from the qualities inherent in the object of judgment itself, the person is said to be invoking asset values. What matters is the object of judgment in a setting that has its own intrinsic purposes and demands. The person's reaction is then based upon how appropriately the situational demands are fulfilled rather than on comparison with a predetermined standard (Wright, 1960, p. 29).

While it is true that some circumstances require comparative evaluations, the asset theory holds that this need never be done without evaluating the disabled person for his own unique characteristics as a human being.

Felty (1965), following the work of Jordan (1963) and Almond and Coleman (1960), suggested that the whole concept of rehabilitation and special education (taken apart from the economic argument that in the long run education and training are cheaper than public support) is a response to the asset values of a society. This view is in distinction from a society where educational

opportunity is based on some comparative standard, either in respect to hereditary standards (comparison with the past) or to achievement standards (comparison with present norms). A reasonable inference to be considered from the asset-comparative value framework is that those persons working in the field of rehabilitation and special education would be expected to hold higher asset values than those working in other occupations, regardless of whether the social system was modern or traditional.

Personal Contact

Allport (1958, pp. 250-268) discusses research on various kinds of intergroup contact. In studies of attitudes toward Negroes, those having contact with high status or high occupational group Negroes held more favorable attitudes than those having contact with lower status Negroes (pp. 254, 261).

Homans (1950, p. 112) has suggested the general relationship that the more frequent the contact between persons or groups, the more favorable the attitudes.

Jacobson et al. (1960, pp. 210-213) investigated intergroup contact, suggesting that equal status contacts are more likely to develop friction (i.e., result in unfavorable attitudes) if the basis of the status equality is unsure; or, if one group does not fully accept the equality which is felt by the other group.

Zetterberg (1963) reviewed the social contact theories of Malinowski in which the effects of frequency of social contact on liking or disliking are dependent on two other variables--the cost of avoiding interaction, and availability of alternative rewards. If the cost of avoiding interaction are low, and if there are available alternative sources of reward, the more frequent the interaction, the greater the mutual liking.

A review of social contact theory would suggest that 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, p. 254, 261-262);
4. The contact is among status equals and the basis of status is unquestioned (Jacobson et al., 1960, pp. 210-213);
5. The contact is volitional (Zetterberg, 1963, p. 13); and
6. The contact is selected over other rewards (Zetterberg, 1963, p. 13).

Roeber (1959) found that both social contact and increased factual information lead to increased acceptance and tolerance of disabled persons.

Haring et al. (1958) discovered that workshop attempts to modify teacher attitudes toward disabled children were more effective where teachers had regular contact.

Empirical Research on Attitudes Toward the Physically Disabled

Felty (1965) reported there were no studies known to him that dealt directly with the problem of cross-national attitude studies toward physically disabled persons. A number of studies have considered attitudes toward specific kinds of physical impairment in specific settings. These studies have been reviewed in Barker et al. (1953), Wright (1960), Cruickshank (1955, 1963). Some of these studies will be mentioned here.

Barker and Wright (1955) found that verbalized attitudes toward disabled persons were usually mildly favorable, though a minority expressed negative attitudes.

Barker et al. attempted an analysis of attitudes toward disabled persons expressed in religion, fiction and humor (1953, pp. 74-76). Religious and literary analyses revealed considerable variation in attitude. However, a strong tendency for jokes about persons characterized by physical disability to be depreciating was found. Jokes about the physically disabled were believed to be more depreciating than those about farmers and salesmen.

Barker and Wright (1955) observed that some persons mask their unfavorable attitudes toward disability. Therefore, jokes might provide a disguised outlet for these unfavorable attitudes.

Cross-Cultural Studies

Wright refers to anthropological surveys by Maisel which dealt with primitive or non-occidental attitudes toward disabled persons. These findings revealed wide discrepancies in the treatment of disabled persons, although "there is no doubt that negative attitudes would show a preponderance" (Wright, 1960). Wright summarized by stating:

> Until there is more abundant anthropological research on the attitudes of different cultural groups toward physique and physical deviation, we can only hazard the guess that though the variation in attitudes is greater than we imagine, out of all the diversity will emerge psychological laws that will contribute to our understanding of the fundamental characteristics of attitudes toward physique (Wright, 1960).

Friesen (1966) observed that in the Trio and Wayana Amer-Indians in Surinam, South America, the disabled did not survive for any length of time. One notable exception was a paraplegic who became an influential chief.

Heider's (1958) balance theory of sentiments posits an interdependence between a person's liking for another (sentiment relation) and the connection of belongingness (unit relation) he perceives with that person. This has direct bearing upon attitudes toward disability. There

will be a tendency, according to Heider, for the dissimilar and strange to evoke a negative attitude.

Hanks and Hanks (1948) attempted a systematic analysis between structural and functional characteristics of several non-occidental societies. They concluded that the physically disabled are better protected and have more participation in societies where: (a) the level of productivity is higher in proportion to the population and its distribution more nearly equal, (b) competitive factors in individual or group achievement are minimized, and (c) the criteria of achievement are less formally absolute as in hierarchical social structures and more weighted with "concern for individual capacity, as in democratic social structures" (pp. 19-20).

Felty (1965) observed that in spite of the frequent references to the Hanks and Hanks study (Barker et al., 1953; Wright, 1960; Roeher, 1961; Cruickshank, 1955, 1963, among others) there have been no apparent attempts to deal empirically with the implications that particular relationships exist between concern for, and acceptance of, disability on the one hand, and particular societal value organization or social-structural characteristics on the other.

Felty's study (1965) of attitudes toward physical disability in Costa Rica served as a pilot study for a number of cross-cultural investigations currently underway at Michigan State University under the direction of

Dr. John E. Jordan. The present study is considered exploratory in nature and an extension of the pilot study to selected European countries. Felty hypothesized that the rehabilitation and special education group would have more favorable attitudes toward handicapped persons than other interest groups. This was confirmed by the executive and labor groups. However, there was no significant difference between the education group and the Special Education and Rehabilitation group (SER).

Felty found some relationship between asset values and attitudes toward handicapped persons. This was in the direction of the hypothesis. He also found significant sex differences on attitude variables. Males tended to be more traditional in their orientation toward education and place more emphasis on basic subject matter and discipline than did females. Females appeared more inclined to accept progressive, child-centered ideas.

Friesen (1966) studied attitudes toward education and the physically handicapped in Colombia, Peru and the United States. He also reported that the SER group tended to score significantly higher on asset value orientation and lower on comparative value orientation than did the other occupational groups. He also hypothesized that the SER group would have more favorable scores on the attitude-toward-disabled-persons scale than other occupational groups. The hypothesis was confirmed for Colombia but not for Peru.

A recent study by Sinha (1966) on maternal attitudes and values in respect to emotionally disturbed and physically disabled persons reported no consistent results in regard to asset and comparative value orientations. He classified his hypotheses into four major categories: (a) contact-intensity and contact-frequency interactions, (b) attitude-value interactions, (c) change orientation and attitude, and (d) general differences in attitudes reflecting cultural stereotypes. Sinha reported that the results confirmed, in general, the impact of personal contact in the maintenance of favorable attitudes toward emotionally disturbed and physically handicapped persons. He also reported that the hypotheses relating to change orientation and attitudes toward education were not confirmed consistently enough to allow for any definite conclusion or generalizations.

Studies by a group of researchers (Richardson et al., 1961; Goodman et al., 1963) investigated uniformity and cultural variability of preference rankings of pictures of kinds of physical deviation. All samples were drawn from the United States and they included both physically handicapped and non-physically handicapped groups and various ethnic and social class groupings.

Richardson found "remarkable uniformity in the hierarchy of preferences which the children exhibited for children pictured with and without various visible physical handicaps" (Richardson et al., 1961, p. 246). Slight sex variations were found in that girls tended to depreciate

children with more "social" impairments while boys seemed more concerned about "functional" impairments.

The Goodman study concerned itself with the acquisition of "value patterns" as something acquired largely in the absence of direct contact with disabled persons, and as having implicit character communicated from parents to adults without explicit rules or awareness. Groups were studied who were judged to come from subcultures with different value organizations in relation to visible impairments. The results suggested that cultural values in respect to disability are related to cultural uniformity, particularly in respect to physical appearance in general. People who deviate from the cultural norm in terms of value orientation might be expected to deviate also in appraisal of the physically disabled.

Further Studies: Types of Disability

Preferences for different disability groupings have been studied by Kvaraceus (1956, Badt (1957), Force (1956), Dickstein and Dripps (1958), Haring et al. (1958), and Murphy (1960). Kvaraceus, Badt, Dickstein and Dripps and Murphy, all studied preference for teaching particular groups over others by means of group rankings. The findings indicated that the gifted were most preferred while mentally handicapped and maladjusted children were least preferred. Physically disabled children were in between.

Badt found that in general physically disabled children were personally accepted as playmates for respondent's children, whereas mentally retarded and disturbed children were not. Dickstein and Dripps, and Murphy studied teachers, principals, and speech therapists as well as students. In general, there was a tendency to prefer to work with those known best. It is not clear whether preference to teach a group indicated a favorable acceptance ranking in these studies. It would have been desirable to determine the kind and extent of contact that persons had with disability groups.

Force and Haring et al. found that children with cerebral palsy are considered the most difficult with whom to interact. Haring et al. (1958, p. 38) considered acceptability of children for regular school programs. Only children with mild hearing disorder and leg crippling, if ambulatory by crutch or wheelchair, were considered educationally acceptable, although others were functionally capable of the placement.

Force (1956) studied peer group sociometric friendship choices and found a considerable range of acceptance-rejection, with cerebral palsy least accepted, hearing disorders next least, followed by orthopedically and visually handicapped. None of the group received as many choices as "normal" children.

Whiteman and Luckoff considered attitude structure and personal value orientations. They found that

respondents follow their value orientations in evaluation of physical disability (Whiteman and Luckoff, 1962).

Nash (1962) found various social-psychological variables basic to attitudes of non-handicapped persons toward the orthopedically handicapped. He reported that the respondents who manifested favorable attitudes were, for the most part, a younger group, currently married, and of higher educational level.

A general confirmation of the view that the acceptance of the disabled is related to a positive self-image and stable object relationships on the part of non-handicapped persons was found by Siller (1964).

There appears to be a strong tendency in recent studies on attitudes toward the physically handicapped to explore such attitudes in terms of basic social-psychological concepts of prejudice and ethocentrism. Barker held the position:

> The physically disabled person is in a position not unlike that of the Negro, the Jew, and other under-priviledged racial and religious minorities; he is a member of an under-priviledged minority (Barker, 1948).

He further points out (Barker, 1953) that there exists an irrational prejudice in the public mind regarding the employability and legal status of the disabled which has a striking similarity to the social rejection and ostracism experienced by members of ethnic minority groups.

Handel (1960) and Himes (1960) also give support to the evidence that common stereotypes place the physically

handicapped in an inferior social role. Cowen et al. (1958) found significant relationships between negative attitudes toward blindness, and anti-Negro, anti-minority, and pro-authoritarian attitudes. Sidney Jordan (1963) proposed that the label of "disadvantaged group" can very justifiably be applied to the physically handicapped in order to conceptualize this ingroup-outgroup relationship.

A recent study by Chesler (1965) supported the idea that:

> . . . for some purposes the physically disabled can be conceptualized as a minority group subject to many of the same attitudinal and behavioral predispositions as are ethnic minorities (1965, p. 881).

He also found further evidence to contend that ethnocentrism and prejudice are not narrowly focused on a particular minority group, but are general phenomena expressed toward a wide variety of outgroups.

Contact with the blind was not found to relate significantly to verbalized attitudes toward blindness (Cowen et al., 1958). This would be contrary to the studies previously mentioned which tend to support the relationship between contact and positive attitudes toward the disabled.

The research coordinators in each country were asked to advise about studies concerning attitudes toward education and the physically handicapped. It was reported that they were unable to find specific references to such attitudes. Correspondence with the Center for Research and Development on Educational Differences at Harvard University

indicates there is very little information available on attitudes toward both education and the handicapped in countries other than the United States.

The Measurement of Attitudes

Attitudes have been defined as a "delimited totality of behavior with respect to something" (Guttman, 1950, p. 51). Allport defines attitudes in the following manner:

> An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related (Allport, 1935, p. 810).

Another definition is offered by Secord and Backman (1965), and places emphasis on affective, cognitive, and behavioral components of attitudes. Guttman's formulation would include belief (cognitive component), overt action (behavioral component), and implicitly, evaluation and intensity (affective component).

Responses on an attitude scale are one form of delimited behavior. Guttman (1950) points out that the attitude universe may consist of many forms of behavior which are more or less inter-correlated and which form separate subuniverses. Therefore, an adequate attitude abstraction from this universe should include sampling from each of the possible sub-universes, a task of doubtful empirical possibility. A limited sample of behavior would place limitations on the range of inferences one could make. It is necessary to measure attitudes on the assumption

that a relationship exists between the statements made about a social object (the physically handicapped), and overt behavior toward that object. However, the relationship needs to be supported by adequate empirical research.

Green (1954, pp. 335-336) has analyzed the underlying characteristics of attitudes and their relationship to other variables. He looks for a consistency of response in respect to some social object and points out that an attitude differs from other psychological variables (with the exception of value) because it is always in terms of a referent class of social objects. This referential character means that one cannot expect an individual to have an attitude toward something which does not exist for him, although it may exist for others.

Cross-National Research and Scale Analysis

It has been pointed out that attitudes are referential. They reflect evaluations with reference to the world of human experience in a cultural framework. There is little doubt but what experience content is somewhat culturally determined. In cross-cultural research, it is necessary to focus on those attitude referents whose existence is acknowledged in all the cultures we are comparing.

The hazards of meaning equivalence in cross-national studies have been pointed out by several authors (Jacobson and Schachter, 1954; Jacobson et al., 1960; Klineberg, 1950; Suchman, 1958, 1962, 1964; UNESCO, 1955, 1963). A

principal difficulty in these types of studies is that of obtaining comparable input stimuli, a problem concerned with equivalence of instruments, problems of translation, linguistic and sampling equivalence. Suchman (1958, p. 197), in reporting methodological findings of the Cornell Cross-Cultural Methodology Project, has distinguished between "concept" equivalence and "index" equivalence. He reported that it was not possible to compare specific questions and indices across cultures, because:

> Technical problems such as language translation along with more subtle factors of the meaning of words, combined to make it extremely difficult to compare responses from different cultures with any degree of confidence that they were indeed equivalent. On the other hand, it was found that while specific indices might not be comparable, broader concepts were.

He further suggests that scale analysis offered a "particularly promising method" of determining concept equivalence.

Duijker (1955) points out that an attitude scale which is useful in the United States, cannot be used in the literally translated form in France or Holland. He says that the instruments must not be identical, but equivalent.

The problem of input equivalence of concepts in cross-national studies would appear to be an aspect of the general problem of question bias. Suchman (1950), has explored the use of the measurement of the intensity of feeling with which people hold to their attitudes or opinions as a way of surmounting differences in attitude or opinion measurement results due mainly to differences in question wording

(bias). Guttman (1954, p. 396), in referring to the application of this approach to the problem of bias by the Israel Institute of Applied Research, has commented: "In Israel where we sometimes have to do the same study in twelve different languages, it is essential to have a technique which does not depend on question wording."

The method of scale and intensity analysis was adopted for exploration in the pilot study by Felty (1965) in Costa Rica, and will be used in this study in respect to each of the attitude measures. The following section offers an introduction into scale and intensity analysis.

Scale Analysis

The writings of Guttman (1950) form the basis for the method used and the rationale for the approach to scale analysis used in this study. Comprehensive discussions of the technique in respect to other scaling methods are to be found in Green (1954), Edwards (1957), and Goode and Hatt (1952). Riley (1963) and Waisanen (1960) presented techniques for introductory work with the method.

Scale analysis provides a method for determining whether a set of items can be ordered along a single dimension. If a particular attitude universe is really one-dimensional, any sampling of items from it should also be one-dimensional, and should provide an ordering of respondents essentially the same as that provided by any other sampling of items from the universe. If the predicted

ordering does not occur, the universe is judged to be multi-dimensional and consequently not scalable. It is possible, of course, that items have been included which do not refer to the universe of content. These non-scale items might be excluded; however, item exclusion must be exercised with caution (Green, 1954, p. 357). If items do suggest an underlying single dimension, it is meaningful to describe a respondent with a higher total score as possessing more of the characteristic being measured than someone with a lower total score.

Most important, if scale properties are obtained, this provides evidence for the existence of a defined body of opinion in the respondent group in respect to the particular area of measurement involved. The fact that item scales are obtained in each of two or more countries being compared is evidence for concept equivalence, regardless of variation in the content of the particular items in the scales from one nationality group to another.

Following Guttman's scale analysis, it is necessary to rank respondents rather than items. He states: "We shall call a set of items of common content a scale if a person with a higher rank than another person is just as high or higher on every item than the other person" (Guttman, 1950, p. 62). The individual item responses of every respondent should be reproducible at .90 or above for accepting the scale hypothesis. The amount of error which is allowable in reproducing item scores from a knowledge

of respondent total scores rank has been somewhat arbitrarily established at 10 per cent, although Guttman has shown that if the errors are random in a given sample of 100 persons and 5 dichotomous items, the population reproducibility should not vary more than 4 or 5 per cent from the reproducibility coefficient of the sample (1950, p. 77).

Guttman also describes the quasi-scale, which may occur when the reproducibility of a scale is lower than the .90 coefficient of reproducibility, but when the errors occur in a random pattern. Stouffer (1950, p. 5) states that "the correlation of the quasi-scale with an outside criterion is the same as the multiple correlation between responses to the individual items forming that scale and the outside criterion (which) justifies the use of sets of items from an area not scalable in the strictest sense."

Felty (1965) points out that the criterion of 90 per cent reproducibility is no more an absolute standard than is the selection of an alpha of .05 for a test of significance. For some purposes a lower limit may be satisfactory, for others a higher limit may be necessary. The important criteria in respect to scale error would seem to be the random nature of occurrence of the errors.

> The error pattern of the quasi-scale question is recognizable from the manner in which the fairly large number of errors that occur gradually decrease in number as one moves further and further away from

> the cutting point.[1] These errors . . . do not group together like non-scale errors (Suchman, 1950).

Scale and Intensity Analysis in Relation to Cross-National Problem of Comparability of Responses

Once scaling has been established so there is some indication of unidimensionality, there remains the question of how to divide the respondents on the basis of favorableness or unfavorableness of response. Foa (1950) and Suchman (1950, pp. 214-215) have shown how question bias can be introduced through slight changes of question wording so that the response patterns of a set of questions may be altered considerably. What is needed is an objective "0" point, independent of the content of the items, which will divide the favorables from the unfavorables.

According to the proposed method, it is necessary to ascertain for each item how intensely the respondent feels about his response. It has been shown experimentally (Foa, 1950, 1961; Guttman, 1947, 1950; Guttman and Foa, 1951; Guttman and Suchman, 1947; Suchman, 1950; Suchman and Guttman, 1947) that intensity will usually form a quasi-scale which, when plotted against the content dimension, will reveal the point on the content scale of the lowest

---

[1]The "cutting point" refers to the point at which the "favorable" (or, e.g., "yes") responses to an item, can be divided with the least amount of error from the "unfavorable" (or, e.g., "no") responses to an item, when the respondents have been ordered on the basis of total score for all items in the scale.

intensity of response. This point has been empirically established as a point of indifference in respect to the item content. Attitudes become favorable on one side of the point and unfavorable on the other side of the point. It then becomes possible to state in respect to a particular group about what per cent of the respondents are actually favorable, neutral, or unfavorable, as defined by an objective and invariant referent point.

This concept has potential significance for cross-cultural research, since it offers an objective technique for comparing persons from different cultures, regardless of subtle meaning changes resulting from translation problems, providing that the item content is scalable within the countries being compared.

Felty (1965) states that both the point of division, and the shape of the intensity curve are of interest. The shape of the curve may indicate whether people are generally apathetic about the issue at hand or are sharply divided into opposing groups. These potential benefits of scale and intensity analysis recommended their use for this study.

See Appendix B-6 for further investigations related to the present study.

CHAPTER III

METHODOLOGY AND PROCEDURES

As previously stated, the present research is an exploratory study of attitudes toward education and toward the physically handicapped in six European countries. An attempt will be made to study these attitudes to enable comparisons between four interest or occupational groups in Belgium, Denmark, England, France, The Netherlands and Yugoslavia.

This study is part of the international study initiated by Dr. John E. Jordan at Michigan State University. A pilot study was conducted in San Jose, Costa Rica by Felty (1965) and a further study was completed by Friesen (1966) on data from Colombia and Peru. The selection of these European countries provides a population differing in language, culture, socio-economic development and in other respects. This will provide for a more rigorous test of the assumptions underlying the instruments and enable cross-cultural comparisons.

It will be helpful to the study to have some understanding of each country, its geography, population, economy, political and administrative organization, and the provisions made within the country for education, special education

and rehabilitation. This should allow for broader perspective relative to data analysis.

The European Situation

The influences of the Industrial Revolution and the spirit of nationalism are demonstrated in the cultural and social life of Europe. Social and economic change has resulted in compulsory education laws which delegates to the school duties which had been previously assumed by private organizations, the home and the church. The nationalistic spirit tended to equate more and better education with national power, and therefore, has made government more responsible for educational objectives.

Prior to the eighteenth century health services and educational objectives were primarily concerns of the individual and the family. Governmental agencies provided only minor assistance to religious and voluntary societies which were attempting to meet these needs. However, when the magnitude of need became great, national interest dictated that only the government could command the resources commensurate with the need.

Taylor and Taylor (1960) report that similar stages in the development of special education are found in the twenty-one countries of western Europe: (a) a belief in the desirability of compulsory education for all; (b) recognition of the desirability of extending educational advantages to the handicapped; (c) a parallel development of educational and health services, with problems arising

concerning the integration of these services; and (d) a steady trend for local, provincial, or national governments, or all three in cooperation to take over the services and institutions which had been established and maintained by private individuals, voluntary organizations, and religious groups.

It is also suggested that the problems of special education in Europe are basically the same as the problems of educating handicapped children in the United States and Canada. However, there are significant differences in approach to these problems.

> The most striking difference is the slower progress made in most European countries toward the achievement of solutions. This slower progress is caused by a variety of factors: (a) the complexities of large numbers of political subdivisions, languages, and cultures; (b) a less uniform degree of industrial development; (c) the interruption of normal progress resulting from depression, two world wars, and reconstruction; and (d) the added burden of personnel shortages and damage to facilities and programs during World War II (Taylor and Taylor, 1960, p. 4).

The development of educational and social services is uniquely related to the historical, social and economic progress of each country.

General Description of Belgium

Geographic

Belgium is bordered on the east by Luxembourg and Germany, on the south by France, on the north by The Netherlands, and on the northwest its coastline of 40 miles faces toward England. It has 11,781 square miles

which can be divided into three belts: the plateau, the plain in the middle and the coastal lowlands. The terrain of the central and western area is quite flat while the Ardennes plateau is rough and heavily wooded.

Belgium is divided geographically by the River Meuse and its tributary, the Sambre. The climate reflects regional differences but is generally mild and humid. Mean temperatures vary between 43 and 49 degrees.

Population

The population of Belgium was reported as 9,464,000 in 1965.[1] Approximately 63 per cent are urban and 37 per cent are rural, with about 796 persons per square mile. There are 15 times as many people to the square mile as there are in the United States.

A 1963 law creating a linguistic frontier running east-west just south of Brussels, separates the country into two official language groups. Flemish, a language similar to Dutch, is the official language of the Flemings, while French is the language of the Walloons to the south. The relationship between these two ethnic groups has been difficult at times with the Walloons concerned about the rapid growth of the Flemish population and a decline in their own.

The Belgian people have been characterized as hard working and industrious. They have suffered from the

---

[1]Information Please Almanac Atlas and Yearbook, 1967.

occupation by other countries and prize highly their independence and religious freedom. They have been known for their readiness to be adaptive to newly developing demands of society and have responded to social change.

Economics

The economic system of the country is based on the encouragement of private enterprise with very little government control or ownership. Belgium is one of the most industrialized countries in Europe. It depends to a great extent on exporting its industrial output. The principal industries are mining, textiles, chemicals, steel, food and beverages. The largest industrial centers are Liege and Charleroi. The city of Antwerp is the diamond trading center of the world.

The role of agriculture in the economy is gradually decreasing. Approximately 10 per cent of the working population are engaged in farms averaging about five acres in size. The yield per acre is the highest in Europe due to careful methods of production.

Politics

Belgium is a hereditary monarchy. The King is the head of the government and is a symbol of unity to the nation. He appoints and removes ministers and approves laws which are subject to review on the basis of constitutionality by the courts.

Legislative power is vested in the King and the Parliament. The real executive power is in the hands of a premier and his cabinet. They are appointed by the King and are members of the largest party in parliament. The parliament consists of two chambers, the Chamber of Deputies and the Senate. Each have 175 members with equal rights to introduce new legislation.

Senators serve four-year terms. Most are elected by popular vote on the basis of one for every 80,000 people. Senators are also elected from the Provinces on the basis of one for every 200,000 people. The senate itself elects half as many as the provincial councils elect and certain male members of the ruling family become senators automatically when they reach the age of 18. Representatives to the Chamber of Deputies are elected by direct popular vote for four-year terms on the basis of one for every 40,000 people.

There are several political parties in Belgium. The Social Christian Party and the Socialist Party are the two largest in the country. The Social Christian Party is the former Catholic Party but is supported by various groups representing most levels of political interest. The Socialist Party is modern with a program to extend social welfare programs. The Felmish Nationalist Party is based on social grievances against the French and the interest of the Felmish people. The Communist party is small and is striving for greater influence in national life.

The country is divided into nine provinces, each administered by a locally elected council. Councils are elected for a six-year term and govern the communes and cities. The governor of each province is appointed by the King.

Education

Education is compulsory and is provided free for children between the ages of 6 and 14. Private schools are approved by the national government and also supported by payment of teacher salaries and costs of facilities and equipment.

The curriculum of the schools, both elementary and secondary are highly discipline oriented. Choices of curriculum and vocational interest must be made at ages 12 and 15. Programs have been adapted since 1958 to allow for more flexibility in the secondary schools to allow transfer from one section to another. Thus, it is possible to postpone until age 15 the choice of which course to follow.

Reuchlin (1964) points out that the 1958 law helped to bring about a common core of studies from age 12 to age 15. Following this stage of secondary education pupils have the opportunity to attend different types of schools. Grammar schools provide classical and modern studies. Technical and vocational schools are available for those interested in a specific field of technology.

An interesting aspect of education in Belgium is the stress on high academic standard and strict discipline. Ashby (1955) criticizes the fact that this stress tends to overlook the important aspects of social life in the school which leads toward development of creative talents.

The old conflict of Church and State was partly settled at least by a compromise of 1958 which acknowledged the principle of equal support for parochial and public schools.

Higher Education in Belgium consists of many colleges and special schools and four leading universities. The Free University of Brussels is non-denominational, Louvain University is Catholic and has separate Felmish and Walloon administrations. There are also universities in Ghent and Liege. It is reported[1] that there are 18,021 schools in Belgium, 561 colleges and universities, and a total of 2,535,237 pupils and students.

Special Education and Rehabilitation Services

Prior to World War I the disabled were cared for by voluntary organizations both religious and secular. "Catholic orders still maintain about 90 per cent of the institutions for handicapped children" (Taylor and Taylor, 1960, p. 100). Services are still decentralized to a large extent and are provided in large measure by voluntary organizations.

---

[1]Information Please Almanac Atlas and Yearbook, 1967.

The law requires the provision of special classes annexed to regular schools when a sufficient number of children need them. Special classes in the regular schools have been provided for the mentally handicapped and there is some interest in developing a more comprehensive program in the regular schools for the physically handicapped.

Teachers who wish to teach in special classes or special schools may be granted a certificate of aptitude for the instruction of abnormal children. They must have a teaching certificate and three years experience. Personal qualities are also taken into consideration in the selection of candidates.

Much progress has been made relative to the coordination of rehabilitation and special education services. Various laws have been passed since the 1919 National Act for War Invalids which have led to a national program for these services. FitzPatrick (1963) states:

> A new sense of purpose came into being following the establishment in 1959 of the coordinating organization, the "Fonds de Formation de Readaptation et de Reclassement Social des Handicapes." There is much to build on and evidence of an emerging comprehensive development.

Taylor and Taylor (1960) point out that inter-institutionary rivalry has made it difficult to achieve better coordination of services.

General Description of Denmark

Geographic

The Kingdom of Denmark comprises Denmark, the Faroe Islands, and Greenland. It is a small country, little more than half the size of Scotland or less than one-eighth the size of Norway. It has not always been the size it is today. Parts of northern Germany and southern Sweden were once Danish territory and at one time the Danes have ruled over England, Norway, Sweden, Iceland, and Esthonia.

Denmark covers an area of 16,619 square miles. By its situation Denmark forms a land-bridge between Central Europe and Scandinavia. It is a lowlying country, with its highest point 568 feet above sea-level. But, except in Western Jutland and a few other locations, Denmark is not flat. It is pleasantly undulating country with many rounded hills and many lakes and forests.

Mid-way between Scotland and Iceland in the North Atlantic, the Faroe Islands constitute a self-governing community within the Danish State. Greenland, with a total land area of 840,000 square miles, is also part of the kingdom.

The western shores of the country are warmed by the Gulf Stream, thus the climate is milder than many countries of the same latitude. The weather is also changeable and unreliable because it is almost surrounded by sea. It is also often windy as there are no sheltering mountains.

Population

Denmark is about one-eighth the size of Norway but has over one million more people, with about one-fourth of the 4.8 million total living in metropolitan Copenhagen. The average population density reaches 400 per square mile in the fertile eastern islands, but drops to 125 per square mile in the western part of the country. The population density averages 277 per square mile. The annual increase is about 7 per thousand, a relatively large figure due chiefly to the low death-rate of 9.5 and the birth rate of 16.6 per thousand.

The Danish language belongs to the East Scandinavian group of Germanic languages. The Nordic group of the European race is rather prominent, being characterized by blond, curling hair and blue eyes.

The Danish Lutheran Church is the established Church and is supported by the State. There are approximately 4,448,000 members. Other minority religious groups are represented by the Roman Catholic Church with 26,000 members, the Baptist Church with 20,000 members and other smaller groups.

Economics

Economic reconstruction and reorganization after World War II resulted in the liberalization of Denmark's economy. The country is quite dependent on its agricultural and dairy productivity. Denmark lacks the mineral, water power, and forest resources of other countries near her.

About one out of every four works in the dairy-farming or stock-raising industries. Dairy products, meats, and eggs are leading Danish exports.

Denmark is known for its manufacturing industries. Copenhagen dominates the industrial and commercial development in Denmark. It is the capital, the cultural and intellectual center, and is known for its shipbuilding, food processing, beer manufacturing, textiles, world-famous silverware, procelain, and china.

In public finance, government expenditures amount to about 29 per cent of the gross national product with many social benefits, education, public health and public transportation being the major areas of economic concentration.

Politics

Denmark is a constitutional monarchy. The King shares executive power with a council of ministers. The Prime Minister is appointed by the King as are the members of the Council. The King acts on behalf of the State in international affairs. He cannot, however, without consent of Parliament, take any action which increases or reduces the area of the Realm or undertake any obligation which requires the cooperation of Parliament. He cannot terminate any international agreement which has been established by Parliament.

The Parliament, or Folketing, makes the law of the kingdom. It consists of a single chamber elected by popular

vote by Danish citizens who are at least 21 years of age. There are 179 members in Parliament, including two from the Faroes, two from Greenland, and one representing the German minority. Parliaments are elected for four-year terms, but may be dissolved at any time by vote of censure or if the Government wishes to appeal to the people.

Strong emphasis is placed in the country on the importance of local government. Each county is administered by a governor and council. The governor is appointed by the state and the council is elected by the people. Local authorities have historically taken the lead in a long tradition of democratic and social services and local school officials have much to do with the quality of education and educational services.

Education

Public education began about 1740, when the State began to develop schools. It is required that all children between the ages of 7 and 14 have a comprehensive course of education. Taylor and Taylor (1960) report that nearly all of the schools are of public establishment (93 per cent). In 1960 526,146 of the 563,652 school-age children attended public schools.

Reuchlin (1964) discusses school organization and guidance services in Denmark. At the end of the fifth year of primary education, a preliminary sorting takes place in certain schools (those which have at least a two-form entry,

and where the majority of the parents agree to the operation of the plan). According to this plan, children with a practical interest are placed in different sections than those with more academic interests. This placement is based primarily on achievement, but parents' views are taken into consideration.

Pupils may leave school at the end of the seventh year of school but are encouraged to stay on for another year or two.

The eighth and ninth years provide a final stage for pupils in the practical curriculum. The purpose is to improve their general knowledge, provide pre-vocational education and evidence for employers of each pupil's aptitudes.

For those students in the academic curriculum, the eighth and ninth years are the first stage of a secondary (Real) course. At the end of the second year of the Real course an internal examination is used to redistribute the pupils in two groups. One group is directed into a tenth year which ends the secondary course. The other group enters a second stage of secondary education which lasts three years and is organized as follows:

> In the first year (the tenth year of schooling), the pupils will choose between an arts course and a science course. In the second and third years, the arts pupils will be subdivided into groups for modern languages, classical languages, or social studies with languages. Similarly, the science pupils will be subdivided into groups for mathematics and physics, general science or social studies with mathematics. At the end of the twelfth year comes the examination marking the end of the secondary course (Reuchlin, 1964, p. 277).

Primary school teachers are trained at twenty-nine teachers' colleges. Other institutions of higher education include: The University of Copenhagen, the University of Arhus, Technical University of Denmark, Danish Academy of Engineers, Royal Danish School of Pharmacy, Royal Dental College at Copenhagen and Arhus, and Royal Veterinary and Agricultural College.

Special Education and Rehabilitation Services

Educational provisions in Denmark were first made for the deaf and blind. The Royal Institute for the Deaf and Dumb was founded in Copenhagen in 1807 as a State institution. The Royal Institute for the Blind was organized by a private society in 1811, receiving an annual grant from the State. "Then under the act of January 21, 1857, the State undertook the education of the blind children" (Taylor and Taylor, 1960).

In 1872 the Reverend Hans Knudsen established the Society and Home for Cripples. It served as an out-patient clinic to provide both medical treatment and occupational training for those with neuromuscular disabilities.

Several important pieces of legislation indicate the broad commitment that the Danish people give to special education and rehabilitation services. The Public Assistance Act of 1933 provides that the State shall provide for handicapped persons, including the blind, the deaf, speech handicapped, crippled, and epileptic, to receive special

treatment, education, and training. The Handicapped Persons' Division of the Ministry of Social Affairs administers the Public Assistance Act and supervises the institutions and services providing the care (Taylor and Taylor, 1960).

The Act of May 11, 1956 provides for special education and services for the Blind and for the Practically Blind. Counselors have been appointed to give personal and vocational guidance to the blind under the Act. The Act of January 27, 1950, established a special Board for the Deaf and a Board for the Hard of Hearing. The Board supervises the social welfare provisions of the Act and advises the Ministry of Social Affairs on all matters.

An important Act was the Social Insurance Act of 1933 which provides for disability pensions and financial assistance for treatment and vocational training, and requires that all cases of congenital or acquired disability observed by physicians, schools, or local authorities before a patient's thirtieth year must be reported to the Invalidity Insurance Court. This Court is the central disability authority in Denmark. It pays for the expenses of vocational training for the handicapped, including the cost of protheses and equipment.

The Ministry of Education has responsibility for the regular schools, including special classes in these schools, while the Ministry of Social Affairs has responsibility for

medical and welfare provisions and special schools and the education of homebound and hospitalized children.

There are many important voluntary organizations which serve the handicapped in many ways. These include the Danish National Association of Cripples, the National Foundation against Polio, the Danish Society for the Welfare of Spastics, the Danish Red Cross, the Association for the Blind, and the Association for the Deaf.

The principal agency charged with the direction and responsibility of the vocational rehabilitation program is the Society and Home for Cripples (FitzPatrick, 1963). It is also designated by the Ministry of Social Affairs as a special Relief Institution. It is still a private organization but acts mainly as an agency of the state. This is indicative of the excellent cooperation between private organizations and the state and the important role played by such organizations in the total service program. The Society and Home for Cripples operates all the orthopedic hospitals and clinics in Denmark, and maintains rehabilitation centers, kindergartens and homes for cerebral palsied children, schools for crippled children, a nursing home for polio patients, a vocational school and home, sheltered workshops and factories.

A comprehensive review of institutional services is available in Taylor and Taylor (1960) and FitzPatrick (1963).

General Description of England

Geographic

The geographical area of England covers 50,874 square miles, smaller than the state of Alabama. It lies in the eastern and southern part of the island of Great Britain, covering three-fifths of the island. England is separated from continental Europe by the English Channel and the North Sea. The Irish Sea cuts England from Ireland, and The River Tweed, the Cheviot Hills and a bay called the Solway Firth separate it from Scotland.

The southwest part of the country is rough and rather barren. The south and east sections have rolling hills and plains while the western area toward Wales and the North toward Scotland is mountainous. Due to the Gulf Stream the climate is mild for its latitude. The annual rainfall is approximately 41 inches.

Population

The combined population of England and Wales is now 47,511,000 as reported in Information Please Almanac Atlas and Yearbook, 1967. The density of population is over 790 people per square mile. This is nearly 27 times as great as Finland although England is only half the size of Finland. While being less than a third the size of France, England has a population nearly 4 times as dense.

The population trend seems to be toward the suburban areas. Presently, about 80 per cent live in urban areas.

Forty per cent of the population live in seven great metropolitan areas of London, Manchester, Glasgow, Birmingham, Leeds-Bradford, Liverpool and Newcastle.

The English people are known for their love of independence and deep respect for tradition. They highly prize the customs of the past and have keen interest in the literature and the arts.

Economics

The English economic system is a combination of capitalism and socialism. The government is the largest single employer, owning industries such as electricity, gas and mining. The economy is based largely on industry. England is one of the most industrialized countries in the world with economic power concentrated in large corporation, national banks, and large trade unions.

England provides only half of the food it eats. It imports great quantities of wheat, meat, butter, livestock feeds and other products. Its chief exports are machinery, ships, locomotives, aircraft, automobiles, chemicals, and textiles.

The country has experienced great difficulty since World War II in stabalizing its economy. Its efforts have aimed for full employment, steady prices, a strong currency and expansion of economic growth.

Politics

The government in England is a monarchy in form and a parliamentary democracy in substance. The central government consists of the sovereign, the executive and the Parliament. Rose (1964) says that "the Queen is the most prominent symbol in the political system." With this tradition it can readily be seen why the "unwritten" conventions somehow become common law, precepts and practices due to Parliamentary statutes.

Parliament consists of a House of Commons with 630 members and a House of Lords with 900 peers. Elections are held at least every five years or sooner if Parliament is dissolved. The executive power is exercised by the prime minister and the cabinet. The prime minister is traditionally the leader of the majority party in Parliament and the cabinet is composed of members from Parliament.

Education

The Ministry of Education for England and Wales is directly responsible for education in the United Kingdom. It is the duty of the Minister to "promote the education of the people of England and Wales and the progressive development of institutions devoted to that purpose and to secure the effective execution by local authorities under his control and direction of the national policy for providing a varied and comprehensive educational service in every area" (Education in Britain, 1964, p. 15).

It is compulsory for all children between the ages of 5 and 15 to attend school. They may attend either public or private schools. Many of Englands best known schools are large private secondary schools such as Eton, Rugby, and Winchester.

The aim of education in Britain has been defined as follows:

> . . . to provide a comprehensive education for all who can profit from it; to secure for children a happier childhood and a better start in life; to ensure a fuller measure of educational opportunity for young people and to provide means for all of developing the various talents with which they are endowed and so enriching the inheritance of the country whose citizens they are (Education in Britain, 1964, p. 1).

Local education authorities number 146 and are established to work with the Ministry of Education in order to use local knowledge and initiative.

A primary system for children between 5 and 11 has traditionally the function of preparing students for the secondary school selection tests. There is considerable concern in England that this emphasis should be revised with greater concentration on general education. Good (1960) says that education "has suffered from the division of people in social strata. There are some areas which are abolishing these 'eleven-plus' exams and are beginning to base the selection on school records, teachers reports, tests taken in primary school and conferences with parents."

Independent schools are completely self-supporting and must be registered with the Ministry of Education.

There are nearly 4,000 such schools covering all age groups and grades and many types of approaches to curriculum.

In 1962 the Minister of Education set up a Curriculum Study Group to improve the value of the service of the Ministry of Education in the area of curriculum and examinations.

Teachers are appointed by local authorities or school governing bodies or administrators. It is reported that there are 319,000 full-time teachers in primary and secondary schools in Britain and it is estimated that for England and Wales in the next decade, an increase of around 100,000 teachers will be required to reduce all classes to within regulation size of 40 pupils for primary schools and 30 for secondary schools and to meet the growth in school population. From present trends the actual shortage of teachers is likely to be 35,000 by 1970-1971 (Education in Britian, 1964, p. 33).

Special Education and Rehabilitation Services

It is generally true that provisions for the handicapped were initiated by voluntary agencies. National laws came into existence in England when the need for such services exceeded the resources of voluntary groups. Fitz-Patrick gives the statutory provisions governing the treatment and training of the disabled, and defining the benefits to which these persons are entitled:

1. The Disabled Persons Employment Act of 1944 which improved placement procedures for disabled persons.

2. The Education Act of 1944 providing special educational facilities and training for handicapped children.

3. The National Insurance Act of 1946 which provided benefits and pensions for persons disabled at work by accident or disease.

4. The National Insurance Act of 1946 which provided insurance benefits for the unemployed disabled.

5. The National Health Service Act providing for medical treatment and hospital care, after care, and orthopedic appliances.

6. The National Assistance Act of 1948 which provided for the welfare of the permanently disabled whether caused by illness, accident, or congenital disease.

Responsibility for special education rests with the Ministry of Education and local authorities. This service is provided in ways appropriate to the degree of handicap and other important factors. Referral of the child to the Local Education Authority for special educational services may be made by parents, the school medical officer, the school nurse, a teacher or other personnel. The Local Education Authority may then request a study of the case by specialists from various professions. When a decision is made relative to the case, parents have a right to appeal the classification to the Ministry of Education.

Complete medical service is provided by the National Health Service under the direction of the Ministry of Health. All types of hospitals and clinics, mental hospitals, and rehabilitation centers operate under a Regional Hospital Board. England is divided into 15 regions.

Industrial Rehabilitation Units serve as a workshop with an industrial atmosphere without emphasis merely on production. Government Training Centers provide opportunity for training in a setting specifically structured for the handicapped. One of the problems has been the lack of interrelationship between programs of national vocational training and the service of the National Health Service. Effort in the direction of the development of comprehensive rehabilitation programs and facilities should aid service to the handicapped.

General Description of France

Geographic

France is situated in Western Europe, bounded to the north by the English Channel, to the east by Belgium, Luxembourg and Germany, to the south by the Mediterranean and Spain, to the southeast by Switzerland, and to the west by the Atlantic Ocean.

The country is bordered by mountains and seas with lowlands and hills in between. The Jura Mountains and Lake Geneva separate France from Switzerland. The Graian and Maritime Alps separate France from Italy on the southeast and the Pyrenees Mountains form a boundry line from Spain.

France covers an area a little larger than the area of Oregon and Nevada, but it has more than 23 times as

many people as these two states. The land area of France, including the island of Corsica, is 212,737 square miles.

The climate is generally humid with mild summers and cool winters. There is considerable variation in weather conditions due to the coastal and mountain areas.

The French overseas empire has dwindled to a few scattered subtropical and tropical areas. Certain ties still exist with past dependencies, but France is more and more focusing attention on domestic and European areas.

Population

The population of France, stabilized at 40 million since the middle of the nineteenth century, has grown to more than 48 million since World War II. "It now leads most European countries in rate of growth, and its birth rate, coupled with longer life expectancy, results in an average excess of 320,000 births over deaths" (Freeman and Morris, 1965).

The Central Plateau, the Pyrenees, Alps, Juras, and other highlands of the northeast are sparsely populated. Of the total population, 56 per cent is urban and 44 per cent rural. With 214 people per square mile, France has the lowest average population density among the industrial nations of Western Europe.

The population is rather homogeneous even though regional language-dialect and other cultural differences

exist. Small minority groups are found on French borders. A large group in Alsace-Lorraine near the German border are Germanic in language and culture.

The French have been characterized as being frank, with a respect for their own independence. They seem to be able to combine acceptance of new ideas with a respect for tradition. They believe in individualistic thinking and place much stress on the existing individual.

Economics

The significance of France in Europe can be seen in the fact that it accounts for 21 per cent of the value of agricultural output and 18 per cent of the gross national product of Western Europe. France has more than three-quarters of its area under cultivation. Cereals, fruit, vegetables, livestock, butter and cheese are abundantly produced, and national consumption of these commodities is very high. French wines are an important export. More than half of the land is worked by owner-occupiers, and a third by tenant-farmers.

Since the Second World War French industry has expanded very rapidly. In 1946 a General Planning Office was established to aid in growth and expansion. Particular progress has been made in electronics, transport, the processing industries and housing. While industry is handicapped by raw material deficiencies, especially power,

and slow modernization of equipment and organizational procedures, French industrial output has more than doubled prewar levels.

The principal industries are steel (over 19 million tons per year), motor vehicles (over a million passenger cars per year), aircraft, mechanical and electrical engineering, textiles and chemicals. Large quantities of coal and iron ore are mined. A wide variety of services such as fashions, catering and tourism play an important part in the French economy.

Freeman and Morris (1965) report that agriculture produces 10 per cent of the national income, manufacturing and construction 43 per cent, trade 12 per cent, transportation and communication 6 per cent, and other activities 29 per cent.

France ranks third, following the United States and the Soviet Union, among the world's iron ore producers. Over 50 million tons are mined yearly, 90 per cent in the Lorraine district and 10 per cent in the Normandy and East Pyrenees fields.

France ranks fourth in the world in bauxite production. Bauxite is mined on the southern flanks of the French Alps, near the Spanish border in the Pyrenees. It is processed into aluminum and some is also exported. Potash deposits are processed and used in the commercial fertilizers vital to agricultural needs.

Other resources include forest products which are of primary importance in the highland economy. Fisheries are located in the Mediterranean and Atlantic coastal waters. France ranks fifth among the European fishing nations.

The soils of France are productive with large areas of fertile lowlands. "Postwar figures show 39 per cent in arable cropland, 24 per cent in meadow and pasture, 21 per cent in forest and woodland, and 16 per cent in other uses. Only one-tenth of France is classified as unproductive" (Freeman and Morris, 1965).

Politics

In September, 1958, by an overwhelming majority in a referendum, a new constitution was adopted and the Fifth Republic came into being with General deGaulle as its President.

The executive is composed of the President and a Council of Ministers headed by the Prime Minister. Legislative power is exercised by Parliament composed of a National Assembly and a Senate. The National Assembly is elected by direct adult suffrage for a term of five years. Senators are elected for a nine-year term by an electoral college. One-third of the membership is renewable every three years. By an amendment following a national referendum in 1962 the President is elected by direct universal suffrage for seven years.

Education

Elementary and secondary education is free and compulsory for children between the ages of 6 and 16. The first five years of schooling are the same for all children aged from 6 to 11. All teachers and other staff personnel are civil service employees of the national government.

For school administration purposes, the country is divided into 17 districts or "academies," each headed by a rector appointed by the Minister of Education. The rectors supervise all educational matters in the districts. Each of these districts includes several departments where the Minister and the rector are represented by an inspector of the "academie." Curricula and teacher training are uniform for the country as the State alone has the right to grant certificates and degrees, even for pupils in private schools.

In the general secondary schools, the pupils are divided, after one term of common studies into a classical or modern group. Transfers from one group to another are decided by an Allocation Committee composed of the group of teachers from the five to eight classes at the same level which are to be found in schools of different types, after due regard to parents' wishes, together with the counselor and others qualified to give a considered opinion about the pupils (Reuchlin, 1964).

Secondary education in Lycees with classical and modern sides and in technical or agricultural Lycees lead

to the Baccalaureate or to the Technical Diploma. The Lower Technical Diploma is taken after two years (the 10th and 11th) in a technical Lycee. After the Baccalaureate examination or the Technical Diploma, students can pursue their studies at the university, in classes preparing for entry to the higher professional colleges, or in classes leading to the Higher Technical Diploma (Reuchlin, 1964).

Special Education and Rehabilitation Services

Taylor and Taylor (1960) report that a 1957 investigation undertaken in the public schools by the "Commissariat General au Plan" created in 1946 for the purpose of establishing a complete plan for the modernization and economical equipment of the schools in metropolitan France and its overseas territories found the following:

> 541,000 children of school age in public schools--that is, 10 per cent of the total school population in the whole of France--were designated as falling within the jurisdiction of special education: 175,000 mentally deficient, 55,000 emotionally disturbed, 8,000 with poor eyesight, 10,000 with defective hearing, 15,000 with speech difficulties, 8,000 criples, 110,000 with poor health (two-fifths of them receiving preventive treatment in an institution), 55,000 social cases, and finally, 15,000 varied cases (blind and deaf, and victims of chronic ailments such as diabetes, epilepsy, heart disease, rheumatism, and asthma.

France has a proud history of educational services for the physically handicapped. The first institution for the blind was a hospital founded in Paris in 1260 by Louis IX for 300 blind persons. The first school for both the blind and deaf in Europe was founded in Paris and exerted much leadership for the rest of Europe.

Special classes attached to the public elementary school provide for some categories of handicapped children. Residential schools are available for most handicapped groups. For example, there are 24 residential schools for the blind. Of these, four are public and the other 20 institutions are operated by religious organizations, chiefly Roman Catholic. Nine of the 24 institutions offer vocational instruction as well as elementary school instruction. There are also 16 trade schools and schools for rehabilitation for the blind, some taking adolescents, although most are for adults.

The deaf-mute is admitted to 39 establishments of the following types: (a) four national institutions under the authority of the Ministry of Public Health and of Population (Paris, Metz, Chambery, Bordeaux); (b) three public departmental establishments under the authority of the Ministry of National Education; (c) 32 private establishments directed by lay or religious organizations under the control of the Ministry of Health (Taylor and Taylor, 1960).

Residential treatment for children with neuromuscular disabilities and cerebral palsy takes place in hospitals, centers of functional re-education, medical-educational centers, and medical-vocational centers. These centers number 17 and are operated by religious organizations or lay voluntary organizations.

A program of correspondence instruction is available for the physically handicapped from either a public or a

private organization. The Association for the Paralyzed of France provides courses for its members. The National Center of Instruction by Correspondence of Vanves offers free primary, secondary, technical, and higher instruction which conforms to official programs.

Responsibility for special education is divided between the Ministry of National Education and the Ministry of Public Health and Population. Voluntary associations play an important role in the education and social welfare of the physically handicapped in France.

General Description of The Netherlands

Geographic

It has been said that "God made the world and the Netherlanders made the Netherlands."

> If geography could not be altered by men, the Netherlands as we know it today would not exist. Two-fifths of the country--containing more than half its people, and the cities of Amsterdam, Rotterdam and The Hague--would be under water if it were not for the intricate network of dikes, dams, sluices and pumps created and maintained by the Dutch. All Dutchmen are aware of this, although by now they tend to take it for granted, except when reminded by a tragedy of the proportions of the 1953 flood in southwestern Holland which killed 1,800 people and destroyed or damaged nearly 50,000 homes (Rachlis, 1963).

The outstanding feature of the 12,850 square miles of land is its flatness. The polder lands, which form approximately 40 per cent of The Netherlands, are subject to flooding at storm or spring tide levels in the absence of sea and river dikes. Drained and diked lands, called polders,

must be constantly drained by the power pumps which have replaced former picturesque windmills. One million, two hundred and eighty-five thousand acres have been reclaimed since the thirteenth century, and an additional 549,000 acres are being reclaimed from the shallow Zuider Zee (Yssel Lake), cut off from the sea by a barrier dam in 1932. The complete project will add seven per cent to the total land area.

Population

The Netherlands, with 916 people per square mile, is unrivaled in Europe in population density. The Netherlands has a population of approximately 12,152,000 and the Netherlands Antilles and Surinam have a population of about 500,000.

Only 14 cities have populations of over 100,000. Of these, only Amsterdam, Rotterdam and The Hague have more than half a million people and no city has more than a million. Two-thirds of the Dutch population is scattered among 968 communities, of which 533 have fewer than 5,000 each.

The people of The Netherlands have a common culture and language. They speak the Dutch language, which developed from ancient Germanic dialects. While not considered a bilingual country, The Netherlands has a second language spoken in the province of Friesland. Frisian is recognized by linguists as a language rather than a dialect.

Approximately 38.5 per cent of the population are Roman Catholic, 44.5 per cent (including 0.15 per cent who are Jewish) belong to the several non-Catholic Churches, and 17.0 per cent do not belong to any religion.

Economics

The Netherlands is an agricultural and commercial nation whose industry is increasing in importance. Freeman and Morris (1965) report that 20 per cent of the labor force are employed in agriculture, 37 per cent in industry, 24 per cent in trade and transport, and 19 per cent in other occupations.

Despite high population density there is a surplus of agricultural produce made possible by land reclamation, intensive scientific cultivation and cooperative crop distribution. Seed crops, flower bulbs, horticultural and dairy products account for one-quarter of exports. The highest use of fertilizer and the highest average wheat yields per acre in the world indicate the intensive agricultural emphasis. Farms are small with 42 per cent less than 12.5 acres.

Industrial output includes steel, metals, transport equipment, chemicals, oil, radios, textiles and ships. Chocolate, biscuits, margarine and other foodstuffs are also important products. Widespread cooperatives maintain high-quality products; they control a large percentage of the dairy output.

Amsterdam is the center for trade in tobacco, diamonds, precious metals and art treasures. The Netherlands is a founder member of the European Common Market.

Politics

The Netherlands is a constitutional hereditary monarchy, divided into 11 provinces, each with its own representative body, the Provincial States. The parliamentary assembly is called the States-General, and consists of the first and second chambers. The second chamber has 150 members elected for four years by proportional representation. The first chamber has 75 members who are elected by the Provincial Councils for six years. All persons 23 years of age may vote.

The Dutch constitution provides that the monarch is limited to the right to advise, to be heard and to warn. The Ministers are responsible. Under its parliamentary democracy, The Netherlands has changed the political make-up of its cabinet without strife or violence.

The main political parties are the Catholic Party and the Socialist Party. Both of these promote social legislation which serves the welfare of the people. Extremes of right or left have never had strong support in The Netherlands.

Education

A new education law was passed in 1963 designed to replace the previous and more complex educational system.

Education is compulsory for all children until they reach the age of 15. Primary education to age 12 is followed by opportunity to explore whether they will take pre-university or general post-primary education.

Pre-university education lasts for six years and is offered in the classical Gymnasium, the modern Athanaeum and the Lycee.

General post-primary education is divided into higher, lower and middle levels. Generally speaking, these schools seem to be concerned primarily with vocational education. However, common curriculum allows for some transfer between categories.

University education is essentially graduate training in The Netherlands. There are universities at Leiden, Utrecht and Groningin. There is also a municipal university at Amsterdam as well as the Free University. There is a Catholic University at Nymegen, the Netherland's School of Economics at Tilburg and technical colleges at Delft and Eindhoven.

The educational system allows significant freedom to educators. The Ministry of Education inspects schools but there is considerable local autonomy which allows for variety in types of schools and educational approach.

Special Education and Rehabilitation Services

Early in the nineteenth century voluntary organizations began to develop programs for the care of the

handicapped. In 1899 The Netherlands Central Society for the Care of the Disabled was organized. It is presently the principal national agency for direction of special education and rehabilitation programs.

The program for rehabilitation in The Netherlands is divided between the State, Protestant foundations and Catholic service organizations. Voluntary agencies receive much of their support from the State. One would expect that there would exist some conflict and competition with such an organizational structure.

The Municipal Social Employment Provision for Manual Workers was established by the Ministry of Social Affairs and Public Health in 1949.

> The basic purpose of the G. S. W. program was to find productive work for unemployed manual workers, particularly the disabled, by placing them in municipally controlled occupations suited to their individual capacities, and to help restore and increase their working capacities" (FitzPatrick, 1963, p. 87).

There is no system for compulsory registration of the disabled in the country. Some handicapped children are not reported early enough due to the absence of such a requirement and because parents may wish to conceal the disability.

Provision is made for the handicapped to attend the regular class where this is feasible. This approach keeps the disabled from becoming isolated when possible. However, special classes in regular schools are rare. In the education of the deaf there is also an attempt to

allow the child to enter as fully as possible into normal activities and social relationships of the hearing world.

There are no special education training colleges and no separate training program designed solely for the teachers of handicapped children. The qualifications for special education teachers are generally the same as those of regular teachers (Taylor and Taylor, 1960).

The teachers in special education receive a salary higher than that of the regular teachers. Salaries are paid by the national government. The overall financing of educational programs for the handicapped is shared by State and private groups, although the State is assuming more responsibility for such programs.

In reporting on the status of rehabilitation facilities in The Netherlands, FitzPatrick (1963) states: "The most critical need . . . is for comprehensive rehabilitation facilities for adults with the full range of medical, psychosocial, and vocational services in one center."

General Description of Yugoslavia

Geographic

Yugoslavia is located in southeastern Europe approximately in the middle latitudes of the Northern Hemisphere. It is the largest Balkan country and is bordered by Austria, Hungary, Rumania, Bulgaria, Greece, Albania, Italy and the Adriatic Sea. It has a territory of almost 100,000 square

miles, larger than any of its neighbors with the exception of Italy, and is the ninth largest country in Europe.

The country is shaped like a triangle, with its base resting on the Adriatic seaboard and its apex on the Rumanian border in northeastern Serbia. About four-fifths of the area is mountainous with the Dinaric Mountains as the largest range in Yugoslavia. The great Pannonian Plain is characterized by the slopes toward the north and the northeast, and the plains along the rivers which flow from the Dinaric System. The valleys of the Danube, Tisa, Sava, and Drava Rivers to the north and northeast is relatively flat and the most fertile part of the country.

The climate along the Adriatic Coast has dry, warm summers and mild, rainy winters. Central Yugoslavia has warm summers and cold winters. The Danube valley has a humid climate, hot and moist in the summer, and cold and snowy in the winter. Due to its karst topography, provincialism has been difficult to overcome.

Population

While Yugoslavia is the largest Balkan country in terms of geographical area, it is also largest in population. The 1967 Information Please Almanac, Atlas and Yearbook places the population at 19,511,000. Twelve per cent of the total population is of non-Yugoslav nationality. Hungarian, German, Rumanian, Slovak, and Czech minority groups are found in the northern part of the

country. Albanians and Turks are in the southern and eastern sections, and Italians are found mostly in the western zone.

A dividing factor in Yugoslav life is language. Three separate languages are spoken: Serbo-Croatian, Slovenian, and Macedonian, containing both Serbian and Bulgarian elements. The country has many dialects which has at times been difficult especially in the field of education. Illiteracy was long a problem with one-fourth of the present population in this category. It should be pointed out, however, that tremendous improvement has taken place relative to this problem in recent years.

The Worldmark Encyclopedia of the Nations reports that the religious identification of Yugoslavia is as follows: Orthodox, 41.4 per cent; Roman Catholic, 31.8 per cent; Moslems, 12.3 per cent; Protestant, 9 per cent; other, 1.3 per cent. Most of the Orthodox live in Serbia, Macedonia, and Montenegro, while Catholics are in Croatia and Slovenia. Most of the Moslems live in Bosnia-Hercegovina and Macedonia.

Economics

In November, 1945, a Constitutional Assembly proclaimed the establishment of the Federal People's Republic of Yugoslavia. Marshal Tito formed the new Republic consisting of the six republics: Serbia, Croatia, Slovenia, Bosnia-Hercegovine, Montenegro, and Macedonia.

The Leninist-Stalinists principles of economic development were soon found to be inadequate to meet the needs of the new Federation of Socialists States. McVicker (1957) points out that the government found by experience that the nationalization of industry bred "a power-hungry, top-heavy, inefficient, undemocratic bureaucracy which stifled workers' incentive and piled up deficits." Therefore, an attempt was made to have "society" replace the State as the proprietors of the means of production.

In 1950, the Worker's Self-Management program was formalized which gave a certain amount of control to the Yugoslav workers. McVicker (1957) states: "Titoist economic decentralization has created a system which is a compromise between the free and the strictly controlled markets." He also summarizes that the results of the Titoist system leaves little doubt that the system of worker self-management has had a certain amount of real success in the country.

About one-half of the population are farm workers. When agricultural collectivism was forced upon the people farm output declined, and since 1953, most of the farms have been returned to individual owners. Chief agricultural products are wheat, oats, barley, and corn. Grain crops are produced largely in the Danube Plain. Most other traditional agricultural products are also produced.

The mountain regions of the country contain many valuable mineral resources. Mining and ore processing are Yugoslavia's most important industries. It is one of

Europe's leading countries in mining lead, bauxite, antimony and is not far behind in mining of copper, mercury and zinc.

Belgrade is the capital and largest city with large industries, principally the manufacture of textiles and leather. Zagreb, the second largest city, is the financial and trading center of the country, as well as an important cultural and educational center.

Politics

Yugoslavia is a "socialist democratic federal state" made upon the six republics: Serbia, Croatia, Slovenia, Bosnia-Hercegovine, Montenegro, and Macedonia. The first united Yugoslav state came into being in 1918 from the ruins of two multinational empires, the Hapsburg and the Ottoman empires. The country has had four constitutions since its organization with the latest being adopted in 1963.

Legislative power is vested in the National Assembly consisting of a Federal Council and a Council of Producers. The executive branch consists of the President and a Federal Executive Council. Judiciary power is vested in the courts. The only functioning political party is the League of Yugoslav Communists. The leadership is drawn from the party's higher echelons.

Education

One of the most difficult problems of Yugoslavia has been that of attempting to bring about uniform educational

standards to all parts of the country. Prior to the Second World War little progress had been made in the educational system. Development had occurred at a different pace. For example, Slovenia was near the advanced level of the more developed Central European countries while the level in Bosnia-Hercegovina and Macedonia was so low that their people were mainly illiterate. The law passed in 1929 requiring school attendance for eight years was not properly enforced.

World War II had a serious impact on the development of education. Tomick (1963, p. 20) pointed out that one-half of the elementary schools were in no condition to be used, with 14 per cent being destroyed and 36 per cent severely damaged.

In 1945 a compulsory education law was passed which provided for a uniform educational system and seven years of compulsory education. This was increased to eight years in 1950. In 1954 the School Reform Commission began the Reform Movement in education. Its responsibility was to "study the school system in relation to the social, material, technical and cultural changes which had taken place in Yugoslavia in the post war period and to propose to the Assembly a new system of education" (Tomick, 1963). As a result of the work of the Commission the General Law on Education was passed in June, 1958.

The new law provided for pre-school training for children ages three to seven. Children from seven to

fifteen years of age were to attend elementary school. The elementary school is the foundation of the educational system. It was defined by the President of the Federal Council of Education, Rodoljub Colakovic, in the following manner:

> . . . the eight year school . . . ought to extend to the young generations the foundation of a modern general education which also included elements of technical training, to provide students with the foundations of a socialist education and to help them to properly make the choice of their profession by themselves (Tomick, 1963, p. 69).

Following elementary education the student may attend a secondary or vocational school. Secondary general education is obtained in the gymnasium, a four-year school for students who do not plan to go on to the university, but who will enter a career. In the gymnasium, general education has been revised to include technical education, taking into account practical training as well as abstract knowledge. The curriculum in each of the republics is prescribed by the Council of Education of the Republic in accordance with the basic curriculum established by the Federal Council of Education.

Vocational schools for (a) skilled workers; (b) highly skilled workers; (c) technical schools for the economy and public services; and (4) art schools allow opportunity for economic, labor, social and professional organizations to play a part in assisting in the development of the structure of the types of schools, and in decisions relative to curriculum.

The General Law also provided for all national minorities to have their language taught in all schools, including pre-school education. Concern for special schools was also evidenced by establishment of special facilities and programs as well as plans for special classes in the regular schools.

Education in Yugoslavia has become a symbol of national pride for the country has made tremendous strides despite the necessity of reconstruction following World War II, and the problems of economic underdevelopment. Tomick (1963, p. 103) stated:

> One who has talked with government leaders, reviewed the literature, and kept pace with the trends of education in Yugoslavia during the past period of development can only be impressed by the Yugoslav people's intense interest in and dedication to education as an essential element in their achievement of progress, national identity, and security.

Special Education and Rehabilitation Services

World War II had its effect on a large number of individuals, physically and emotionally. No exact data is available, but it has been estimated that over two million children were left homeless during the Nazi occupation and an additional two million were moved or deported. Over one million lost one or both parents and thousands grew up without a family life, sufficient food, clothing, medical care or housing (Taylor and Taylor, pp. 477-478).

The development of special education in the regular schools is progressing slowly due to lack of facilities,

equipment and trained personnel. The 1958 General Law on Schooling refers only to special classes in schools other than the regular schools except that those special classes currently in the regular school would continue until further development in this regard. The 1958 law was the first in the country to include special education for the physically, mentally, and socially handicapped.

The law on disability insurance of 1959 defines three categories of disability. They are (a) persons completely incapacitated for their previous vocation and any other type of vocation and who cannot be rehabilitated; (b) those who are partially able to perform their previous work or similar task and who cannot be trained for full-time work in any other vocation; and (c) disabled persons who are unable to perform their normal task but who might work full-time in another vocation after suitable training. These persons who have been disabled before reaching age 45 for men and 40 for women are entitled to vocational rehabilitation (FitzPatrick, 1963).

Commissions consisting of two or more physicians, a vocational counselor, a social worker, and a social insurance member, are set up to make a diagnosis, prognosis, evaluation of the degree of handicap, proposed program of rehabilitation, and any other matters pertinent to the case. Vocational rehabilitation is carried on in commercial or industrial institutions, in sheltered workshops, in special schools, or in rehabilitation centers. Medical rehabilitation

is carried on in health service facilities while vocational rehabilitation is the responsibility of the Institute of Social Insurance and the Department of Labor.

FitzPatrick (1963) has given a comprehensive list of rehabilitation facilities established in the country by 1960 including physical therapy departments, certain outpatient clinics, rehabilitation centers, vocational training centers, children's units, convalescent centers, and other specialized facilities.

Sampling Procedures and Research Population

Arrangements were made with Dr. John E. Jordan to visit the countries involved in the study in order to work with the research collaborators, working out the problems of translation, sampling, preparation of materials, and developing procedures for data collection. Dr. Jordan returned again prior to the data gathering period to work out any possible difficulties experienced in preparation.

Data was collected primarily by group administration with the exception of Belgium where approximately one-half of the sample was gathered by individual contact. In all countries an effort was made to select typical schools for the Education group and administer the instrument to all teachers in the school. This was also true of the SER group. It was believed that this would tend to make the sample more representative. One of the problems of a study of this nature is the representativeness of the research sample.

The administrative procedures were developed for use in all countries. A set of instructions (Appendix B-1) was developed which consisted of: (a) a statement of appreciation for the cooperation of the group; (b) a general statement of the reason for the investigation; (c) a statement of the format of the administration; and (d) an oral explanation of the various instruments.

The instruments (Appendix A) were administered in the following order:

1. Attitudes Toward Education Scale
2. The Survey of Interpersonal Values
3. The Personal Questionnaire
4. The Attitudes Toward Disabled Persons Scale
5. The Personal Questionnaire (HP)

Belgian Sample

This population was obtained in cooperation with Dr. Francine Robaye, Department of Differential Psychology, the Free University of Brussels. The sample was drawn from the greater Brussels area. The instruments were administered according to the plan of the overall study. Most of the instruments were taken on an individual basis. The total sample has an N of 127 with the largest and perhaps most representative group being Education with an N of 51. Sex designation was inadvertently omitted from the data, thus no analysis in this regard is possible.

Danish Sample

The data was gathered in cooperation with Miss Karen Hansen of the Special Education section of the Ministry of Education in Copenhagen, and Mr. N. E. Söndergaard, Director of the Geelsgard Boarding School in Virum. The sample had an N of 154 with a male population of 97. There were no female respondents in the M group. The instruments were principally administered in groups and an attempt was made to select typical schools and groups. Miss Hansen reported that the SER and E groups were the most representative of the occupational categories.

English Sample

This sample was gathered by The Spastic Society under the direction of Mr. James A. Loring. The SER group was obtained from a population of those working in special education and rehabilitation in the greater London area. The M group was gathered with the cooperation of S. Moore-Coulson, Head of Education and Industrial Research Division, Confederation of British Industry. The E group was taken from regular schools under the direction of Mr. J. H. Q. Fox, of The Spastics Society, who made an attempt to select typical schools. The labor group was omitted from the analysis due to the small number of respondents.

French Sample

The data in France was obtained through the cooperation of the International Children's Centre in Paris,

under the direction of Madame Jacqueline Fabia, M. D. and with the assistance of Mademoiselle Annik Rouillon, M. D. Group administration procedures were carefully observed. The total N was 223 with 87 males and 136 females.

The Dutch Sample

The study was carried out under the direction of A. Th. Schweizer, M. D. of the University of Leiden by contract with Dr. Sheldon D. Rose of the Sociaal-Pedagogisch Institvvt, University of Amsterdam. Mr. T. Fris, also of the Institute, assisted in the study.

A pretest for each occupational category with 10 exploratory sets was given to enable the researcher to deal with any problems that might arise. A careful attempt was made to select a population in each category that was consistent with the purposes of the study. Mr. Fris reported that he felt that the distance between workers and employers in the sample is less than in reality. The total N was 232 with a male population of 130.

Yugoslavian Sample

This data was gathered in the cities of Zagreb and Celje. Professor Angelina Boric, Dean of the Institute of Defectology of the University of Zagreb, was responsible for the study. Dr. Sulejman Masovic of the Institute also assisted in organizing and directing the study. The Celje data was gathered by Mr. Roman Boban, Director of a school for the mentally retarded. Mr. Frano Berginc cooperated

in securing the sample from the L and M groups in Celje. These groups were associated with the EMO industries--Emajlernica Metalna Industrija Orodjarna.

Selection of Variables

The selection of variables was dictated primarily by theoretical considerations previously reviewed and by well established sociological tradition in respect to the selection of demographic variables.

The variables selected were those suspected to be in some theoretical relationship to the two criterion variables of attitudes toward education and physical disability. Other variables were included which were intended to provide information in respect to the characteristics of persons who work with the disabled, rather than in respect to attitudes toward disabled persons. These variables are those of: (a) mobility, (b) personalism, (c) institutional satisfaction, (d) religiosity, and (e) change orientation.

The major variables used in the study are discussed further in the following sections.

Attitudes Toward Disabled Persons Scale

The items used in this scale were taken from the Attitudes Toward Disability Scale (Yuker *et al.*, 1960). Test-retest reliability scores were reported to range from .67 to .78. Construct validity data (Yuker *et al.*, 1960, pp. 5-8) that were collected from disabled employees of Abilities, Incorporation of New York, a light manufacturing

company which employs disabled workers, also indicated the adequacy of the scale. Among these employees the test was found to be negatively related to age and anxiety, and positively related to verbal intelligence and job satisfaction. Females and those with low absentee ratings made higher scores. Although the validating group itself has questionable generality and the rationale for item selection is not clear, the test deserves further study and appears to be the only instrument available.

Siller and Chipman (1964) attempted to determine the factorial structure and correlates of the Attitudes Toward Disabled Persons Scale. Their data indicated acceptable reliability and comparability over age and educational levels.

The Attitudes Toward Disabled Persons Scale used in the present study was modified so as to make provisions for respondent scoring. The Likert-type format was retained, but the response categories for each item were reduced from seven to four. Another modification was that instead of requiring the respondent to transfer a number from a set of coded categories at the top of the page to indicate his response, the item alternatives were stated following each question. Since it was intended to submit the items to scale analysis rather than follow the suggested scoring system, there was no need to follow the same numerical scores.

Fifteen of the twenty attitude items are statements of differences between disabled persons and those not

disabled, and agreement with those statements is interpreted as reflecting an unfavorable attitude. Consequently, the scoring is reversed (see Appendix A-1) in the remaining five items in order that a lower score will indicate a more favorable attitude.

Attitudes Toward Education Scale

The Attitudes Toward Education Scale is an adaptation of Kerlinger's scale (Kerlinger, 1958, 1961; Kerlinger and Kaya, 1959). Modifications similar to those described in the Attitudes Toward Disabled Persons Scale were made for this scale.

Educational attitudes have been conceptualized by Kerlinger as hinging on two relatively independent underlying factors or ideologies. They are: traditionalism and progressivism. Kerlinger has reported that traditionalism can be conceived as the affirmation of a stand which emphasizes a conservative traditional approach to educational issues. Progressivism, on the other hand, is not just the opposite of traditionalism, but has an existence of its own.

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 final instrument consisted of 20 items of which ten are progressive and ten are traditional. As employed in this study the progressive and traditional items will be analyzed independently as two separate scales.

The Education scales were included in the study for several reasons. First, there seems to be justification in

hypothesizing a relationship between progressive attitudes toward education and positive attitudes toward disabled persons. The permissive-progressive factor in education emphasizes problem-solving, in which education is seen as growth and the child's interests and needs are seen as basic to education. Equality and warmth in interpersonal relationship are highly valued. Internal rather than external discipline is considered important. Social beliefs tend to be liberal and education is viewed as an instrument of change.

The Intensity Scales

The intensity function as described by Suchman (1950) was adopted to measure intensity for both attitude scales.

> 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).

Modification was made in that four response categories were used instead of the three used by Suchman.

Interpersonal Values

The selection of the Gordon Survey of Interpersonal Values (Gordon, 1960), was based on two considerations. First, an instrument was needed which would yield scores

on items that seemed logically related to the values under test in the hypotheses. These values are: those of asset and comparative orientation toward others. Of the six sub-scales in the instrument, the one for Benevolence is described as follows: "Doing things for other people, sharing with others, helping the unfortunate, being generous" (Gordon, 1960, p. 3). In subsequent research reports, Benevolence was found to correlate .49 with the Nurturance score on the Edwards Personal Preference Schedule and negatively with Achievement -.24 and Aggression -.28 (Gordon, 1963, p. 22).

On the basis of the description, item content, and inter-correlations with the EPPS, it was felt that the Gordon Benevolence Value scale would be an adequate operationalization of asset value.

The second value to be operationalized was that of a comparative orientation toward others. The Gordon manual gives the following definition for Recognition Value: "Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition" (Gordon, 1960, p. 3). Conformity value was defined as: "Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist" (Gordon, 1960, p. 3). Leadership was defined as: "Being in charge of other people, having authority over others, being in a position of leadership or power" (Gordon, 1960, p. 3). All three of these values would appear to involve rankings

of others on some kind of absolute scale, either of social acceptability (Conformity), achievement (Recognition), or power (Leadership). Consideration was given to the scale content and Recognition and Leadership items were judged to be most representative of Comparative values.

A second consideration in the selection of the instrument was the suggested validity in a different culture than the one for which it was designed. Gordon (1963, pp. 17-21) reports that translations in French and Japanese yielded scores between known groups consistent with expectations. The forced-choice format of the instrument may also be less sensitive to subtle shifts in item meaning resulting from translation than a format in which each item is separately responded to as "agree" or "disagree," or according to a Likert-type format. It is expected that in the present study some estimate of validity may be obtained through confirmation of predictions about the values of known groups used in the study (predictive validity), and from expected relationships between other scores (concurrent validity).

Personal Questionnaire (General)

This questionnaire was composed of two parts. The first part was concerned with contact with education and attempted to elicit knowledge about education from the respondent. The second part of the questionnaire was intended to provide personal information about the respondents such as age, income, education, marital status, number of children, mobility, and other items.

Contact with education was measured by four items (PQ 4-7) where the respondents were asked to indicate: (a) how much they had worked in schools or educational settings; (b) what per cent of their income was derived from such work; (c) how they generally felt about such work; and (d) what other work opportunities they could have alternatively chosen. An attempt was made to determine various kinds or levels of education experienced, and varieties of contact with education.

Preferences for personal relationships were measured by three items (PQ 21-23) in an attempt to identify respondents, or groups of respondents, along a traditional-modern dimension. The predominance of affective relationships as opposed to affectively neutral relationships is supposedly one of the distinguishing characteristics of the "Gemeinshaft," or traditional orientation (Loomis, 1960, p. 61). The respondent is asked to indicate the approximate per cent of personal interactions on the job which were with persons who were close personal friends. Another question (PQ 22) asked how important it was to work with persons who were close personal friends. A third question (PQ 23) was intended to signify diffuseness of speciality of personal interactions under the hypothesis that the traditionally oriented person is more likely to have personal interactions which are diffused between job and family, or other affective non-job interactions. Loomis comments:

> Members of the Gemeinshaft-like system are likely to know each other well; their relationships are functionally diffuse in that most of the facets of human personality are revealed in the prolonged and intimate associations common to such systems (Loomis, 1960, p. 72).

In accordance with our hypotheses about values, the SER group, being committed to asset values, being more concerned with intrinsic valuation of the person rather than valuing him for his absolute achievements, would also express a greater need for personal interactions generally, and a greater diffuseness of interpersonal relationships.

Change orientation items (PQ 39-43 and 47) elicited attitudes toward change in such areas as health practices, child-rearing practices, birth control practices, automation, and political leadership. It was assumed that people expressing positive attitudes toward education and disabled persons would show greater flexibility and openness toward change. It was postulated that the SER group would score higher than the other groups on this variable, with the M and L groups expected to respond in ways suggesting resistance to change. Self change (PQ 47-49) and future orientation (PQ 52-54) were also included for measuring attitudes toward change. These items were adapted from Programa Inter-Americano de Informacion Popular (PIIP) in Costa Rica (Felty, 1965).

Institutional satisfaction was measured by a set of items (PQ 31 A-I) adapted from Hyman (1955, p. 400). The institutions selected (schools, business, labor, government,

health services, and churches) were listed in the questions. Respondents were asked to indicate whether they judged these institutions as excellent, good, fair, or poor in respect to how well they fulfill their role in the community. It was hypothesized that people working in special education and rehabilitation would be less satisfied with institutions generally than other groups.

Religiosity was measured by use of three questions (PQ 19, 20, and 38). The questions asked were: (a) religious preference, (b) the felt importance of religion to the respondent, and (c) conformity to the rules and regulations of the religion. "Religiosity" seems to be related to the traditional-modern dimension, and higher scores would be expected among the lower income groups, and among persons with less education.

Demographic characteristics were ascertained by asking respondents to indicate their placement on several variables often found to be of significance in sociological analysis. These were age (PQ 8), marital status (PQ 12), number of children (PQ 13), number of siblings (PQ 16, 17), education (PQ 26, 27), occupation (PQ 37), home ownership (PQ 29), rental (PQ 30), rural-urban youth (PQ 9) and income (PQ 14). Analysis will not be made on all of these variables in the present study but will be utilized more fully in the larger Cross-Cultural study previously described.

Personal Questionnaire: HP

Contact with physically handicapped persons was measured by nine items (PQ: HP 1-9) in which respondents were asked to indicate: (a) the kind of physical disability with which they had had the most contact, or knew the most about (PQ: HP 1, 2); (b) the type of relationship the respondents had had with physically disabled persons--family, friends, working relationships, casual, etc. (PQ: HP 3); and (c) the approximate number of encounters the subjects had had with physically handicapped persons (PQ: HP 4). Other questions were designed to explore alternative opportunities (PQ: HP 9), enjoyment of contact with handicapped persons (PQ: HP 8), ease of avoidance of such contacts (PQ: HP 5), material gain from contact with the handicapped (PQ: HP 6), and per cent of income derived from working with the disabled (PQ: HP 7).

Statistical Procedures

Descriptive Statistics

Responses from the instruments were scored on a special scoring sheet and then transferred to punched cards for the purpose of feeding the data into the CDC 3600 computer, available at Michigan State University.

Two frequency Column Count Programs (Clark, 1964) designated as FCC I and FCC II, were used. These programs were utilized in tabulating the frequency distributions for every item. This proved to be a very useful step in

selecting variables for analysis and in gaining a "clinical feel" of the data.

Inferential Statistics

The one- and two-way analysis of variance was used for testing hypotheses about the difference between group means. For convenience of computer programming, the F statistic was used for testing of all mean differences, even though differences between two means are usually tested by the t statistic. Comparisons of F and t statistics have shown that the results are the same (Edwards, 1965, p. 146). If an F between group means was significant, inspection of the size of the two means indicated which one was the highest and consequently the main contributor to the differences reflected in the F ratio.

While a significant overall F leads to non-rejection of the hypothesis being tested, we do not know whether every mean is significantly different from every other. Several methods have been proposed by statisticians for determining the nature of the differences between treatment means. The F test for the four group comparisons is the usual one while the F test used to test for differences between the adjusted means of the "pairs-of-groups" is equal to a two-sided t test while also fully accounting for the other experimental factors. The adjusted mean equalizes or accounts for the variance in the size of the group samples as well as the

unequal sex distribution within the samples. This procedure for testing for significance among multiple means is approximately equal to Duncan's Multiple Means test (Edwards, 1950; Kramer, 1956, pp. 307-310) up to and including three treatment means. The procedure is somewhat more liberal than Duncan's when more than three means are included, thus increasing the likelihood of Type I error. The procedure also does not account for the non-independence among the pairs-of-treatment means.

The UNEQ1 routine (Ruble, Kiel, Rafter, 1966) was used to calculate the one-way analysis of variance statistics. The program was specially designed to handle unequal frequencies occurring in the various categories. The computer "print-out" also provided the frequencies, sums, means, standard deviations, sums of squares, and sums of squared deviations of the mean for each category, in addition to the analysis of variance tables. The F statistic was also printed out and enabled the researcher to know at a glance whether or not the F was significant.

The UNEQ1 routine also contains provision for designating one or more dependent variables as missing for an observation, but incorporating other dependent variables listed on the Analysis of Variance table as non-missing. The observation is then ignored for all dependent variables with missing values, but used in the analysis for all dependent variables with non-missing values. The number of

missing values in each category is printed after the table giving statistics for the categories for each dependent variable.

A two-way analysis of variance design for unequal N's was used to analyze group-sex interaction (Ruble, Paulson, and Rafter, 1966). Since the samples were not equal in size or in sex ratio within groups an "adjusted mean" was computed on which to base all F tests. The adjusted mean is shown in the tables along with the obtained mean.

Relational and Predictive Statistics

The computer programs at Michigan State University enabled the researcher to obtain the following measures of association for the purpose of predictive and relational analyses: (a) zero-order correlations, (b) multiple correlations, and (c) partial correlations. The programs provided a host of data including means and standard deviations for each variable, the matrix of simple correlations between all variables, the multiple correlations of selected variables used in the analyses, a test of significance for each beta weight, and the partial correlations between each predictor and the criterion.

The zero-order correlational analysis (Ruble and Rafter, 1966) provided a matrix of simple correlations between all variables for the total sample and for the four groups used in the study. Tests of significance of the

correlation coefficients from zero are the usual ones, with tables entered for the appropriate degrees of freedom.

Multiple regression analysis (Ruble, Kiel and Rafter, 1966a) was carried out on the two criterion variables, attitudes-toward-handicapped persons and progressive and traditional attitudes toward education, with contact and change variables as the predictors. The use of multiple regression analysis was supported by Ward (1962), who observed that it "not only reduces the dangers inherent in piece-meal research but also facilitates the investigation of broad problems never before considered researchable" (p. 206). Since the computer program for multiple regression did not "handle missing data," persons with missing data were dropped from that problem.

Partial correlation is one of the outputs of the general multiple regression model (Ruble, Kiel and Rafter, 1966a) used in the CDC 3600 program. The greatest advantage of using partial correlation is that a number of variables which are assumed to have some relationship to a criterion, or dependent variable can be examined simultaneously. When a series of Pearsonian product-moment r's are computed between a criterion and a set of variables considered to be predictors of the criterion, spurious conclusions may be made because the predictor variables are themselves interrelated, rather than predictive of the criterion. However, partial correlation helps solve the

problem by taking into account these relationships among the predictor variables in computing the true correlation of each variable with the criterion. That is to say, the effects of all but one are held constant.

The Problem of Scale and Intensity Analyses

It was planned at the outset of the study to perform scale and intensity analyses on the data. The computer program currently available was known as Multiple Scalogram Analysis (MSA), developed by Lingoes (1963) and refined by Hafterson (1964). The "CUT" computer program by Hafterson (1965) determined each possible cutting point as well as the number of errors involved in each cut. This method was found to be much more economical, in that it saved numerous hours of work and avoided errors which would have resulted from longer and more tedious methods (e.g., Suchman, 1950; Waisanen, 1960). The dichotomized items resulting from the "CUT" procedure were then to be scaled by the Multiple Scalogram Analysis program. Thus the MSA program would have selected the items forming Guttman-type scales from the attitude instruments used in the study.

Two recent doctoral dissertations (Felty, 1965; Friesen, 1966) which used the MSA program failed to obtain sufficient evidence that the items would form Guttman-type scales. It should be pointed out that the Lingoes procedure can only extract unidimensional scales that exist in a set of items. However, it is "more reasonable" to assume that

attitudes are multidimensional, and as such scale and intensity analyses would be more meaningful if the multidimensional nature of attitudes are revealed by some special technique. Guttman and Lingoes (1966) have revised the original procedures to make provisions for both unidimensional and multidimensional analyses. This new computer program (MSA-1) is not yet available at Michigan State University. Hence, the attitude scales in the present research could not be submitted for scale and intensity analyses.

Major Research Hypotheses

Hypotheses Related to Contact Frequency, Intensity, and Attitude Scores

H-1: Contact-Intensity Interactions

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

Hypothesis Derivation.--From considerations of Guttman and Foa (1951), Foa (1950), and Rosenberg (1960), to the effect that contact frequency is directly related to attitude intensity, regardless of content directions (see Chapter II).

Hypothesis Instrumentation.--Contact frequency was measured by direct question (PQ: HP 4). The intensity

scores were obtained through independent intensity questions following each attitude content statement on both attitude scales (Appendix B-4).

H-1b: The more frequent the contact with education, the higher will be the scores on the intensity statements of the Attitudes Toward Education Scale, regardless of whether attitude is traditional or progressive.

Hypothesis Derivation.--Same as H-1a above.

Hypothesis Instrumentation.--Contact frequency was measured by direct question (PQ 4, Appendix B-1) and education intensity scores were obtained as in H-1a.

H-2: Contact-Frequency Interactions

H-2a: High frequency of contact with physically 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.--From considerations of studies by Homans (1954), Zetterberg (1963), and various studies in special education and rehabilitation reviewed in Chapter II.

Hypothesis Instrumentation.--Attitudes toward disabled persons were measured by a 20 statement attitude instrument developed by Yuker et al. (1960) and modified for the purposes of the present study (see Disabled Persons Scale, Appendix B-4). Contact with physically disabled persons was determined by direct question in

the Personal Questionnaire (PQ: HP): frequency by PQ: HP 4; alternatives by PQ: HP 9; enjoyment by PQ: HP 8; and avoidance by PQ: HP 5.

H-2b: High frequency of contact with education 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 contacts.

Hypothesis Derivation.--Same as H-2a above.

Hypothesis Instrumentation.--Attitudes toward education were measured by the Education Scale. This scale is a modification of a 20 statement attitude instrument developed by Kerlinger (1959). Contact variables were measured by direct questions in the Personal Questionnaire.

Hypotheses Related to Attitude and Value Interactions

H-3a: Persons who score high in need for power and control over others will tend to score low in acceptance of disabled persons.

H-3b: Persons who score high in need for power and control over others will tend to score low in progressive attitudes toward education and high in traditional attitudes toward education.

Hypothesis Derivation (H-3a,b).--From considerations of Wright in respect to asset and comparative valuations of others (see Chapter II), and of Rosenberg (1956) who suggested that the more the belief content of an attitude is instrumental to value maintenance, the more favorable

will be the evaluation of the object of the attitude. There is evidence to support the contention that persons with high needs for power and control over others are applying a comparative yardstick in evaluations of others and should be expected to devalue persons with disabilities as well as progressive attitudes toward education since the latter usually implies changes in the status quo. Some empirical evidence of this appears in findings of Whiteman and Luckoff (1962) in respect to blindness, Felty (1965), and Friesen (1966).

Hypothesis Instrumentation (H-3a,b).--Need for power and control measured by the Leadership (L) scale of the Gordon Survey of Interpersonal Values (Appendix B-2); Attitudes toward disabled persons as in H-2a, and attitudes toward education as in H-2b.

H-4a: Persons who score high in need for recognition and achievement will tend to score low in acceptance of disabled persons.

H-4b: Persons who score high in need for recognition and achievement will tend to score low in progressive attitudes toward education and high in traditional attitudes toward education.

Hypothesis Derivation (H-4a,b).--Same as H-3a,b above.

Hypothesis Instrumentation (H-4a,b).--Need for recognition and achievement measured by the Recognition (R) scale of the Gordon Survey of Interpersonal Values (Appendix B-2). Attitudes toward disabled persons as in H-2a and attitudes toward education as in H-2b.

H-5a: Persons who score high in need to help others, to be generous, will tend to score high in acceptance of disabled persons.

H-5b: Persons who score high in need to help others, to be generous, will tend to score high in progressive attitudes toward education and low in traditional attitudes toward education.

H-5c: Women will score higher than men in (a) the need to help others, (b) positive attitudes toward the physically disabled, and (c) progressive attitudes-toward-education.

Hypothesis Derivation (H-5a,b,c).--Same as H-3a,b above, but stated in terms of asset-value orientation rather than comparative-value orientation.

Hypothesis Instrumentation (H-5a,b,c).--Need to be helpful and generous was measured by the Benevolence (B) scale of the Gordon Survey of Interpersonal Values, attitudes toward physically disabled persons as in H-2a, and attitudes toward education as in H-2b.

Hypothesis Related to Change Orientation and Attitude Scores

H-6a: Persons who score high on change orientation will score high on positive attitudes toward physically disabled persons.

H-6b: Persons who score high on change orientation will score high on progressive attitudes toward education and low on traditional attitudes toward education.

Hypothesis Derivation (H-6a,b).--As in H-3 and extended to connote that high scores on change orientation represents departure from the status quo and high relationship to new ideas (i.e., progressivism) and care for the disabled (i.e., concern for individual differences).

Hypothesis Instrumentation (H-6a,b).--Change orientation was measured by questions 39-43 in the Personal Questionnaire. These questions deal with change in health practices, child-rearing, birth control, automation, political leadership, and self change. Attitudes toward the physically disabled measured as in H-2a and attitudes toward education as in H-2b.

Hypotheses Related to Characteristics of Those Working Directly with the Physically Disabled (SER)

H-7: Persons working directly with disabled persons (SER) will have a lower mean attitude-toward-disabled-persons score than will persons in other occupational categories.

Hypothesis Derivation.--From considerations of Zetterberg (1963) to the effect that high frequency of contact is positively associated with favorableness of attitude if (a) the interaction could be easily avoided, and (b) there are other rewarding activities to engage in. The linkage of (a) and (b) with occupational categories rests on the assumption that a measure of choice and job alternatives was present in the selection of employment, i.e., that SER employees chose this occupation in preference to others.

Hypothesis Instrumentation.--Attitudes-toward-physically-disabled-persons measure by the ATDP scale.

H-8: The SER group will have a higher mean score than will persons in other occupational categories in respect to the value of Benevolence and lower mean scores in respect to the values of Leadership and Recognition.

Hypothesis Derivation.--Same as H-3a,b above and applied specifically to the SER group rather than to those who measure high on the value scales.

Hypothesis Instrumentation.--Same as H-3,4,5.

H-9a: The SER group will have a higher mean score on progressive attitudes toward education than will persons in other occupational categories.

H-9b: The SER group will have a lower mean score on traditional attitudes toward education than will persons in other occupational categories.

Hypothesis Derivation (H-9a,b).--Same as H-3 and H-4 and applied specifically to the SER group rather than to those who measure high on progressive attitudes and low on traditional attitudes toward education.

Hypothesis Instrumentation (H-9a,b).--Same as H-5b above.

H-10: The SER group will have higher mean scores than will other occupational groups on the following change orientation variables: (a) health practices, (b) child-rearing practices, (c) birth control practices, (d) automation, and (e) self change.

Hypothesis Derivation.--Same as H-6a,b, and extended to postulate that persons who score high on progressive attitudes toward education will also score high on change orientation variables since both areas represent dissatisfaction with the status quo and emphasize the individual and empirical solutions to current problems.

Hypothesis Instrumentation.--Change orientation measured as in H-6a,b.

H-11: The SER group will have higher mean scores than other occupational groups on the amount of contact with mentally retarded or emotionally disturbed persons.

Hypothesis Derivation.--The SER group was chosen for known prolonged contact with the physically disabled. The current hypothesis postulates a generalization effect in that increased contact with one area of disability implies increased contact with other areas of disability or exceptionality.

Hypothesis Instrumentation.--Contact frequency with the physically disabled measured as in H-1a and contact frequency with the mentally retarded and with the emotionally disturbed measured by questions from the Personal Questionnaire (PQ: HP 10, 11).

Limitations of the Study

The major focus of the present study is on cross-group comparison within countries which will enable cross-national comparisons to some extent in this study, but to

a much greater degree in the international cross-cultural study previously referred to in Chapter I. Limitations of this type of study are related to the general and specific problems of comparative social research.

Concept Equivalence

One of the goals of comparative research is to develop procedures for measuring concepts that can be defined in ways which are not culture bound. The present study allows for a test of the instruments in a variety of cultural situations. Suchman (1964) discusses three problems which relate to such studies:

1. The development of a set of concepts which is expected to operate, and is testable, in the several cultures which are to be analyzed comparatively.
2. The phrasing of such concepts in terminology which is defined and understood in the same way by the analysts of the several cultures.
3. The collection of data which are relevant to these concepts and comparable in the several cultures.

Careful consideration was given by the research team to concept definition and theoretical formulations prior to item translation and data collection. As previously mentioned, it was planned to use Guttman's method of scale and intensity analysis which is designed to get at the problem of concept equivalence. However, previous efforts by Felty (1965) and Friesen (1966) failed to produce sufficient evidence that this method would be useful. Lingoes and Guttman (1966) have revised the original procedures to make provision for both unidimensional and multidimensional

analyses. This aspect of the study is limited by the unavailability of the new computer program (MSA-1).

Language Equivalence

It was necessary to work with experts in each country to insure that the instruments were linguistically equivalent. Jacobson (1954) reported on a study of Teacher attitudes carried out under the auspices of the Organization for Comparative Social Research (OCSR). He stated: "The translation had to reproduce the English meaning adequately, and the adequate translation had to be judged in terms of its psychological equivalence to the forms being used in the other countries" (Jacobson, 1954, p. 45).

It is felt by the research coordinators in each country and the writer that translation of the instruments used in the study was accomplished successfully enough to insure reasonable linguistic equivalence.

The Problem of Sampling

One of the first steps in drawing a sample is to define the population one wishes to study. Sampling is based upon objective criteria such as age, sex, occupation, residence, etc. Sampling bias places certain limitations on the generality of the results. Due to various technical limitations, it was not possible to control the sampling process for each group in each country as planned or as exactly as desired. However, an attempt was made in each country to select respondents in occupational categories

who would most typically be representative of that group. A major concern was with obtaining a large enough representation within each group for analysis, while keeping in mind the necessity of adequate sampling. It was reported that the SER and E groups were thought to be representative of the total population. Some difficulty was experienced in attempting to draw samples from the M and L groups. The ideal situation would be to secure a completely comparable representative sample at random that would reflect major distribution of group characteristics within the country. It is necessary for generalizations to be limited due to suspected problems of sampling bias. Although this situation would impose a serious limitation on a study purporting to be representative, it appears at least adequate for an exploratory study of this nature.

CHAPTER IV

ANALYSIS OF THE DATA

The analysis of data is organized into two main sections:

Section 1: descriptive data on designated characteristics of the sample;

Section 2: testing of hypotheses and comparison of mean differences of various scores when respondents are divided according to: (a) occupational categories; (b) sex,; (c) contact with criterion; and (d) other indices. Correlational relationships (zero-order, partial, and multiple) will also be studied for selected variables.

Section 1: Descriptive Data

Descriptive characteristics of the sample are derived from a combination of the FCC I and II and the CDC 3600 MDSTAT programs which provide a number of statistics useful for simple demographic descriptions.

Table 1 gives the distribution of the total sample according to sex and occupational category. Table 2 presents the occupational composition of the total sample divided by sex and four respondent groups. Close observation of the tables reveals the omission of sex

TABLE 1.--Distribution of respondents according to sex and occupational group in six countries.[1]

Occupational Group[2]	Country and Sex													
	Belgium	Denmark		England		France		The Netherlands		Yugoslavia		Total[5]	
	Total[3]	M	F	M	F	M	F	M	F	M	F	M	F
SER	28	21	23	7	15	28	41	18	33	16	31	90	143
E	51	25	22	14	10	31	37	25	36	19	21	114	126
M	20	30	0	17	1	18	31	55	3	35	11	155	46
L[4]	28	17	11	--	--	10	27	32	30	34	25	93	93
Total	127	93	56	38	26	87	136	130	102	104	88	452	408

[1]In some instances the N's do not agree exactly between Tables 1, 2, and the other statistical tables. This is due to problems of missing data and minor differences in classifications.

[2]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/ Executives

[3]Sex designation was inadvertently omitted in Belgium, thus no sex analysis is possible.

[4]L group is omitted due to sample size.

[5]Does not include Belgian sample.

TABLE 2.--Occupational composition of total sample by sex and occupational group[1] in five countries.

Code	Occupation Description	Country[2] and Sex											
		Denmark		England		France		The Nether-lands		Yugo-slavia		Total	
		M	F	M	F	M	F	M	F	M	F	M	F
(01-09, SER)													
01	Adm. persons	-	-	4	2	1	3	1	3	-	-	6	8
02	Teachers	20	22	2	13	15	17	8	5	16	31	61	88
03	School spec. ser.	-	1	1	-	-	-	2	9	-	-	3	10
04	University tchrs.	-	-	-	-	1	1	1	-	-	-	2	1
05	Medical	1	-	-	-	2	-	1	1	-	-	4	1
06	Psych., soc. wkrs.	-	-	-	-	-	7	-	2	-	-	-	9
07	Para-medical	-	-	-	-	9	11	-	9	-	-	9	20
08	Unskilled	-	-	-	-	1	1	-	2	-	-	1	3
09	Other	-	-	-	-	-	-	-	1	-	-	-	1
(10-19, Educators)													
10	Elem. teachers	13	17	-	-	15	20	2	22	6	8	36	67
11	Sec. teachers	9	5	6	5	6	3	4	3	13	-	38	16
12	Guidance	1	-	-	-	1	4	-	2	-	-	1	6
13	Spec. services	-	-	-	-	2	2	-	-	-	-	2	2
14	Adm. personnel	1	-	6	2	-	-	4	-	-	-	11	2
15	University tchrs.	-	-	2	3	1	6	12	8	-	-	15	16
16	Open	-	-	-	-	-	1	-	-	-	-	-	1
(20-29, Medical)													
20	General practitioners	1	-	-	-	3	2	-	-	-	-	4	2
21	Surgeons	-	-	-	-	1	-	-	-	-	-	1	-
23	Dentists	2	-	-	-	-	-	-	-	1	2	3	2
24	All other medical	-	-	-	-	1	-	-	-	-	-	1	-
25	Open	-	-	-	-	2	7	-	-	-	-	2	7
26	Tech. & prof.	-	-	-	-	2	4	-	2	1	2	3	8
27	Non-tech. & non-prof.	-	-	-	-	-	2	1	-	-	-	1	2
(30-39, Other Professional Personnel)													
30	Engineers	3	-	-	-	4	-	3	-	2	-	12	-
31	Lawyers	2	-	2	-	1	-	1	-	4	1	10	1
32	Ministers	-	-	-	-	-	-	1	-	-	1	-	1
35	Researchers	-	-	1	-	1	-	3	-	1	-	6	1
36	Social workers	-	-	-	-	-	15	-	-	1	-	1	15
37	Other	-	-	-	-	2	-	3	-	3	-	6	-
(40-49, Business & Industry)													
40	Government officials	4	-	-	-	-	-	3	-	4	1	11	1
41	Mfg. executives	4	-	1	1	-	1	15	-	7	-	28	1
42	Non-mfg., service	1	-	1	-	-	-	7	1	5	4	14	5
43	Retail trades	3	-	-	-	-	-	8	1	2	-	13	1
44	General	10	-	-	-	-	-	6	1	4	-	20	1
45	Open	-	-	-	-	-	-	-	1	-	-	-	1
(46-49, Farm Owners)													
46	Farm owner	-	-	-	-	1	-	-	-	-	-	1	-
(50-59, White Collar Workers)													
50	Clerical	8	10	3	4	10	28	13	16	5	24	39	82
51	Sales workers	-	-	-	-	-	-	1	3	-	-	1	3
53	Waiters	-	-	-	-	-	-	-	1	-	-	-	1
(60-69, Blue Collar Workers)													
60	Craftsmen	2	-	-	-	-	-	5	-	5	-	12	-
61	Foremen	1	-	-	-	-	-	1	-	-	-	2	-
63	Mechanics	5	-	-	-	-	-	2	-	5	-	12	-
67	Oper. of mech. equip.	-	-	-	-	-	-	-	-	1	-	1	-
(70-74, Service and Private Household Workers)													
70	Private household	1	1	-	-	-	-	-	1	-	-	1	3
(75-79, Military Personnel)													
75	Ranking officers (all services)	-	-	11	-	-	-	-	-	-	-	11	-
76	Jr. off., Army & Air	-	-	-	-	-	-	-	1	-	-	-	1
(80-87, Laborers)													
80	Small farm owners	-	-	-	-	-	-	1	-	-	-	1	-
81	Non-mfg., non-indus.	-	-	-	-	-	-	1	-	-	-	1	-
82	Mfg. of durable goods	-	-	-	-	-	-	1	-	18	-	19	-
83	Mfg. of non-durable goods	-	-	-	-	-	-	3	-	-	-	3	-
84	Non-mfg. industries	-	-	-	-	-	-	1	-	-	-	1	-
87	Persons that haven't worked (housewives, students)	3	-	-	-	-	-	1	2	-	-	4	2

[1]SER - Special Education Rehabilitation; L = Labor; E = Education; M = Managers/ Executives

[2]Data was not available from Belgium on occupation.

designation from the Belgian sample, the inability to use the L group from England due to the small number of respondents, the small N in various sub-samples, and the sex-linked character of some of the occupational groups. All of these factors lead to difficulties in data analysis and interpretation.

Differences in Education, Income, and Age Between Respondent Groups

The data for the three demographic variables of education, income, and age are in Tables 3-5. Mean differences, standard deviations, and F statistic were computed for four occupational categories. The F for group differences was computed while holding constant sex interaction within the group. A significant difference was found between the occupational groups in each country in respect to amount of education, income, and age.

The data for education and income were analyzed in coded form. Table 6 gives an interpretation of the education scores in terms of educational attainment. See Special Code Book Instructions for income code. The data is presented such that each score represents a range: i.e., grades completed or amount of income. The data is ordinal in that a higher mean score always represents higher educational attainment or greater amount of income earned.

TABLE 3.--Comparison of mean differences, standard deviations, and F statistic in respect to education for four occupational groups in six countries.

Country	Occupation[1]	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	5.57		1.14	----	7.64	----	.005
	E	50	6.08		1.03				
	M	20	6.30		1.72				
	L	27	4.78		1.48				
Ranking of Means: M(6.30) > E(6.08) > SER(5.57) > L(4.78)									
Mean's Test: SER > L; E > L; M > L									
Denmark	SER	44	5.14	5.17	1.10	.16	12.34	.69	.005
	E	47	5.28	5.30	1.06				
	M	30	4.70	4.60	1.29				
	L	28	3.86	3.86	1.16				
Ranking of Adjusted Means: E(5.30) > SER(5.17) > M(4.60) > L(3.86)									
Mean's Test: SER > M; SER > L									
England	SER	23	5.56		1.41	----	9.37	----	.005
	E	24	6.12		.85				
	M	18	4.50		1.34				
Ranking of Means: E(6.12) > SER(5.56) > M(4.50)									
Mean's Test: SER > M; E > M; E > M; E > L; M > L									
France	SER	68	5.25	5.25	1.31	0.29	5.55	.60	.005
	E	69	5.35	5.38	1.44				
	M	49	6.08	6.06	1.87				
	L	37	4.73	4.70	1.82				
Ranking of Adjusted Means: M(6.06) > E(5.38) > SER(5.25) > L(4.70)									
Mean's Test: M > SER; M > E; E > L; M > L									
Netherlands	SER	48	5.46	5.53	1.32	0.22	24.82	.64	.005
	E	59	5.71	5.77	0.95				
	M	64	5.16	5.04	1.37				
	L	52	3.86	3.90	1.12				
Ranking of Adjusted Means: E(5.77) > SER(5.53) > M(5.04) > L(3.90)									
Mean's Test: SER > L; E > M; E > L; M > L									
Yugoslavia	SER	47	4.83	4.83	.73	.02	35.46	.85	.005
	E	40	4.97	4.97	.92				
	M	46	4.63	4.63	.93				
	L	59	3.44	3.44	.84				
Ranking of Adjusted Means: E(4.97) > SER(4.83) > M(4.63) > L(3.44)									
Mean's Test: SER > L; E > L; M > L									

[1]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/ Executives.

TABLE 4.--Comparison of mean differences, standard deviations, and F statistic in respect to income for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	7.71		6.58	----	7.25	----	.005
	E	47	6.62		4.60				
	M	17	17.94		10.33				
	L	26	8.69		14.04				
Ranking of Means: M(17.94) > L(8.69) > SER(7.71) > E(6.62)									
Mean's Test: M > SER; M > E; L > E									
Denmark	SER	43	8.86	9.07	3.26	15.16	10.83	.005	.005
	E	46	8.43	8.47	3.32				
	M	30	12.80	12.26	4.90				
	L	28	8.14	8.18	3.47				
Ranking of Adjusted Means: M(12.26) > SER(9.07) > E(8.47) > L(8.18)									
Mean's Test: M > SER; M > E; M > L; L > M									
England	SER	22	8.68		3.20	----	.20	----	.82
	E	23	8.96		3.39				
	M	18	9.50		5.69				
Ranking of Means: M(9.50) > E(8.96) > SER(8.68)									
France	SER	65	21.59	21.50	17.40	2.81	3.58	.09	.01
	E	68	17.98	17.87	10.68				
	M	46	23.26	23.36	13.01				
	L	34	14.56	14.93	6.04				
Ranking of Adjusted Means: M(23.36) > SER(21.50) > E(17.87) > L(14.93)									
Mean's Test: SER > L; M > E; M > L									
Netherlands	SER	41	5.46	5.76	2.50	9.34	3.81	.005	.01
	E	56	6.54	6.79	4.77				
	M	61	8.95	8.49	7.80				
	L	44	5.14	5.07	2.14				
Ranking of Adjusted Means: M(8.49) > E(6.79) > SER(5.76) > L(5.07)									
Mean's Test: M > SER; M > L									
Yugoslavia	SER	47	9.04	8.91	4.12	1.11	12.17	.29	.005
	E	40	9.20	9.16	4.77				
	M	46	7.69	7.84	4.85				
	L	59	4.86	4.89	2.56				
Ranking of Adjusted Means: E(9.16) > SER(8.91) > M(7.84) > L(4.89)									
Mean's Test: SER > L; E > L; M > L									

TABLE 5.--Comparison of mean differences, standard deviations, and F statistic in respect to age for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	33.43		10.71	----	3.85	----	.01
	E	51	32.69		10.95				
	M	20	41.75		11.75				
	L	27	38.07		12.33				
Ranking of Means: M(41.75) > L(38.07) > SER(33.43) > E(32.69)									
Mean's Test: M > SER; M > E; L > E									
Denmark	SER	44	35.79	36.45	9.93	17.98	12.42	.005	.005
	E	47	34.47	34.88	9.70				
	M	30	46.57	44.90	9.64				
	L	28	37.14	37.22	10.57				
Ranking of Adjusted Means: M(44.90) > L(37.22) > SER(36.45) > E(34.88)									
Mean's Test: M > SER; M > E; M > L									
England	SER	23	41.65		8.27	----	4.68	----	.01
	E	24	36.50		7.96				
	M	18	43.78		7.88				
Ranking of Means: M(43.78) > SER(41.65) > E(36.50)									
Mean's Test: SER > E; M > E									
France	SER	68	33.01	32.99	10.51	0.12	7.42	.72	.005
	E	68	30.15	30.16	8.50				
	M	47	37.04	37.34	11.83				
	L	37	39.40	39.59	13.43				
Ranking of Adjusted Means: L(39.59) > M(37.34) > SER(32.99) > E(30.16)									
Mean's Test: M > SER; L > SER; M > E; L > E									
Netherlands	SER	48	31.58	33.06	9.59	28.19	5.17	.005	.005
	E	57	34.48	35.64	13.22				
	M	64	42.84	40.74	12.65				
	L	52	32.23	32.23	12.67				
Ranking of Adjusted Means: M(40.74) > E(35.64) > SER(33.06) > L(32.23)									
Mean's Test: M > SER; M > E; M > L									
Yugoslavia	SER	47	37.36	37.97	10.23	4.79	12.93	.03	.005
	E	40	35.25	35.46	8.99				
	M	45	31.73	31.03	10.22				
	L	59	27.69	27.60	6.90				
Ranking of Adjusted Means: SER(37.97) > E(35.46) > M(31.03) > L(27.60)									
Mean's Test: SER > M; SER > L; E > M; E > L									

TABLE 6.--Interpretation of education scores in terms of actual educational attainment.

Scores	Interpretation	Range of Inverval
1	Less than 4 years completed	0- 3 inclusive
2	From 4 to 6 years completed	4- 6 inclusive
3	From 7 to 9 years completed	7- 9 inclusive
4	From 10 to 11 years completed	10-11 inclusive
5	Some college or university	12-15 inclusive
6	College or university degree	16
7	Post-degree study	--
8	Advanced degree	--

Summary of Descriptive Data in Tables 3-6

Significant differences between the four occupational categories in all countries is indicated in Tables 3-5 for education, income, and age. The sample sizes seem to be adequate except for the M group in Belgium and England.

The L group is lowest in educational level in each country. This does not hold in respect to income or age in Belgium or age in Denmark, France, and The Netherlands. The M group were generally older than other groups with higher mean income. The E and SER groups had a higher level of education than the M group except in Belgium, England, and France.

It can be noted from the tables that the actual significance level of the F statistic is printed out rather than merely indicating if it is significant at a stated level. It was decided to present the actual F value since the computer program provides this information. This will enable one to know when the level "just-does-not-make" an acceptable level of significance.

Section 2: Hypothesis Testing, Mean Differences, and Correlational Analyses

Hypotheses Related to Contact Frequency, Intensity, and Attitude Scores

H-1: Contact-Intensity Interactions

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

intensity statements of the disabled person (ATDP) scale, regardless of whether attitude content is favorable or unfavorable.

H-1b: The more frequent the contact with education, the higher will be the scores on the intensity statements of the attitudes-toward-education scale, regardless of whether attitude is traditional or progressive.

Table 7 indicates that high frequency of contact with disabled persons did relate significantly to intensity scores on the ATDP scale in several countries. Approximately 25 per cent of the total sample in each country having the highest contact scores were compared with approximately 25 per cent of the same sample who had the lowest contact scores. England was omitted from all high-low comparisons due to the omission of the L group from the total sample. H-1a is confirmed in Belgium, Denmark, and The Netherlands. It can be observed that France and Yugoslavia "just-did-not-make" an acceptable level of significance.

Tables 8 and 9 suggest that mean differences between persons with high and low contact with education, are not significantly different on either progressive or traditional intensity scores except in Belgium (Table 9) which showed differences on traditional attitudes toward education. On comparing high and low frequency of contact with education with intensity scores on the traditional attitudes toward education, it can be noted that the low group had higher mean scores in Denmark, France, and Yugoslavia.

TABLE 7.--Means, standard deviations, and F statistic comparing high and low frequency of contact with disabled persons with intensity scores on the attitudes-toward-disabled-persons scale in five countries.[1]

Country	Contact Frequency	N	Mean of ATDP Intensity Scale	Standard Deviation	F	Significance of F
Belgium	Low	35	54.46	11.09	13.00	.005
	High	38	65.03	13.69		
Denmark	Low	54	60.15	8.86	6.36	.01
	High	61	64.23	8.48		
France	Low	64	60.89	14.30	2.78	.09
	High	98	64.50	12.63		
Netherlands	Low	51	55.51	6.51	10.91	.005
	High	70	60.03	8.04		
Yugoslavia	Low	51	64.59	7.34	2.88	.09
	High	63	66.92	7.25		

[1]England was omitted from all high-low comparisons, due to the omission of the Labor group in the total sample.

TABLE 8.--Means, standard deviations, and F statistic comparing high and low frequency of contact with education with intensity scores on the progressive-attitudes-toward-education scale in five countries.

Country	Contact Frequency	N	Mean of Progressive Intensity Scale	Standard Deviation	F	Significance of F
Belgium	Low	29	30.59	5.65	2.54	.11
	High	29	32.45	4.24		
Denmark	Low	38	35.37	3.68	0.28	.60
	High	47	35.00	2.69		
France	Low	33	32.67	8.24	1.30	.26
	High	26	34.58	2.46		
Netherlands	Low	42	31.26	3.26	0.41	.53
	High	49	31.75	3.94		
Yugoslavia	Low	29	34.21	3.45	0.66	.42
	High	27	34.96	3.50		

TABLE 9.--Means, standard deviations, and F statistic comparing high and low frequency of contact with education with intensity scores on the traditional-attitudes-toward education scale in five countries.

Country	Contact Frequency	N	Mean of Traditional Intensity Scale	Standard Deviation	F	Significance of F
Belgium	Low	29	28.52	4.88	4.82	.03
	High	29	31.48	5.39		
Denmark	Low	38	33.68	3.71	0.51	.48
	High	47	33.13	3.42		
France	Low	27	35.18	6.04	1.47	.23
	High	32	33.72	2.93		
Netherlands	Low	43	31.51	3.80	2.45	.12
	High	50	32.72	3.62		
Yugoslavia	Low	29	35.17	3.51	.05	.81
	High	27	34.96	3.53		

Tables 10-12 contain zero-order correlations between contact and intensity scores on the attitudes-toward-disabled-persons scale, and the progressive and traditional attitude scales. Table 10 shows a significant relationship between contact and intensity scores on the ATDP scale for the M group in Belgium. The male population for SER in Denmark is significantly related on contact and ATDP scores, while the total SER group is significant ($p < .01$). In The Netherlands, the E group for males and total sample is significantly correlated as indicated in Table 10. The N for the female L group is small but the relationship between contact and intensity was obtained. In Yugoslavia, the total SER and E group scores on these variables is significantly correlated. A significant negative correlation was found on the total E group in England. This would indicate that when either contact or intensity would increase the other variable would decrease.

Table 11 gives correlations between contact and intensity scores on the progressive-attitudes-toward education scale for male and female and total respondents in four occupational categories. Analysis on sex differences were omitted for Belgium and England due to technical difficulties. A significant negative correlation was found between these variables with the female sample of the E group in Denmark. The female group of the SER sample in The Netherlands was also significantly correlated.

All other comparisons that appear significant have such a small N that the results cannot be considered meaningful.

In Table 12, the Denmark E group shows a negative correlation ($P < .01$) between contact and intensity scores on traditional attitudes toward education. The E group in Belgium obtained a significant correlation ($P < .01$) on the same scale. These findings are generally consistent with the results reported in the correlational analysis found in Tables 8 and 9.

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

H-2b: High frequency of contact with education 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 contacts.

Table 13 indicates that the multiple correlation of combined contact variables and attitudes toward disabled persons is significantly related for the total sample in Belgium, England, France, The Netherlands, and Yugoslavia. In Belgium, enjoyment of contact when partialled out, contributes most to predicting attitudes toward disabled persons. The variables "ease of avoidance" and "enjoyment of contact" are negatively correlated in France. Thus, the

TABLE 10.--Zero-order correlations between contact and intensity scores on attitudes-toward-disabled persons scale for four occupational groups in six countries.

Country	Sex	Occupational Group[1]							
		SER		E		M		L	
		r	N	r	N	r	N	r	N
Belgium	Total	.04	24	.10	25	.68[c]	15	.28	19
Denmark	Male	.55[c]	20	.20	16	.19	20	-.28	10
	Female	.17	23	.17	15	--	--	-.23	8
	Total	.36[b]	43	.18	31	.19	20	.26	18
England[2]	Total	.13	18	-.38[a]	22	.06	11	--	--
France	Male	-.07	26	-.22	23	.40	14	-.25	10
	Female	.23	37	.07	32	.13	29	.26	16
	Total	.25[a]	61	.21	56	.11	42	-.15	24
Netherlands	Male	-.12	13	.48[a]	15	.21	38	.11	16
	Female	.13	31	.32	26	-.26	4	.55[a]	11
	Total	.09	44	.41[c]	41	.17	42	.19	28
Yugoslavia	Male	.32	15	.39	13	.06	27	.14	30
	Female	.30	30	.28	15	.44	9	.25	19
	Total	.30[a]	45	.32[a]	28	.12	36	.20	49

[1]SER - Special Education Rehabilitation; L = Labor; E = Education; M = Managers/Executives

[2]Labor group was omitted.

[3]a = P < .05; b = P < .01; c = P < .005.

TABLE 11.--Zero-order correlations between contact and intensity scores on the progressive-attitudes-toward-education scale for four occupational groups in six countries.

Country	Sex	Occupational Group[1]							
		SER		E		M		L	
		r	N	r	N	r	N	r	N
Belgium	Total	-.07	26	.22	49	.20	10	.45	9
Denmark	Male	-.15	21	.19	24	-.03	16	-.64	4
	Female	.03	22	-.40[a]	21	--	--	--	2
	Total	-.06	43	-.12	45	-.03	16	-.30	6
England	Total	-.09	23	.03	23	.46	6	--	--
France[2]	Male	.30	17	.11	29	-.30	5	--	--
	Female	-.17	23	-.22	36	.10	8	--	--
	Total	.04	38	-.10	66	.18	13	--	--
Netherlands	Male	.04	16	.20	23	.36	8	.99[c]	3
	Female	-.46[a]	15	.01	34	--	1	--	1
	Total	-.16	31	.07	57	.36	9	.92[a]	4
Yugoslavia	Male	-.17	15	.11	18	.38	12	--	2
	Female	.15	31	.02	21	.99[c]	3	--	1
	Total	.04	46	.07	39	.47[a]	15	-.75	3

[1]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/Executives

[2]Labor group too small for sex correlational analysis.

[a]$P < .05$. [b]$P < .01$. [c]$P < .005$.

TABLE 12.--Zero-order correlations between contact and intensity scores on the traditional-attitudes-toward-education scale for four occupational groups in six countries.

Country	Sex	Occupational Group[1]							
		SER		E		M		L	
		r	N	r	N	r	N	r	N
Belgium	Total	.12	26	.33[a]	49	.22	10	.02	9
Denmark	Male	.22	21	.29	24	.11	16	-.85[a]	4
	Female	-.10	22	-.48[a]	21	--	--	--	2
	Total	.03	43	-.20	45	.11	16	-.62	6
England	Total	.01	23	-.32	23	.09	6	--	--
France[2]	Male	-.08	17	.06	29	.84[a]	5	--	1
	Female	.24	24	.20	36	.66[a]	8	--	0
	Total	.07	39	-.15	66	-.03	13	--	1
Netherlands	Male	.36	16	.20	23	.02	8	.50	3
	Female	.24	15	.14	36	--	1	--	1
	Total	.26	31	.15	59	.04	9	.23	4
Yugoslavia	Male	-.22	15	-.02	18	.29	12	--	2
	Female	.19	31	.04	21	-.38	3	--[b]	1
	Total	.04	46	.01	39	.21	15	-.98	3

[1]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/Executives.

[2]Labor group too small for sex correlational analysis.

[a]$P < .05$. [b]$P < .01$. [c]$P < .005$.

hypothesis is supported. In England, amount of contact contributes most to predicting attitudes. In The Netherlands, enjoyment of contact is significantly related to attitudes on the criterion variable. In Yugoslavia, avoidance of contact and alternatives to contact are significantly related to attitudes toward disabled persons scores.

H-2b is not supported for France, The Netherlands, and Yugoslavia in respect to progressive attitudes toward education. The multiple correlation for Belgium, Denmark, and England is significant ($P < .05$). In both Belgium and Denmark amount of contact with progressive education contributes most to predicting attitudes toward education. H-2b is supported in France and Yugoslavia relative to traditional attitudes toward education. In France, enjoyment of contact, when partially out, contributed significantly to the multiple correlation.

Hypotheses Related to Attitude and Value Interactions

H-3a: Persons who score high in need for power and control over others will tend to score low in acceptance of disabled persons.

H-3b: Persons who score high in need for power and control over others will tend to score low in progressive attitudes toward education and high in traditional attitudes toward education.

TABLE 13.--Partial and multiple correlations between attitudes-toward-disabled-persons and attitudes toward education as related to contact variables for six countries.

Attitude Scale	Contact	Country					
		Belgium	Denmark	England	France	Nether-lands	Yugo-slavia
		N=66	N=112	N=49	N=174	N=155	N=159
Attitudes Toward Disabled Persons	Amount	-.06	.08	.26[a]	-.10	-.00	-.01
	Avoidance	.01	-.04	.19	-.23[c]	.04	-.22[b]
	Enjoyment	-.20	-.13	-.12	-.16[a]	-.19[a]	-.22[b]
	Multiple R:	.30[b]	.16[a]	.27[a]	.28[c]	.21[a]	.29[c]
		N=82	N=96	N=46	N=105	N=90	N=99
Progressive Attitudes Toward Education	Amount	.21[a]	-.19[a]	.07	-.08	-.14	-.07
	Enjoyment	.10	.07	.09	.13	.06	.14
	Alternatives	.06	-.04	-.23	.00	.08	-.07
	Multiple R:	.23[a]	.19[a]	.26[a]	.14	.16	.16
		N=82	N=96	N=46	N=106	N=92	N=98
Traditional Attitudes Toward Education	Amount	.18	-.10	-.01	.18	.13	-.15
	Enjoyment	-.00	.02	-.18	-.21[a]	-.02	.15
	Alternatives	-.02	.08	.02	.09	.12	-.06
	Multiple R:	.19	.15	.19	.26[b]	.18[a]	.19[a]

[a] $P < .05$. [b] $P < .01$. [c] $P < .005$.

This hypothesis was tested by analysis of variance for the entire sample which was divided into high and low groups for each country on the basis of value scores on the Leadership sub-scale. The results are reported in Tables 14-16. England is omitted from the comparison due to availability of only three occupational groups. Table 14 shows there are no significant differences between high and low scores on Leadership value and attitudes toward disabled persons. Table 15 indicates a significant difference in Belgium ($P < .005$) and Yugoslavia ($P < .01$) on high and low scores on leadership when related to progressive attitudes toward education. In both countries the group scoring low on leadership values scored higher on progressive attitudes toward education. H-3b is confirmed in Belgium and Yugoslavia on progressive attitudes. In Table 16, no differences were significant on leadership value and traditional attitudes toward education scores.

H-4a: Persons who score high in need for recognition and achievement will tend to score low in acceptance of the disabled.

H-4b: Persons who score high in need for recognition and achievement will tend to score low in progressive attitudes toward education and high in tradition attitudes toward education.

Table 17 indicates that H-4a is not confirmed for the five countries. Persons who scored high on Recognition value did not have less favorable attitudes toward the

TABLE 14.--Means, standard deviations, and F statistic comparing high and low scores on leadership value with attitudes-toward-disabled-persons scores in five countries.

Country	Leadership Variable	N	Mean of ATDP Scale	Standard Deviation	F	Significance of F
Belgium	Low	49	48.31	5.08	0.41	.53
	High	41	48.97	4.72		
Denmark	Low	44	46.70	6.92	1.65	.20
	High	38	48.66	6.81		
France	Low	47	48.96	6.09	0.87	.36
	High	61	50.15	7.14		
Netherlands	Low	78	48.34	4.11	0.07	.78
	High	74	48.19	4.19		
Yugoslavia	Low	59	52.25	5.40	1.39	.24
	High	54	53.46	5.48		

TABLE 15.--Means, standard deviations, and F statistic comparing high and low scores on leadership value with progressive-attitudes-toward-education scores in five countries.

Country	Leadership Variable	N	Mean of Progressive	Standard Deviation	F	Significance of F
Belgium	Low	48	33.08	3.04	17.73	.005
	High	45	30.33	3.26		
Denmark	Low	44	33.64	3.22	0.09	.76
	High	38	33.84	3.04		
France	Low	48	30.17	4.40	1.73	.19
	High	63	31.32	4.70		
Netherlands	Low	77	30.73	3.55	0.09	.76
	High	76	30.55	3.81		
Yugoslavia	Low	60	33.48	2.81	6.87	.01
	High	57	31.95	3.50		

TABLE 16.--Means, standard deviations, and F statistic comparing high and low scores on leadership value with traditional-attitudes-toward-education scores in five countries.

Country	Leadership Variable	N	Mean of Traditional	Standard Deviation	F	Significance of F
Belgium	Low	48	27.60	4.46	0.09	.75
	High	45	27.87	3.77		
Denmark	Low	44	28.11	5.40	0.63	.43
	High	38	27.21	4.77		
France	Low	49	29.63	4.24	0.10	.75
	High	63	29.87	3.82		
Netherlands	Low	78	29.22	3.02	0.84	.36
	High	76	28.72	3.65		
Yugoslavia	Low	60	32.38	2.98	0.17	.69
	High	56	32.16	2.89		

physically disabled. Table 18 reflects a high significant difference ($p < .005$) in The Netherlands on high and low scores on recognition and progressive attitudes toward education. H-4b is considered confirmed for The Netherlands. There are no significant differences reported on recognition and traditional attitudes toward education in Table 19.

H-5a: Persons who score high in need to help others, to be generous, will tend to score high in acceptance of disabled persons.

The above hypothesis was not confirmed in any countries. However, Table 20 indicates that the relationship was in the direction of the hypothesis except in France and an acceptable level of significance was nearly obtained in all other countries.

H-5b: Persons who score high in need to help others, to be generous, will tend to score high in progressive attitudes toward education and low in traditional attitudes toward education.

Table 21 lends support to this hypothesis only in The Netherlands. The relationship between benevolence and progressive attitudes toward education is in the direction of the hypothesis in the other countries with the exception of France, although not at an acceptable level of significance.

H-5b is not confirmed for benevolence and traditional attitudes as indicated in Table 22.

TABLE 17.--Means, standard deviations, and F statistic comparing high and low scores on recognition value with attitudes-toward-disabled persons scores in five countries.

Country	Recognition Variable	N	Mean of ATDP Scale	Standard Deviation	F	Significance of F
Belgium	Low	34	48.00	5.18	0.55	.47
	High	70	48.81	5.29		
Denmark	Low	34	49.38	6.69	1.64	.20
	High	36	47.36	6.52		
France	Low	42	49.88	5.29	0.27	.61
	High	75	49.23	7.07		
Netherlands	Low	60	47.67	3.60	1.50	.22
	High	52	48.56	4.09		
Yugoslavia	Low	57	47.51	12.42	2.37	.12
	High	50	51.36	13.46		

TABLE 18.--Means, standard deviations, and F statistic comparing high and low scores on recognition with progressive-attitudes-toward-education scores in five countries.

Country	Recognition Variable	N	Mean of Progressive	Standard Deviation	F	Significance of F
Belgium	Low	35	32.00	3.66	0.92	.34
	High	72	31.33	3.21		
Denmark	Low	34	33.12	3.34	0.08	.77
	High	36	32.89	3.49		
France	Low	45	30.24	5.00	1.25	.26
	High	77	31.32	5.22		
Netherlands	Low	63	31.98	3.41	11.31	.005
	High	53	29.68	3.97		
Yugoslavia	Low	57	32.68	3.97	0.15	.70
	High	50	32.42	2.98		

TABLE 19.--Means, standard deviations, and F statistic comparing high and low scores on recognition with traditional-attitudes-toward-education scores in five countries.

Country	Recognition Variable	N	Mean of Traditional	Standard Deviation	F	Significance of F
Belgium	Low	35	27.97	4.05	0.12	.72
	High	72	27.69	3.72		
Denmark	Low	34	29.23	5.23	1.84	.18
	High	36	27.64	4.60		
France	Low	45	29.33	4.71	0.02	.85
	High	78	29.46	4.57		
Netherlands	Low	64	29.56	3.46	0.68	.42
	High	53	29.06	3.11		
Yugoslavia	Low	57	32.44	3.44	3.08	.10
	High	50	30.72	6.41		

TABLE 20.--Means, standard deviations, and F statistic comparing high and low scores on benevolence with attitudes-toward-disabled persons scores in five countries.

Country	Benevolence Variable	N	Mean of ATDP Scale	Standard Deviation	F	Significance of F
Belgium	Low	40	49.82	5.57	3.62	.07
	High	46	47.69	4.80		
Denmark	Low	38	49.39	6.40	1.73	.19
	High	40	47.22	8.03		
France	Low	54	49.26	6.03	0.07	.78
	High	105	49.54	6.77		
Netherlands	Low	71	48.93	4.69	3.24	.09
	High	66	47.57	4.06		
Yugoslavia	Low	49	53.41	4.62	2.65	.10
	High	54	51.80	5.35		

TABLE 21.--Means, standard deviations, and F statistic comparing high and low scores on benevolence with progressive-attitudes-toward-education in five countries.

Country	Benevolence Variable	N	Mean of Progressive	Standard Deviation	F	Significance of F
Belgium	Low	41	31.02	3.81	1.36	.24
	High	49	31.90	3.28		
Denmark	Low	38	33.63	3.64	0.91	.34
	High	41	34.29	2.42		
France	Low	57	31.77	4.14	1.31	.25
	High	107	30.90	4.90		
Netherlands	Low	72	29.05	3.81	17.37	.005
	High	70	31.48	3.09		
Yugoslavia	Low	51	31.86	3.45	0.32	.58
	High	55	32.24	3.52		

TABLE 22.--Means, standard deviations, and F statistic comparing high and low scores on benevolence with traditional-attitudes-toward-education scores in five countries.

Country	Benevolence Variable	N	Traditional Mean	Standard Deviation	F	Significance of F
Belgium	Low	41	28.00	3.98	0.12	.73
	High	49	27.69	4.26		
Denmark	Low	38	28.05	4.01	0.57	.46
	High	41	28.88	5.49		
France	Low	57	29.71	4.47	0.28	.60
	High	107	29.34	4.39		
Netherlands	Low	73	28.64	3.16	3.61	.07
	High	70	29.67	3.30		
Yugoslavia	Low	50	31.70	2.98	0.16	.69
	High	55	31.94	3.28		

H-5c: Women will score higher than men in (a) the need to help others, (b) positive attitudes toward the physically disabled, and (c) progressive attitudes toward education.

As shown by Table 23, H-5c is confirmed ($P < .005$) in The Netherlands and Yugoslavia on Benevolence. While the difference in the other countries was not significant, the relationship between males and females was in the direction of the hypothesis.

It can be seen in Table 24 that there is no confirmation of the hypothesis that women will have more positive attitudes toward the physically disabled than men. It should be mentioned that the Denmark sample almost obtained a significant F.

Table 25 indicates that females in France are significantly different than males on progressive attitudes toward education. Thus, H-5c relative to progressive attitudes toward education is confirmed only in France.

Hypothesis Related to Change Orientation and Attitude Scores

H-6a: Persons who score high on change orientation will score high on positive attitudes toward physically disabled persons.

H-6b: Persons who score high on change orientation will score high on progressive attitudes toward education and low on traditional attitudes toward education.

TABLE 23.--Means, standard deviations, and F statistic for Benevolence for males and females in four countries.

Country	Sex	N	Mean	Standard Deviation	F	Significance of F
Denmark	Male	92	20.10	5.58	1.17	.28
	Female	56	21.39	5.10		
France	Male	85	19.95	4.32	1.73	.19
	Female	125	20.83	4.60		
Netherlands	Male	124	16.44	5.30	18.80	.005
	Female	98	19.36	4.52		
Yugoslavia	Male	101	17.92	4.72	8.59	.005
	Female	85	19.90	4.45		

TABLE 24.--Means, standard deviations, and F statistic for attitudes-toward-disabled-persons scale score for males and females in four countries.

Country	Sex	N	Mean	Standard Deviation	F	Significance of F
Denmark	Male	96	49.07	6.78	2.80	.09
	Female	57	47.16	7.70		
France	Male	64	49.69	5.56	.04	.82
	Female	64	49.55	6.31		
Netherlands	Male	124	48.06	4.66	.25	.63
	Female	101	48.36	4.30		
Yugoslavia	Male	104	52.35	5.98	.12	.73
	Female	84	52.07	5.20		

TABLE 25.--Means, standard deviations, and F statistic for progressive-attitudes-toward-education scores for males and females in four countries.

Country	Sex	N	Mean	Standard Deviation	F	Significance of F
Denmark	Male	97	33.48	3.23	1.36	.24
	Female	57	34.00	2.76		
France	Male	85	30.23	4.90	5.52	.02
	Female	133	31.77	4.40		
Netherlands	Male	130	30.38	3.97	.49	.49
	Female	99	30.73	3.24		
Yugoslavia	Male	104	32.56	3.32	1.07	.30
	Female	88	32.04	3.52		

It is felt that high scores on change orientation represents departure from the status quo and high relationship to new ideas (i.e., progressivism) and concern for the disabled. Table 26 reports partial and multiple correlation between selected predictor variables and the criterion variables of attitudes toward disabled persons and attitudes toward progressive and traditional education. Health practices was eliminated from the Belgian sample due to controversy over flouridation during the research period.

The multiple correlation indicates a significant relationship between change orientation variables and the criterion variables in all countries with the exception of Denmark on traditional attitudes toward education. Therefore, H-6a,b is considered confirmed with the above exception.

When the five change variables are partialled out for Belgium, self change makes most differential contribution to the multiple correlation on attitudes toward disabled persons, and child-rearing practices on attitudes toward progressive education. In Denmark, child-rearing practices contributes most to predicting attitudes toward progressive education. In France, a group of predictors, namely, child-rearing practices, birth control practices, and self change all contributed significantly ($P < .05$) to the prediction of progressive attitudes. On the same criterion, the significant predictor variables in The Netherlands were child-rearing practices and political leadership. Birth control and political leadership can best predict ($P < .01$)

attitudes toward traditional education in France. Health practices contributes most to predicting attitudes toward disabled persons in England while self change can be used with a measure of confidence ($P < .01$) in The Netherlands. It can be observed that in Belgium, Denmark, The Netherlands, and Yugoslavia the multiple correlation between change orientation and the criterion variable is lowest for traditional attitudes toward education.

Zero-order Correlations Between Attitudes and Values

Tables 27-33 give the relationship between attitudes toward disabled persons and values for the four occupational categories in the total sample. Correlation for sex differences was not possible for Belgium and England and the L group is omitted for England.

Table 27 shows a significant negative relationship between Benevolence value for the E group in Belgium. This is in the direction of the hypothesis that those who score high on Benevolence will have more favorable attitudes toward the disabled. The SER and L groups were not significantly correlated, but were also in the direction of the hypothesis. There was a negative relationship between Independence and HP attitudes for the M group and on Leadership and HP attitudes for the L group.

Findings in Table 28 are consistent with the theoretical model of the study for several groups. There was a significant relationship between Benevolence and attitudes toward disabled persons with the male and total L

TABLE 26.--Partial and multiple correlations between attitudes toward disabled persons and attitudes toward education (progressive and traditional) as related to change orientation for six countries.

Scale	Change Variable	Country					
		Belgium	Denmark	England	France	Nether-lands	Yugo-slavia
Disabled Persons Scale		N=119	N=148	N=58	N=225	N=217	N=186
	Health practices	--	.11	-.23[a]	.05	.00	-.17[a]
	Child-rearing practices	.08	-.07	-.04	.13	.10	.02
	Birth control practices	-.01	.13	.14	.04	-.01	.16[a]
	Automation	-.02	.09	-.08	-.06	-.08	-.01
	Political leader-ship	-.03	.04	.00	-.08	.04	.00
	Self Change	-.18[a]	-.03	-.07	-.08	.17[a]	.00
	Multiple R:	.21[a]	.19[a]	.35[b]	.20[b]	.23[b]	.27[c]
Traditional Attitudes Toward Education		N=123	N=149	N=62	N=225	N=222	N=189
	Health practices	--	.03	.03	.06	-.07	-.04
	Child-rearing practices	-.14	-.01	-.21	.06	-.07	.00
	Birth control practices	.09	.07	-.06	.18[b]	.01	.00
	Automation	.09	.13	.01	.10	.08	.10
	Political leader-ship	.06	.00	.22	-.19[b]	.12	-.04
	Self Change	-.01	.05	-.09	-.11	-.10	-.16[a]
	Multiple R:	.18[a]	.15	.32[b]	.29[c]	.19[b]	.19[b]

Progressive Attitudes Toward Education		N=123	N=149	N=62	N=225	N=220	N=190
	Health practices	--	.08	-.10	-.00	.00	-.07
	Child-rearing practices	.19[a]	.21[a]	.07	.16[a]	.17[a]	.22[b]
	Birth control practices	-.17	-.08	-.17	-.15[a]	-.09	-.05
	Automation	-.04	.02	-.17	-.15[a]	-.03	.07
	Political leadership	.03	.16	.00	-.06	.19[b]	-.09
	Self change	.11	-.03	-.07	.15[a]	.09	-.02
	Multiple R:	.29[c]	.31[c]	.23[a]	.29[c]	.30[c]	.25[c]

[a] $P < .05$.

[b] $P < .01$.

[c] $P < .005$.

group and the female SER group in Denmark. A significant correlation ($P < .05$) is found on the male L group on Leadership and the ATDP scale. Findings for the total L group on Support value and the male L group on conformity were significantly related ($P < .05$) to attitudes toward disabled persons but were not consistent with the theoretical model.

Table 29 indicates no significant relationships between Support, Conformity, and Leadership and attitudes toward disabled persons. The total E group shows a relationship ($P < .05$) on Recognition and Independence values with attitudes toward disabled persons. These findings are consistent with hypothetical considerations.

Table 30 reveal few significant correlations for France. The expected relationship was supported by the male SER group on conformity. Leadership value and ATDP scores were found significantly ($P < .05$) related for the total E group and the male and total M group. These findings would be in the opposite direction of the hypothesis.

Correlations between attitudes toward disabled persons and the Gordon value scale are given in Table 31 for The Netherlands. Support value is significantly related to the ATDP scale for the male ($P < .01$) and total ($P < .05$) SER group. However, the N of the male SER group was small. Recognition is significantly correlated ($P < .05$) for the male SER group and the female M group. However, in both cases the N is small. Theory concerning Benevolence value and attitudes toward disabled persons is supported by the

findings for the male ($P < .005$) and total ($P < .01$) SER group and the male ($P < .05$) L group. A significant difference is shown between male and female groups on Leadership and attitudes for the E and M groups.

Table 32 shows the ATDP scale and value relationships for Yugoslavia. Support value is related ($P < .01$) for the male SER group and the male E group ($P < .05$) to ATDP scores. This is in the opposite direction of the hypothesis. Significant correlations ($P < .005$) were found for the male and total E group for Recognition value. The hypothesis regarding Recognition and attitudes toward disabled persons is confirmed for this group. Also in the direction of the hypothesis are the findings for the male L group ($P < .05$) for Recognition value. The Benevolence value and ATDP scores is significantly related ($P < .005$) for the male and total E group. This supports the hypothesis that those who hold Benevolent values will have more favorable attitudes toward the disabled. Leadership value and attitude theory regarding the disabled is supported by the female and total L group of the sample.

Tables 33-38 contain zero-order correlations between attitudes toward education and the value scales. Table 33 gives only the total occupational groups for Belgium. Sex correlation was not possible. A significant ($P < .05$) correlation was found between conformity and traditional attitudes toward education for the L group. An expected relationship was found between Recognition and progressive

TABLE 27.--Zero-order correlations between attitudes-toward-disabled-persons scale[1] (content) and the Gordon value scale for four occupational groups[2] in Belgium.

Group	Support Value		Conformity		Recognition		Independence		Benevolence		Leadership	
	r	N	r	N	r	N	r	N	r	N	r	N
SER												
Total	.26	27	-.10	27	.21	27	-.09	27	-.09	27	-.10	27
E												
Total	-.03	46	.05	46	-.19	46	.02	46	-.25[a]	46	.13	46
L												
Total	.29	26	.31	26	.09	26	.01	26	-.24	26	-.42[a]	26
M												
Total	-.07	18	.17	18	.48[a]	18	-.75[c]	18	.20	18	.21	18

[1]High HP scores indicate negative attitudes.

[2]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/ Executives

[a]$P < .05$. [b]$P < .01$. [c]$P < .005$.

TABLE 28.--Zero-order correlations between attitudes-toward-disabled-persons scale (content) and the Gordon value scale for four occupational groups in Denmark.

Group	Support Value		Conformity		Recognition		Independence		Benevolence		Leadership	
	r	N	r	N	r	N	r	N	r	N	r	N
SER												
Male	-.16	21	.09	21	-.09	21	.04	21	.18	21	.00	21
Female	.13	23	-.01	23	.29	23	-.02	23	-.47[a]	23	-.04	23
Total	-.02	44	.04	44	.13	44	.02	44	-.18	44	.01	44
E												
Male	-.02	24	-.01	24	.08	24	.03	24	.03	24	-.04	24
Female	.08	22	.35	22	.07	22	-.21	22	-.12	22	-.07	22
Total	-.08	46	.10	46	.01	46	-.11	46	-.06	46	.13	46
L												
Male	.15	15	-.35[a]	27	.23	27	.25	27	-.49[c]	27	.43[a]	27
Female	.45	10	.20	10	-.03	10	-.43	10	-.12	10	-.14	10
Total	.33[a]	25	-.21	25	.21	25	.10	25	-.38[a]	25	.16	25
M												
Male	-.25	27	.04	27	-.16	27	.09	27	-.03	27	.16	27
Female	--	--	--	--	--	--	--	--	--	--	--	--
Total	-.25	27	.04	27	-.16	27	.09	27	-.03	27	.16	27

[a] $P < .05$. [b] $P < .01$. [c] $P < .005$.

TABLE 29.--Zero-order correlations between attitudes-toward-disabled-persons scale (content) and the Gordon value scale for three occupational groups in England.

Group	Support Value		Conformity		Recognition		Independence		Benevolence		Leadership	
	r	N	r	N	r	N	r	N	r	N	r	N
SER												
Total	-.10	18	.32	18	-.07	18	.06	18	-.15	18	-.20	18
E												
Total	.05	23	.26	23	.47[a]	23	-.46[a]	23	-.34[a]	23	.08	23
M												
Total	-.12	17	.07	17	-.04	17	.20	17	-.08	17	-.08	17

[a] $P < .05$. [b] $P < .01$. [c] $P < .005$.

TABLE 30.--Zero-order correlations between attitudes-toward-disabled-persons scale (content) and the Gordon value scale for four occupational groups in France.

Group	Support Value		Conformity		Recognition		Independence		Benevolence		Leadership	
	r	N	r	N	r	N	r	N	r	N	r	N
SER												
Male	-.17	27	.42[a]	27	-.21	27	.01	27	-.06	27	-.05	27
Female	.03	35	-.02	35	-.08	35	.03	35	-.06	35	-.08	35
Total	-.03	62	.14	62	-.13	62	.01	62	-.07	62	-.04	62
E												
Male	.09	29	.08	29	-.00	29	-.16	29	.13	29	-.23	29
Female	.01	33	.09	33	.15	33	-.13	33	.10	33	-.17	33
Total	.07	62	.10	62	.08	62	-.13	62	.09	62	-.23[a]	62
L												
Male	.07	10	.08	10	-.64	10	.29	10	-.11	10	.12	10
Female	-.24	24	.00	24	.04	24	.07	24	-.00	24	.24	24
Total	-.15	34	.05	34	-.15	34	.13	34	-.01	34	.21	34
M												
Male	.32	17	.10	17	.21	17	.23	17	-.28	17	-.51[a]	17
Female	.04	25	.03	25	.21	25	-.13	25	-.03	25	-.18	25
Total	.13	42	.06	42	.25	42	.05	42	-.21	42	-.26[a]	42

[a] $P < .05$. [b] $P < .01$. [c] $P < .005$.

TABLE 31.--Zero-order correlations between attitudes-toward-disabled-persons scale (content) and the Gordon value scale for four occupational groups in The Netherlands.

Group	Support Value		Conformity		Recognition		Independence		Benevolence		Leadership	
	r	N	r	N	r	N	r	N	r	N	r	N
SER												
Male	.68[b]	11	-.32	11	.50[a]	11	.08	11	-.72[c]	11	.05	11
Female	.21	30	-.17	30	.05	30	.26	30	-.22	30	-.18	30
Total	.30[a]	41	-.22	41	.15	41	.22	41	-.38[b]	41	-.10	41
E												
Male	-.11	21	-.21	21	-.15	21	-.15	21	-.16	21	.60[c]	21
Female	.14	35	-.03	35	.26	35	-.07	35	.00	35	-.30[a]	35
Total	.08	56	-.07	56	.06	56	-.13	56	-.02	56	.03	56
M												
Male	.02	55	-.01	55	.08	55	-.07	55	.05	55	-.02	55
Female	-.13	6	-.42	6	.68[a]	6	-.56	6	-.25	6	.69[a]	6
Total	-.01	61	-.01	61	.11	61	-.09	61	.03	61	.02	61
L												
Male	-.07	27	-.03	27	.20	27	.22	27	-.33[a]	27	.11	27
Female	-.06	21	.17	21	-.23	21	.07	21	-.10	21	.07	21
Total	-.05	49	.05	49	-.03	49	.14	49	-.21	49	.07	49

[a] $P < .05$. [b] $P < .01$. [c] $P < .005$.

TABLE 32.--Zero-order correlations between attitudes-toward-disabled-persons scale (content) and the Gordon value scale for four occupational groups in Yugoslavia.

Group	Support Value		Conformity		Recognition		Independence		Benevolence		Leadership	
	r	N	r	N	r	N	r	N	r	N	r	N
SER												
Male	.58[b]	15	-.17	15	.36	15	-.18	15	-.18	15	-.21	15
Female	-.08	29	-.06	29	.09	29	.22	29	-.14	29	-.04	29
Total	.24	44	-.13	44	.20	44	.02	44	-.13	44	-.10	44
E												
Male	.41[a]	17	-.25	17	.65[c]	17	-.14	17	-.60[c]	17	-.16	17
Female	.10	19	.01	19	.33	19	-.24	19	.25	19	-.34	19
Total	.27	36	-.12	36	.49[c]	36	-.16	36	-.22	36	-.23	36
L												
Male	-.09	34	-.14	34	.28[a]	34	-.04	34	-.27	34	.27[a]	34
Female	-.11	23	-.19	23	.11	23	-.13	23	.04	23	.39[b]	23
Total	-.13	57	-.15	57	.22	57	-.09	57	-.14	57	.34[b]	57
M												
Male	.28	35	-.01	35	.09	35	-.17	35	-.22	35	.16	35
Female	-.31	10	.15	10	-.09	10	-.02	10	.25	10	.17	10
Total	.10	45	.04	45	.05	45	-.15	45	-.16	45	.17	45

[a] $P < .05$. [b] $P < .01$. [c] $P < .005$.

attitudes ($P < .05$) for the E group and Recognition and traditional attitudes ($P < .05$) for the M group. Theoretical considerations were supported by the relationship ($P < .05$) between Independence value and traditional attitudes for the SER and E groups. The E and L groups obtained a significant correlation ($P < .05$) on Independence and progressive attitudes. This would also support the hypothesis. Benevolence value and progressive attitudes toward education are related ($P < .05$) for the SER group, thus lending support to the general theory. Leadership value and progressive attitudes are negatively correlated ($P < .005$) for the SER group and the L and M groups ($P < .05$). These findings would confirm H-3a.

Table 34 shows relationship between value scales and the two criterion variables of attitudes toward education in Denmark. The male SER group and the total E group have a significant negative correlation ($P < .05$) between support and traditional attitudes toward education. This would tend to support the theory of the study concerning support and traditional attitudes. The SER male and total group and the L male group had significant correlation on Conformity and traditional attitudes toward education. The female L group had a negative correlation ($P < .01$) between Conformity and progressive attitudes. A significant negative correlation ($P < .005$) for the female and total E group on Recognition and progressive attitudes toward education is indicated. Independence value should be related more

closely with progressive attitudes. A negative correlation for the SER male group ($P < .05$) between Independence and traditional attitudes lends support to this theory. The SER female group had a negative correlation ($P < .05$) on Benevolence and traditional attitudes toward education. The SER total and male group correlations were not significant but were in the direction of the hypothesis. The male L group had a high correlation ($P < .005$) between Benevolence and traditional attitudes toward education. This represents almost the opposite situation from the SER group. The L group also had negative correlation between Leadership and traditional attitudes toward education and positive correlation by the female L group. These are not in the hypothesized direction. One could take the position that lack of depth in the understanding of educational issues by the L group led to such results.

Table 35 indicates some interesting results for the E group to support the theoretical framework on value-attitude relationships in England. There is a negative significant correlation ($P < .005$) between both Conformity and Recognition values and progressive attitudes toward education. A highly significant relationship exists between Independence ($P < .005$) and Benevolence ($P < .05$) and progressive attitudes, while there is a negative correlation ($P < .005$) between Independence and traditional attitudes toward education.

Comparisons on values and attitudes toward education for France are shown in Table 36. Conformity and traditional attitudes are significantly related for the SER group. Recognition value and traditional attitudes are negatively correlated ($P < .05$) for the male and total L group. Independence value and progressive attitudes are related ($P < .05$) for the female E group and the female M group. The female and total L group is significantly correlated ($P < .05$) on Benevolence and progressive attitudes toward education. The male M group had a negative correlation ($P < .05$) on these same variables. Leadership and progressive attitudes are correlated ($P < .05$) for the male SER and M groups. However, the SER group is not in the hypothesized direction. Also, the finding of the male M and total group on Leadership and traditional attitudes toward education is not in the expected direction.

In The Netherlands (Table 37) there was general support in the direction of H-4b for the total sample. It was hypothesized that those who score high in need for recognition and achievement will tend to score low in progressive attitudes toward education and high in traditional attitudes toward education. Recognition and progressive attitudes were significantly ($P < .05$) negatively correlated for the male and total E groups, the female and total L groups and the male and total M groups. The SER and E male and female groups were vastly different on Leadership and traditional attitudes and neither were in the direction of H-3b. The

L and M male, female and total groups had a significant relationship on Benevolence and progressive attitudes toward education and confirm H-3b. The theoretical model on value-attitude scores is not supported by the results shown for the relationship ($P < .05$) for the female E group and the male and total L group on Support and progressive attitudes toward education. It is, however, supported by the correlation between Support and traditional attitudes for the SER female and the total M group. Conformity and traditional attitudes were related for the female and total SER sample, the male and total E group, and the male and total M group. Independence value and traditional attitudes were not in the direction of the theoretical formulations for the female and total SER group and the female E group.

There are few significant correlations between attitudes toward education and the value scales in Yugoslavia. The significant correlations ($P < .05$) on Recognition and attitudes toward education are not in the direction of the hypothesis. This is true for the SER male group on progressive and traditional attitudes and the female E group on Recognition and traditional attitudes. The male SER group had a high relationship ($P < .005$) between Benevolence and traditional attitudes toward education and this is in the opposite direction of H-5b. Leadership value and progressive attitude relationship appears to be quite different from the other countries. There is a negative correlation for the female and total SER group, the male, female and total E group and the male M group. This is confirmation of H-5b.

TABLE 33.--Zero-order correlation between attitudes-toward-education (content) and the Gordon value scale for four occupational groups[1] in Belgium.

Group	Support		Conformity		Recognition		Independence		Benevolence		Leadership	
	P[2]	T[2]	P	T	P	T	P	T	P	T	P	T
SER												
Total	.15	-.06	.30	.19	-.07	-.15	-.06	-.38[a]	.40[a]	.27	-.55[c]	.22
(N)	27	27	27	27	27	27	27	27	27	27	27	27
E												
Total	-.04	.21	.01	.15	-.31[a]	-.02	.30[a]	-.31[a]	.07	-.05	-.06	.05
(N)	51	51	51	51	51	51	51	51	51	51	51	51
L												
Total	-.13	-.11	.20	.38[a]	-.31	-.24	.36[a]	.06	.19	.12	-.37[a]	-.17
(N)	26	26	26	26	26	26	26	26	26	26	26	26
M												
Total	.30	-.13	-.11	.20	.34	.52[a]	.23	-.25	-.35	-.22	-.42[a]	.04
(N)	17	17	17	17	17	17	17	17	17	17	17	17

[1]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/ Executives.

[2]P = Progressive attitudes toward education; T = Traditional attitudes toward education.

[a]$P < .05$. [b]$P < .01$. [c]$P < .005$.

TABLE 34.--Zero-order correlation between attitudes-toward-education (content) and the Gordon value scale for four occupational groups in Denmark.

Group	Support		Conformity		Recognition		Independence		Benevolence		Leadership	
	P	T	P	T	P	T	P	T	P	T	P	T
SER												
Male	.13	-.40[a]	-.27	.57[c]	-.07	.21	-.06	-.40[a]	-.02	-.13	.28	.25
(N)	21	21	21	21	21	21	21	21	21	21[a]	21	21
Female	.17	-.13	-.14	-.06	.30	.21	-.20	.16	-.03	-.44[a]	.02	.15
(N)	23	23	23	23[a]	23	23	23	23	23	23	23	23
Total	.14	-.16	-.22	.35[a]	.11	-.25	-.12	.25	-.03	-.07	.15	-.04
(N)	44	44	44	44	44	44	44	44	44	44	44	44
E												
Male	-.17	-.32	.13	.33	-.30	.03	-.17	.04	.19	.13	.16	-.24
(N)	24	24	24	24	24	24	24	24	24	24	24	24
Female	-.35	-.30	-.20	.04	-.63[c]	-.04	.26	-.33	.33	.22	.24	.25
(N)	22	22[a]	22	22	22[c]	22	22	22	22[a]	22	22	22
Total	-.22	-.27[a]	.00	.22	-.43[c]	.01	.04	-.11	.26[a]	.18	.13	-.09
(N)	46	46	46	46	46	46	46	46	46	46	46	46
L												
Male	-.20	-.18	.14	.58[b]	.09	-.31	-.28	-.62[c]	.36	.68[c]	-.25	-.57[b]
(N)	16	16	16[b]	16	16	16	16[a]	16	16	16	16[a]	16
Female	-.16	.13	-.73[b]	-.03	.13	.16	.64[a]	.21	-.23	-.13	.53[a]	-.08
(N)	10	10	10	10[a]	10	10	10	10[a]	10	10	10	10[a]
Total	-.14	-.07	-.09	.42[a]	.13	-.21	.01	-.41[a]	.12	.42[a]	-.04	-.38[a]
(N)	26	26	26	26	26	26	26	26	26	26	26	26
M												
Male	-.09	-.29	.07	.30	-.13	-.20	.23	-.22	-.09	.29	-.09	.08
(N)	27	27	27	27	27	27	27	27	27	27	27	27
Female	--	--	--	--	--	--	--	--	--	--	--	--
(N)	--	--	--	--	--	--	--	--	--	--	--	--
Total	-.09	-.29	.07	.30	-.13	-.20	.23	-.22	-.09	.29	-.09	.08
(N)	27	27	27	27	27	27	27	27	27	27	27	27

TABLE 35.--Zero-order correlation between attitudes-toward-education (content) and the Gordon value scale for three occupational groups in England.

Group	Support		Conformity		Recognition		Independence		Benevolence		Leadership	
	P	T	P	T	P	T	P	T	P	T	P	T
SER												
Total	.29	-.07	.18	.12	-.14	.16	-.15	.12	.36	-.13	-.05	-.16
(N)	19	19	19	19	19	19	19	19	19	19	19	19
E												
Total	-.04	.15	-.69[c]	.30	-.66[c]	.30	.69[c]	-.65[c]	.40[a]	.09	.17	-.19
(N)	24	24	24	24	24	24	24	24	24	24	24	24
M												
Total	.04	.02	-.17	.19	-.36	.06	.18	.13	.11	-.08	.09	-.39
(N)	17	17	17	17	17	17	17	17	17	17	17	17

TABLE 36.--Zero-order correlation between attitudes-toward-education (content) and the Gordon value scale for four occupational groups in France.

Group	Support		Conformity		Recognition		Independence		Benevolence		Leadership	
	P	T	P	T	P	T	P	T	P	T	P	T
SER												
Male	-.18	.01	-.34[a]	.26	.00	-.01	-.07	-.12	.22	-.15	.40[a]	.02
(N)	27	27	27	27	27	27	27	27	27	27	27	27
Female	-.20	-.15	.03	.38[a]	.04	-.01	.06	-.36[a]	-.01	.06	.10	.10
(N)	38	37	37	38	38	37	38	37	38	37	38	37
Total	-.14	-.08	-.17	.33[c]	.00	-.01	.04	-.24[a]	.21	-.05	.08	.07
(N)	63	64	63	64	63	64	63	64	63	64	63	64
E												
Male	-.27	-.19	-.06	.19	-.13	-.21	.08	.07	.21	.07	.04	.13
(N)	29	29	29	29	29	29	29	29	29	29	29	29
Female	.07	.22	-.23	-.03	-.07	-.02	.36[a]	-.08	-.10	.01	-.06	-.12
(N)	35	35	35	35	35	35	35	35	35	35	35	35
Total	-.12	.10	-.15	.09	-.07	-.11	.16	.04	.08	-.01	.05	-.15
(N)	65	65	65	65	65	65	65	65	65	65	65	65
L												
Male	-.16	.12	.10	.24	.32	-.53[a]	-.29	.04	.20	-.22	.00	.03
(N)	10	10	10	10	10	10	10	10	10	10	10	10
Female	-.27	-.24	.13	.23	-.17	-.21	-.10	-.09	.35[a]	.38[a]	.19	.03
(N)	26	26	26	26	26	26	26	26	26	26	26	26
Total	-.20	-.13	.07	.24	-.01	-.30[a]	-.15	-.04	.29[a]	.26	.13	.01
(N)	36	36	36	36	36	36	36	36	36	36	36	36
M												
Male	.14	.32	.27	.13	.20	.32	.10	.20	.04	-.40[a]	-.56[b]	-.50[a]
(N)	17	17	17	17	17	17	17	17	17	17	17	17
Female	-.13	.10	.10	.20	-.14	-.22	.35[a]	-.25	-.05	.21	-.23	-.09
(N)	26	26	26	26	26	26	26	26	26	26	26	26
Total	-.01	.20	-.20	.17	-.03	.01	.21	-.05	.12	.02	-.40[c]	-.35[a]
(N)	43	43	43	43	43	43	43	43	43	43	43	43

TABLE 37.--Zero-order correlation between attitudes-toward-education (content) and the Gordon value scale for four occupational groups in The Netherlands.

Group	Support		Conformity		Recognition		Independence		Benevolence		Leadership	
	P	T	P	T	P	T	P	T	P	T	P	T
SER												
Male	-.15	.09	-.08	.40	-.18	-.12	.30	-.24	-.03	.23	.03	-.49[a]
(N)	13	13	13	13	13	13	13	13	13	13	13	13
Female	.02	-.38[a]	.04	.48[c]	-.15	-.15	-.11	-.43[b]	.10	.31[a]	.06	.33[a]
(N)	31	31	31	31	31	31	31	31	31	31	31	31
Total	-.02	-.23	-.01	.48[c]	-.16	-.14	.02	-.39[b]	.05	.30[a]	.07	.02
(N)	44	44	44	44	44	44	44	44	44	44	44	44
E												
Male	-.06	.03	-.13	.36[a]	-.36[a]	.16	.22	-.10	.27	-.04	-.02	-.36[a]
(N)	23	23	23	23	23	23	23	23	23	23	23	23
Female	-.36[a]	-.23	.10	.22	-.18	-.11	-.14	-.31[a]	.04	.21	.05	.23
(N)	33	35	33	35	33	35	33	35	33	35	33	35
Total	-.19	-.12	.03	.29[a]	-.27[a]	.01	-.01	-.21	.20	-.08	.08	-.06
(N)	56	58	56	58	56	58	56	58	56	58	56	58
L												
Male	-.40[a]	-.08	.21	.19	-.15	.15	-.15	-.15	.50[c]	.10	-.08	-.15
(N)	27	27	27	27	27	27	27	27	27	27	27	27
Female	-.18	.09	.10	.19	-.40[a]	.05	-.28	-.26	.70[c]	.18	.22	-.21
(N)	21	21	21	21	21	21	21	21	21	21	21	21
Total	-.32[a]	-.05	.19	.20	-.27[a]	.07	-.22	-.19	.49[c]	.08	.10	-.09
(N)	49	49	49	49	49	49	49	49	49	49	49	49
M												
Male	-.20	-.23	.09	.28[a]	-.27[a]	-.15	.02	-.10	.36[b]	.05	-.13	-.01
(N)	57	57	57	57	57	57	57	57	57	57	57	57
Female	.01	-.53	.77[a]	.61	-.59	-.26	-.43	-.22	.70[a]	.42	-.62	-.23
(N)	6	6	6	6	6	6	6	6	6	6	6	6
Total	-.15	-.23[a]	.09	.29[a]	-.27[a]	-.16	.01	-.11	.34[c]	.09	-.16	-.03
(N)	63	63	63	63	63	63	63	63	63	63	63	63

TABLE 38.--Zero-order correlation between attitudes-toward-education (content) and the Gordon value scale for four occupational groups in Yugoslavia.

Group	Support		Conformity		Recognition		Independence		Benevolence		Leadership	
	P	T	P	T	P	T	P	T	P	T	P	T
SER												
Male	-.56[a]	-.23	.09	.31	-.43[a]	-.48[a]	.70[c]	.22	.34	.72[2]	-.18	-.44[a]
(N)	15	15	15	15	15	15	15	15	15	15	15	15
Female	-.01	.06	.09	-.01	-.04	-.15	.28	.03	-.01	.05	-.32[a]	-.13
(N)	30	29	30	29	30	29	30	29	30	29	30	29
Total	-.14	-.02	.10	.11	-.15	-.25	.39[b]	.11	.05	.18	-.29[a]	-.23
(N)	45	44	45	44	45	44	45	44	45	44	45	44
E												
Male	-.12	-.03	.36	.02	-.11	.04	.11	-.05	.21	.04	-.44[a]	-.05
(N)	17	17	17	17	17	17	17	17	17	17	17	17
Female	-.14	-.10	.23	.22	.04	-.48[a]	-.05	.11	.33	-.03	-.36[a]	.08
(N)	21	21	21	21	21	21	21	21	21	21	21	21
Total	-.10	-.10	.26	.16	.00	-.25	.05	-.00	.13	.14	-.37[a]	-.01
(N)	38	38	38	38	38	38	38	38	38	38	38	38
L												
Male	-.07	-.23	-.02	.16	.27	.02	-.46[c]	-.25	.10	.02	.22	.23
(N)	34	34	34	34	34	34	34	34	34	34	34	34
Female	.14	-.03	.10	-.03	.11	.00	-.18	.15	.03	-.07	-.04	-.02
(N)	24	24	24	24	24	24	24	24	24	24	24	24
Total	.01	-.11	.02	.08	.20	.01	-.33[b]	-.03	.06	-.03	.12	.09
(N)	58	58	58	58	58	58	58	58	58	58	58	58
M												
Male	-.11	.07	-.06	-.13	.13	.03	.00	-.08	.27	-.05	-.30[a]	.13
(N)	35	35	35	35	35	35	35	35	35	35	35	35
Female	.31	.38	-.46	-.45	-.24	-.07	.23	.20	.08	-.42	.08	.24
(N)	10	10	10	10	10	10	10	10	10	10	10	10
Total	.04	.14	-.18	-.19	.03	.01	.07	-.03	.24	-.07	-.25	.11
(N)	45	45	45	45	45	45	45	45	45	45	45	45

Hypotheses Related to Characteristics of Those Working Directly with the Physically Disabled (SER)

H-7: Persons working directly with disabled persons (SER) will have a lower mean attitude-toward-disabled-persons score than will persons in other occupational categories.

A two-way analysis of variance design for unequal N's was used to analyze group-sex interaction (Ruble, Paulson, and Rafter, 1966). Two-way analysis of variance with adjusted means and mean's test were run for all AOV problems in England and Yugoslavia. In the remaining countries, adjusted means and mean tests were run only where there was a significant difference.

As indicated in Table 39, the F statistic for Belgium was significant at the .01 level, suggesting significant difference between occupational groups on attitudes toward disabled persons. H-7 is confirmed for Belgium. The significance level in France and the mean's test between groups indicates that H-7 is not confirmed for France. Although the significance level for Yugoslavia is .01, which suggests that the group means did not come from a common population, H-7 cannot be considered fully confirmed as the SER group did not rank lowest as predicted.

TABLE 39.--Comparison of mean differences, standard deviations, and F statistic in respect to attitudes-toward-disabled-persons scores for four occupational groups in six countries.

Country	Occupation	N	Mean of ATDP[2]	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	45.96		4.95	----	4.06	----	.01
	E	46	48.82		5.04				
	M	20	49.50		3.90				
	L	28	50.42		5.69				
Ranking of Means: L(50.42) > M(49.50) > E(48.82) > SER(45.96)									
Mean's Test: E > SER; M > SER; L > SER									
Denmark	SER	44	49.00		5.92	2.80	0.79	0.09	.50
	E	47	47.49		8.46				
	M	30	49.60		7.88				
	L	27	47.41		5.87				
Ranking of Means: M(49.60) > SER(49.00) > E(47.49) > L(47.41)									
England	SER	19	50.74		.73	----	9.82	----	.005
	E	23	49.39		3.34				
	M	18	44.67		4.52				
Ranking of Means: SER(50.74) > E(49.39) > M(44.67)									
Mean's Test: SER > M; E > M									
France	SER	66	48.18	48.17	6.89	.04	2.79	.82	.04
	E	64	49.76	49.85	5.95				
	M	47	49.62	49.63	5.07				
	L	34	51.73	51.77	4.99				
Ranking of Adjusted Means: L(51.77) > E(49.85) > M(49.63) > SER(48.17)									
Mean's Test: L > SER									
Netherlands	SER	45	48.51		4.84	0.15	0.44	.70	.73
	E	57	48.54		4.46				
	M	62	48.32		4.59				
	L	52	47.58		4.38				
Ranking of Means: E(48.54) > SER(48.51) > M(48.32) > L(47.58)									
Yugoslavia	SER		51.41	51.49	5.68	.19	4.37	.67	.01
	E		51.89	51.91	5.44				
	M		50.69	50.62	4.78				
	L		54.31	54.30	5.87				
Ranking of Adjusted Means: L(54.30) > E(51.91) > SER(51.49) > M(50.62)									
Mean's Test: L > SER; L > E; L > M									

[1]SER = Special Education Rehabilitation; L = Labor; E = Education; M = Managers/ Executives.

[2]High scores on ATDP scale means less favorable attitudes.

H-8: The SER group will have a higher mean score than will persons in other occupational categories in respect to the value of Benevolence and lower mean scores in respect to the values of Leadership and Recognition.

Table 40 indicates that H-8 is confirmed for Benevolence in England and The Netherlands. A significant difference was found in Denmark with the E group higher than other groups on Benevolence value. The France sample was somewhat different with the M group highest. The L group was lowest except in Denmark and The Netherlands.

Comparison on Recognition value scores is illustrated in Table 41. The SER group in Denmark was significantly different than the M and L groups and higher than the E group. This is not a confirmation of H-8. Significant differences are found also in England, France, The Netherlands and Yugoslavia. While the findings are generally in the direction of the hypothesis regarding Recognition value, H-8 is not confirmed.

Leadership value comparisons are given in Table 42 for the total sample. England, France and The Netherlands show significant differences between groups on Leadership value. A look at the adjusted means and the mean's test indicates which one contributes most to the difference. However, the Leadership hypothesis is not confirmed in any country. In France, the SER group is significantly higher than the E group on Leadership value.

TABLE 40.--Comparison of mean differences, standard deviations, and F statistic in respect to benevolence value scores for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	27	22.22		3.76	----	5.01	----	.005
	E	51	21.57		4.00				
	M	18	20.11		4.30				
	L	26	18.08		5.51				
Ranking of Means: SER(22.22) > E(21.57) > M(20.11) > L(18.08)									
Mean's Test: SER > L; E > L									
Denmark	SER	44	20.27	20.21	4.58	1.17	2.59	0.28	.05
	E	46	22.46	22.41	4.18				
	M	27	19.18	19.35	5.24				
	L	26	20.50	20.50	7.42				
Ranking of Adjusted Means: E(22.41) > L(20.50) > SER(20.21) > M(19.35)									
Mean's Test: E > SER; E > M									
England	SER	19	21.79		4.12	----	4.83	----	.01
	E	24	17.92		5.34				
	M	17	17.47		4.42				
Ranking of Means: SER(21.79) > E(17.92) > M(17.47)									
Mean's Test: SER > E; SER > M									
France	SER	64	20.75	20.77	3.97	1.73	2.24	.19	.08
	E	66	20.21	20.30	4.62				
	M	44	21.43	21.36	4.19				
	L	36	19.05	18.93	5.17				
Ranking of Adjusted Means: M(21.36) > SER(20.77) > E(20.30) > L(18.93)									
Mean's Test: SER > L; M > L									
Netherlands	SER	44	19.64	19.14	4.26	19.64	9.16	.005	.005
	E	58	18.12	17.81	4.85				
	M	63	15.08	15.70	5.21				
	L	49	18.53	18.56	4.76				
Ranking of Adjusted Means: SER(19.14) > L(18.56) > E(17.81) > M(15.70)									
Mean's Test: SER > M; E > M; L > M									
Yugoslavia	SER	45	19.11		4.11	8.68	.45	.005	.72
	E	38	19.18		5.19				
	M	45	18.93		5.25				
	L	58	18.29		4.39				
Ranking of Means: E(19.18) > SER(19.11) > M(18.93) > L(18.29)									

TABLE 41.--Comparison of mean differences, standard deviations, and F statistic in respect to recognition value scores for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	27	6.37		3.13	----	1.54	----	.21
	E	51	5.92		2.88				
	M	18	6.94		3.42				
	L	26	7.58		4.20				
Ranking of Means: L(5.58) > M(6.94) > SER(6.37) > E(5.92)									
Denmark	SER	44	7.36	7.72	4.57	9.13	5.01	.005	.005
	E	46	6.33	6.22	2.97				
	M	27	4.70	5.17	3.13				
	L	26	5.85	6.07	3.03				
Ranking of Adjusted Means: SER(7.72) > E(6.22) > L(6.07) > M(5.17) Mean's Test: SER > E; SER > M; SER > L									
England	SER	19	6.05		3.67	----	4.82	----	.01
	E	24	10.12		4.67				
	M	17	8.00		4.34				
Ranking of Means: E(10.12) > M(8.00) > SER(6.05) Mean's Test: E > SER									
France	SER	64	6.03	6.02	2.49	0.20	5.16	.66	.005
	E	66	5.77	5.79	3.83				
	M	45	5.48	5.51	2.85				
	L	36	8.08	8.14	3.37				
Ranking of Adjusted Means: L(8.14) > SER(6.02) > E(5.79) > M(5.51) Mean's Test: L > SER; L > E; L > M									
Netherlands	SER	44	5.79	5.86	4.23	4.64	3.29	0.03	.02
	E	58	6.40	6.67	4.06				
	M	63	6.67	6.80	3.96				
	L	49	6.57	6.64	3.90				
Ranking of Adjusted Means: M(6.80) > E(6.67) > L(6.64) > SER(5.86)									
Yugoslavia	SER	45	7.42		3.40	2.00	5.82	.15	.005
	E	38	7.89		4.58				
	M	45	7.00		3.45				
	L	58	10.03		4.71				
Ranking of Means: L(10.03) > E(7.89) > SER(7.42) > M(7.00) Mean's Test: L > E; L > M; L > SER									

TABLE 42.--Comparison of mean differences, standard deviations, and F statistic in respect to leadership value for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	27	13.48		5.12	----	1.01	----	.39
	E	51	12.37		5.04				
	M	18	14.55		4.84				
	L	26	13.61		4.60				
Ranking of Means: M(14.55) > L(13.61) > SER(13.48) > E(12.37)									
Denmark	SER	44	11.47		6.28	30.01	1.68	.005	0.17
	E	46	10.15		5.71				
	M	27	13.33		5.60				
	L	26	9.96		6.27				
Ranking of Means: M(13.33) > SER(11.57) > E(10.15) > L(9.96)									
England	SER	19	13.37		6.63	----	11.20	----	.005
	E	24	13.54		4.49				
	M	17	21.35		6.49				
Ranking of Means: M(21.35) > E(13.54) > SER(13.37) Mean's Test: M > SER; M > E									
France	SER	64	13.58	13.53	5.64	13.15	3.88	.005	.01
	E	66	11.14	10.86	4.60				
	M	44	13.43	13.32	5.28				
	L	36	11.19	11.53	5.91				
Ranking of Adjusted Means: SER(13.53) > M(13.32) > L(11.53) > E(10.86) Mean's Test: SER > E; M > E									
Netherlands	SER	44	13.54	14.67	5.10	44.45	9.54	.005	.005
	E	58	14.84	15.55	6.39				
	M	63	18.49	17.06	4.69				
	L	49	13.69	13.67	6.26				
Ranking of Adjusted Means: M(17.06) > E(15.55) > SER(14.67) > L(13.67) Mean's Test: M > SER; M > L									
Yugoslavia	SER	45	10.38	10.72	5.04	4.86	1.46	.03	.23
	E	37	8.65	8.79	5.20				
	M	45	10.78	10.41	4.61				
	L	58	10.60	10.54	4.20				
Ranking of Adjusted Means: SER(10.72) > L(10.54) > M(10.41) > E(8.79)									

H-9a: The SER group will have a higher mean score on progressive attitudes toward education than will persons in other occupational categories.

H-9b: The SER group will have a lower mean score on traditional attitudes toward education than will persons in other occupational categories.

Table 43 indicates that hypothesis H-9a is not confirmed in any country. A significant F (.005) is computed for France where the E group is significantly higher than all other groups on progressive attitudes. While the F statistic for Denmark is not significant, the relationship between group means is in the direction of the hypothesis. It is interesting to observe the means of the four groups and the F statistic (.99) for Yugoslavia. It could almost be said that these groups were taken from the same population.

Significant differences between occupational groups on traditional attitudes toward education are given in Table 44. Denmark (.005), France (.005), and England (.005) show significant differences, although not in the predicted direction. The E group was lower than the SER group on traditional attitudes. While the F was not at an acceptable level (.09) for Belgium, the mean comparisons were in the hypothesized direction. The F for Yugoslavia (.92) again suggests the lack of differences between occupational groups.

TABLE 43.--Comparison of mean differences, standard deviations, and F statistic in respect to progressive-attitudes-toward-education for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	31.78		3.50	----	1.42	----	.24
	E	51	32.14		2.97				
	M	19	30.89		3.69				
	L	38	30.68		3.73				
Ranking of Means: E(32.14) > SER(31.78) > M(30.89) > L(30.68)									
Denmark	SER	44	34.50		2.82	1.36	2.30	0.24	0.08
	E	47	33.96		2.38				
	M	30	33.03		3.36				
	L	28	32.89		3.78				
Ranking of Means: SER(34.50) > E(33.96) > M(33.03) > L(32.89)									
England	SER	23	31.00		2.59	----	1.68	----	.19
	E	24	32.08		2.84				
	M	18	30.44		3.55				
Ranking of Means: E(32.08) > SER(31.00) > M(30.44)									
France	SER	66	31.01	31.08	4.75	5.52	7.65	.02	.005
	E	68	33.03	33.12	3.15				
	M	47	29.57	29.58	5.75				
	L	37	30.03	29.82	4.24				
Ranking of Adjusted Means: E(33.12) > SER(31.08) > L(29.82) > M(29.58) Mean's Test: E > SER; E > M; E > L									
Netherlands	SER	48	30.50		3.54	0.30	0.57	0.59	0.64
	E	57	30.42		3.29				
	M	64	30.14		4.17				
	L	41	31.02		3.51				
Ranking of Means: L(31.02) > SER(30.50) > E(30.42) > M(30.14)									
Yugoslavia	SER	47	32.32	32.43	3.66	1.14	.03	.29	.99
	E	40	32.27	32.31	3.05				
	M	46	32.33	32.20	3.64				
	L	50	32.35	32.34	3.35				
Ranking of Adjusted Means: SER(32.43) > L(32.34) > E(32.31) > M(32.20)									

TABLE 44.--Comparison of mean differences, standard deviations, and F statistic in respect to traditional-attitudes-toward-education for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	27.03		3.97	----	2.19	----	.09
	E	51	27.06		3.94				
	M	19	28.05		3.61				
	L	28	29.32		4.69				
Ranking of Means: L(29.32) > M(28.05) > E(27.06) > SER(27.03)									
Denmark	SER	44	27.11	26.90	4.63	0.24	15.83	0.63	.005
	E	47	25.76	25.63	4.34				
	M	30	31.80	32.33	4.94				
	L	28	31.25	31.22	4.19				
Ranking of Adjusted Means: M(32.33) > L(31.22) > SER(26.90) > E(25.63) Mean's Test: M > SER; L > SER; M > E									
England	SER	23	25.61		3.20	----	5.84	----	.005
	E	24	23.33		4.60				
	M	18	27.39		3.50				
Ranking of Means: M(27.39) > SER(25.61) > E(23.33) Mean's Test: SER > E; M > E; L > E									
France	SER	68	29.88	29.91	3.92	6.73	17.21	.01	.005
	E	68	26.57	26.69	4.42				
	M	47	30.59	30.65	3.70				
	L	37	32.03	31.90	3.31				
Ranking of Adjusted Means: L(31.90) > M(30.65) > SER(29.91) > E(26.69) Mean's Test: SER > E; L > SER; M > E; L > E									
Netherlands	SER	48	29.02		3.28	0.42	0.38	0.52	0.77
	E	59	29.34		3.79				
	M	64	28.94		3.08				
	L	52	28.63		3.51				
Ranking of Means: E(29.34) > SER(29.02) > M(28.94) > L(28.63)									
Yugoslavia	SER	46	31.85	31.84	3.10	.00	.16	.93	.92
	E	40	32.10	32.10	2.91				
	M	46	31.67	31.68	2.95				
	L	59	32.02	32.02	3.25				
Ranking of Adjusted Means: E(32.10) > L(32.02) > SER(31.84) > M(31.68)									

H-10: The SER group will have higher mean scores than will other occupational groups on the following change orientation variables: (a) health practices, (b) child-rearing practices, (c) birth control practices, (d) automation, and (e) self change.

Table 45 gives comparisons between the groups on health practices. As previously stated, this variable was left out of the Belgian questionnaire due to the controversy over flouridation at the time the sample was being drawn.

It can be seen that significant differences are computed in England, The Netherlands, and Yugoslavia. Denmark (.06) and France (.10) are very close to being significant. However, H-10 is not confirmed as the SER group does not have higher mean score on this change variables. It is interesting to note that in Denmark, England, and France, the SER group has the lowest mean score on health practices of the four groups.

Table 46 gives the mean differences, adjusted means, mean's test and F statistic for child-rearing practices. A significant difference is found only in Yugoslavia where the ranking of means shows the SER group to be lowest, in the opposite direction of the hypothesis. Both M and L groups are significantly higher than the SER group. The significance level (.07) for The Netherlands and the ranking of means is in the direction of the hypothesis. However, H-10 is not confirmed for child-rearing practices.

Comparison between groups on birth control practices is shown in Table 47. While the difference between the groups in France is highly significant (.005) the SER group mean is lower than the mean of the M and L groups. Therefore, the hypothesis is not confirmed for any country on birth control practices.

Table 48 gives the comparisons on automation. A significant difference was found in Belgium (.01) and The Netherlands (.005). The Ranking of means indicates that the SER group is not highest. Therefore, H-10 is not confirmed for automation in all countries.

The self change variable comparisons is shown in Table 49. No significant differences were found which would confirm the hypothesis.

H-11: The SER group will have higher mean scores than other occupational groups on the amount of contact with Mentally Retarded or Emotionally Disturbed persons.

This hypothesis was confirmed on contact with mentally retarded persons in all countries except France. Contact with emotionally disturbed persons confirmed the hypothesis in Denmark, The Netherlands, and Yugoslavia.

TABLE 45.--Comparison of mean differences, standard deviations, and F statistic in respect to health practices for four occupational groups in five countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Denmark	SER	44	3.18		0.87	0.82	2.53	0.37	0.06
	E	47	3.47		0.88				
	M	30	3.67		0.48				
	L	28	3.25		0.89				
Ranking of Means: M(3.67) > E(3.47) > L(3.25) > SER(3.18)									
England	SER	23	2.96		1.02	----	4.47	----	.02
	E	23	3.61		.72				
	M	18	3.67		.84				
Ranking of Means: M(3.67) > E(3.61) > SER(2.96) Mean's Test: E > SER; M > SER									
France	SER	69	2.90		1.01	1.69	2.13	.19	.10
	E	68	3.26		0.89				
	M	48	3.02		1.04				
	L	37	3.22		1.05				
Ranking of Means: E(3.26) > L(3.22) > M(3.02) > SER(2.90)									
Netherlands	SER	48	3.73	3.71	0.49	0.25	4.31	0.62	0.01
	E	59	3.63	3.61	0.72				
	M	62	3.69	3.72	0.62				
	L	52	3.29	3.27	0.98				
Ranking of Adjusted Means: M(3.72) > SER(3.71) > E(3.61) > L(3.27) Mean's Test: SER > L; E > L; M > L									
Yugoslavia	SER	47	2.85	2.80	1.10	3.36	4.58	.08	.005
	E	40	3.27	3.26	.68				
	M	46	3.26	3.32	.93				
	L	59	2.73	2.74	1.08				
Ranking of Adjusted Means: M(3.32) > E(3.26) > SER(2.80) > L(2.74) Mean's Test: E > SER; M > SER; E > L; M > L									

TABLE 46.--Comparison of mean differences, standard deviations, and F statistic in respect to child-rearing practices for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	2.71		.81	----	.42	----	.74
	E	51	2.59		.72				
	M	20	2.75		.79				
	L	28	2.53		.96				
Ranking of Means: M(2.75) > SER(2.71) > E(2.59) > L(2.53)									
Denmark	SER	44	2.89		0.78	0.31	0.43	0.58	.74
	E	47	3.04		0.75				
	M	30	2.93		0.83				
	L	28	2.86		0.85				
Ranking of Means: E(3.04) > M(2.93) > SER(2.89) > L(2.86)									
England	SER	22	3.09		.61	----	.16	----	.85
	E	24	3.00		.66				
	M	18	3.11		.83				
Ranking of Means: M(3.11) > SER(3.09) > E(3.00)									
France	SER	69	2.46		0.90	3.24	2.25	.09	.08
	E	69	2.53		0.76				
	M	49	2.61		0.96				
	L	36	2.61		0.80				
Ranking of Means: M & L(2.61) > E(2.53) > SER(2.46)									
Netherlands	SER	48	3.10		0.47	.005	2.33	0.90	0.07
	E	59	3.07		0.55				
	M	64	3.03		0.50				
	L	51	2.84		0.64				
Ranking of Means: SER(3.10) > E(3.07) > M(3.03) > L(2.84)									
Yugoslavia	SER	47	2.34	2.37	1.22	.55	2.61	.46	.05
	E	39	2.77	2.78	1.24				
	M	46	3.06	3.04	.95				
	L	59	2.88	2.88	1.20				
Ranking of Adjusted Means: M(3.04) > L(2.88) > E(2.78) > SER(2.37) Mean's Test: M > SER; L > SER									

TABLE 47.--Comparison of mean differences, standard deviations, and F statistic in respect to birth control for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	28	1.57		.69	----	1.08	----	.36
	E	51	1.47		.50				
	M	20	1.65		.67				
	L	28	1.71		.65				
Ranking of Means: L(1.71) > M(1.65) > SER(1.57) > E(1.47)									
Denmark	SER	44	1.52		0.55	0.14	1.42	0.71	.24
	E	46	1.43		0.65				
	M	30	1.37		0.56				
	L	28	1.68		0.72				
Ranking of Means: L(1.68) > SER(1.52) > E(1.43) > M(1.37)									
England	SER	22	1.50		.67	----	2.84	----	.06
	E	24	1.62		.49				
	M	18	1.22		.43				
Ranking of Means: E(1.62) > SER(1.50) > M(1.22) Mean's Test: E > M									
France	SER	68	1.66	1.66	0.58	0.05	7.60	.81	.005
	E	68	1.42	1.43	0.53				
	M	49	1.96	1.96	0.57				
	L	37	1.76	1.76	0.76				
Ranking of Adjusted Means: M(1.96) > L(1.76) > SER(1.66) > E(1.43) Mean's Test: SER > E; SER > M; M > E; L > E									
Netherlands	SER	47	1.59		0.58	2.89	0.27	0.09	.85
	E	58	1.55		0.57				
	M	64	1.55		0.59				
	L	50	1.50		0.58				
Ranking of Means: SER(1.59) > E & M(1.55) > L(1.50)									
Yugoslavia	SER	47	1.32	1.30	.59	.87	.16	.36	.92
	E	40	1.32	1.32	.47				
	M	46	1.33	1.34	.52				
	L	59	1.37	1.37	.58				
Ranking of Adjusted Means: L(1.37) > M(1.34) > E(1.32) > SER(1.30)									

TABLE 48.--Comparison of mean differences, standard deviations, and F statistic in respect to automation for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	27	2.55		.93	----	4.43	----	.01
	E	51	2.16		.85				
	M	20	3.00		.85				
	L	28	2.53		1.00				
Ranking of Means: M(3.00) > SER(2.55) > L(2.53) > E(2.16)									
Mean's Test: M > E									
Denmark	SER	42	3.02		0.81	10.47	2.28	.005	0.08
	E	47	3.11		0.79				
	M	30	3.47		0.73				
	L	28	3.28		0.71				
Ranking of Means: M(3.47) > L(3.28) > E(3.11) > SER(3.02)									
England	SER	22	3.41		.50	----	1.46	----	.24
	E	24	3.25		.53				
	M	18	3.55		.70				
Ranking of Means: M(3.55) > SER(3.41) > E(3.25)									
France	SER	68	2.27		0.95	0.52	0.72	.48	.52
	E	67	2.28		1.00				
	M	49	2.26		1.01				
	L	37	2.03		0.93				
Ranking of Means: E(2.28) > SER(2.27) > M(2.26) > L(2.03)									
Netherlands	SER	48	2.94	3.00	0.78	20.45	5.77	.005	.005
	E	58	2.81	3.86	0.63				
	M	64	3.30	3.19	0.70				
	L	51	3.04	3.04	0.53				
Ranking of Adjusted Means: M(3.19) > L(3.04) > SER(3.00) > E(2.86)									
Mean's Test: M > E									
Yugoslavia	SER	47	3.08	3.17	1.08	5.56	.57	.02	.64
	E	40	3.05	3.08	1.06				
	M	46	3.28	3.19	1.13				
	L	59	2.95	2.93	1.25				
Ranking of Adjusted Means: M(3.19) > SER(3.17) > E(3.08) > L(2.93)									

TABLE 49.--Comparison of mean differences, standard deviations, and F statistic in respect to self change for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F		Significance of F	
						1 way sex	2 way group	1 way sex	2 way group
Belgium	SER	27	2.63		0.69	----	1.14	----	.34
	E	51	2.37		0.72				
	M	20	2.25		0.74				
	L	27	2.41		0.83				
Ranking of Means: M(2.02) > L(1.78) > E(1.70) > SER(1.69)									
Denmark	SER	44	2.64	2.65	0.98	.08	1.22	.77	.31
	E	47	2.68	2.69	0.59				
	M	30	2.77	2.46	0.86				
	L	28	2.86	2.86	0.65				
Ranking of Adjusted Means: L(2.86) > M(2.46) > E(2.69) > SER(2.65)									
England	SER	21	2.48		.75	----	1.42	----	.25
	E	24	2.33		.87				
	M	18	2.78		.94				
Ranking of Means: M(2.78) > SER(2.48) > E(2.33)									
France	SER	68	2.88	2.56	.90	0.73	0.80	.40	.50
	E	69	2.59	2.61	.84				
	M	49	2.39	2.39	.67				
	L	37	2.49	2.47	.73				
Ranking of Adjusted Means: E(2.61) > SER(2.56) > L(2.47) > M(2.39)									
Netherlands	SER	47	2.45	2.47	0.72	1.21	.17	.27	.92
	E	59	2.46	2.48	0.62				
	M	64	2.50	2.46	0.80				
	L	52	2.40	2.41	0.80				
Ranking of Adjusted Means: E(2.48) > SER(2.47) > M(2.46) > L(2.41)									
Yugoslavia	SER	46	1.69		.69	.44	1.85	.51	.14
	E	40	1.70		.72				
	M	48	2.02		.74				
	L	59	1.78		.83				
Ranking of Means: M(2.02) > L(1.78) > E(1.70) > SER(1.69)									

TABLE 50.--Comparison of mean differences, standard deviations, and F statistic in respect to contacts with mentally retarded persons for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F 1 way sex	F 2 way group	Significance of F 1 way sex	Significance of F 2 way group
Belgium	SER	28	3.86		1.32	----	24.03	----	.005
	E	48	1.71		1.18				
	M	19	1.42		.77				
	L	22	2.00		1.27				
Ranking of Means: SER(3.86) > L(2.00) > E(1.71) > L(1.42)									
Mean's Test: SER > E; SER; M; SER > L									
Denmark	SER	44	4.14	4.16	1.32	0.75	20.86	.39	.005
	E	44	2.41	2.42	1.51				
	M	30	2.20	2.14	1.49				
	L	28	1.82	1.82	1.22				
Ranking of Adjusted Means: SER(4.16) > E(2.42) > M(2.14) > L(1.82)									
Mean's Test: SER > E; SER > M; SER > L									
England	SER	21	3.28		1.87	----	13.13	----	.005
	E	24	2.37		.97				
	M	16	1.12		.34				
Ranking of Means: SER(3.28) > E(2.37) > M(1.12)									
Mean's Test: SER > E; SER > M; E > M									
France	SER	66	3.26	3.25	1.48	.76	10.08	.18	.005
	E	66	2.36	2.41	1.56				
	M	43	2.81	2.85	1.59				
	L	31	1.58	1.54	1.23				
Ranking of Adjusted Means: SER(3.25) > M(2.85) > E(2.41) > L(1.54)									
Mean's Test: SER > E; SER > L; E > L; M > L									
Netherlands	SER	48	3.46	3.49	1.49	0.03	20.88	.85	.005
	E	56	1.62	1.65	1.12				
	M	62	2.32	2.38	1.46				
	L	47	1.64	1.65	1.13				
Ranking of Adjusted Means: SER(3.49) > M(2.28) > E(1.65) > L(1.65)									
Mean's Test: SER > E; SER > M; SER > L; M > E; M > L									
Yugoslavia	SER	47	3.68	3.73	1.40	1.44	21.44	.23	.005
	E	40	1.95	1.97	1.28				
	M	44	1.93	1.88	1.28				
	L	59	1.85	1.84	1.35				
Ranking of Adjusted Means: SER(3.73) > E(1.97) > M(1.88) > L(1.84)									
Mean's Test: SER > E; SER > M; SER > L									

TABLE 51.--Comparison of mean differences, standard deviations, and F statistic in respect to contacts with emotionally disturbed persons for four occupational groups in six countries.

Country	Occupation	N	Mean	Adjusted Mean	Standard Deviation	F 1 way sex	F 2 way group	Significance of F 1 way sex	Significance of F 2 way group
Belgium	SER	28	2.00		1.44	----	3.76	----	.01
	E	49	1.22		.55				
	M	19	1.58		1.12				
	L	24	1.54		.88				
Ranking of Means: SER(2.00) > M(1.58) > L(1.54) > E(1.22)									
Mean's Test: SER > E; SER > L									
Denmark	SER	44	3.20	3.15	1.59	5.05	12.90	0.03	.005
	E	44	1.84	1.81	1.14				
	M	30	1.77	1.89	1.30				
	L	28	1.53	1.53	1.14				
Ranking of Adjusted Means: SER(3.15) > E(1.81) > M(1.89) > L(1.53)									
Mean's Test: SER > E; SER > M; SER > L									
England	SER	21	2.86		1.62	----	1.72	----	.19
	E	24	2.16		1.20				
	M	17	2.18		1.29				
Ranking of Means: SER(2.86) > M(2.18) > E(2.16)									
France	SER	63	2.16	2.16	1.40	0.20	3.61	.66	.01
	E	64	1.59	1.61	1.21				
	M	45	2.40	2.41	1.32				
	L	31	1.81	1.80	1.44				
Ranking of Adjusted Means: M(2.41) > SER(2.16) > L(1.80) > E(1.61)									
Mean's Test: SER > E; M > E									
Netherlands	SER	48	2.85	2.89	1.65	0.03	12.62	0.84	.005
	E	56	1.77	1.79	1.22				
	M	62	2.03	1.98	1.42				
	L	46	1.24	1.24	0.56				
Ranking of Adjusted Means: SER(2.89) > M(1.98) > E(1.79) > L(1.24)									
Mean's Test: SER > E; SER > M; SER > L; E > L; M > L									
Yugoslavia	SER	47	2.45	2.45	1.54	.02	13.80	.86	.005
	E	39	1.36	1.36	.99				
	M	45	1.60	1.59	1.07				
	L	59	1.14	1.13	.51				
Ranking of Adjusted Means: SER(2.45) > M(1.59) > E(1.36) > L(1.13)									
Mean's Test: SER > E; SER > M; SER > L; M > L									

TABLE 52.--Summary of hypotheses 1 through 11 indicating confirmation or nonconfirmation and directionality for country samples.

Variables	H-1 Contact Frequency and Intensity			H-2 Contact Frequency and Attitude Favorableness			H-3 Leadership			H-4 Recognition			H-5 Benevolence			H-5c Sex			H-6 Change Orientation		
	DP	P-ED	T-Ed	DP	P-Ed	T-Ed	DP	P-Ed	T-Ed	DP	P-Ed	T-Ed	DP	P-Ed	T-Ed	B	DP	P	DP	P-Ed	T-Ed
EUROPE																					
Belgium	X	S	X	X	X	-	S	X	X	S	S	-	S	S	S	O	O	O	X	X	X
Denmark	X	-	-	-	X	-	S	-	-	-	S	-	S	S	-	S	S	S	X	S	X
England	O	O	O	X	X	-	O	O	O	O	O	O	O	O	O	X	X	X	X	X	X
France	S	S	-	X	-	X	S	-	S	-	-	S	-	-	S	S	S	S	X	X	X
Netherlands	X	S	S	X	X	X	-	S	-	S	X	-	S	X	-	X	-	S	X	X	X
Yugoslavia	S	S	-	-	-	-	S	X	-	S	S	-	S	S	-	X	-	-	X	X	X

SER Group Compared With Other Groups	H-7 High DP	H-7 High Benevolence	H-8 Low Leadership	H-8 Low Recognition	H-9 High Progressive Education	H-9 Low Traditional Education	H-10 High Change Scores HL	CR	BC	A	SC	H-11 High Contact Mentally Retarded	H-11 High Contact Emotionally Disturbed
EUROPE													
Belgium	X	-	-	-	-	S	-	-	-	-	S	X	S
Denmark	-	-	-	-	S	-	-	-	-	-	-	X	X
England	-	X	S	S	-	-	-	-	-	-	-	X	S
France	S	-	-	-	-	-	-	-	-	-	S	S	-
Netherlands	-	X	S	S	-	-	S	S	S	-	-	X	X
Yugoslavia	-	-	-	-	-	-	-	-	-	-	-	X	X

X = Confirmation of hypothesis; O = Analysis not made for this country; S = Not confirmed but in the direction of the hypothesis.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

An attempt will be made to summarize the original objectives of the study and to integrate the results and implications with these objectives. The chapter will be divided into three major sections: Part I will be a review of the theoretical and methodological considerations of the study; Part II presents a discussion of the results of hypotheses testing with implications; Part III is devoted to recommendations for further study.

Part I: Review of Theoretical and Methodological Considerations

The Nature of the Problem

It was suggested that obstacles to responsible social change are attitudinal in nature and must be studied as they become diffused into the cultural situation. Interest in attitudes toward education and toward rehabilitation of the disabled has greatly intensified in the past decade. The social frame of reference for rehabilitation concepts and programs coupled with the need for greater integration of the purposes of social institutions, are essential to the achievement of a greater degree of well-being for all.

The Second International Seminar on Special Education at Nyborg, Denmark (July, 1963), expressed concern for the acquisition of normative data about attitudes of various interest groups toward special education and rehabilitation. Such data was considered indispensable to a coherent approach to international cooperation in a health-related field such as special education and rehabilitation.

Review of Theory

The theoretical framework of the present study is generally consistent with Kerlinger's theoretical model used to study attitudes toward education and the social-psychological orientation of Wright (1961) and Meyerson (1948, 1963) regarding attitudes toward physical disability. The main focus of the study has been the relationship between certain variables having to do with interpersonal values, personal contact, and attitude, with the assumption that both value and contact variables serve as determinants of attitudes.

Kerlinger has developed a theoretical model based on a basic dichotomy which includes permissive-progressive or restrictive-traditional dimensions of attitudes toward education. He suggests that the sharpness of this dichotomy is dependent upon occupational role, knowledge of and experience with education as well as the perceived importance of education (Kerlinger, 1956, p. 312). The present

research is based on Kerlinger's assumption that the progressive-traditional dimensions of attitudes toward education generalize to attitudes in other areas.

Concepts central to the theoretical framework of Wright (1960) and Meyerson (1948, 1963) are those of self, other, reference groups, role, attitude, contact and value. These concepts are presumed to arise from, and are related to, interpersonal interaction with emphasis on interpersonal activity. Underlying these assumptions is a belief in the active nature of the individual as an agent of change in his physical and social environment.

Theory has suggested that values are important determinants of attitudes. Values can be viewed as basic to a "theory of action" in which value orientations are viewed as the basis of attitudes taken toward various social objects. A conceptual value framework has been formulated (Dembo, Leviton, Wright, 1956; Wright, 1960) that is specifically related to attitudes toward physical disability. Values can be clustered according to whether they are derived from <u>comparisons</u> or <u>intrinsic assets</u>. While it is true that some circumstances require comparative evaluations, the <u>asset</u> theory holds that this need never be done without evaluating the disabled person for his own unique characteristics as a human being.

It has been suggested (Felty, 1965) that the whole concept of rehabilitation and special education (taken apart from the economic argument that in the long run

education and training are cheaper than public support) is a response to the asset values of a society. A reasonable inference from the asset-comparative value framework seemed to be that those persons working in the field of rehabilitation and special education would be expected to hold higher asset values than those working in other occupations.

Theory has suggested that the amount and kind of interpersonal contact with a subgroup are determinants of attitudes. Several studies were reviewed which suggested the importance of personal contact in changing attitudes and reducing prejudice. Homans (1950) held the general relationship that the more frequent the contact between persons or groups, the more favorable the attitudes. Guttman and Foa (1951) have shown that attitude intensity is related to the amount of social contact with the attitude object. Zetterberg (1963) observed that the effects of frequency of social contact on liking or disliking are dependent on the cost of avoiding interaction and whether this interaction is perceived as rewarding. Attempts have been made to test interaction between contact frequency, intensity and the related contact indices of enjoyment and avoidance.

Review of Hypotheses Construction

The pilot study conducted by Felty (1965) applied several of the hypotheses of the present study to the

physically disabled in San Jose, Costa Rica. Friesen (1966) extended the hypotheses to include attitudes toward education. Sinha (1966) included similar hypotheses in his study on maternal attitudes and values in respect to emotionally disturbed and physically disabled persons.

H-1 and H-2 are related to contact-frequency and contact-intensity interactions. The hypotheses were derived from considerations by Guttman and Foa (1951), Foa (1950), and Rosenberg (1960), to the effect that contact frequency is directly related to contact frequency regardless of content direction. Contact-frequency interactions took into account the relationship of contact variables: (a) alternative rewarding opportunities, (b) enjoyment of the contact, and (c) ease of avoidance of contact.

H-3 through H-5 attempt to test the assumptions concerning asset or comparative value orientation. H-6 postulates a relationship between change orientation and positive attitudes toward the disabled and high scores on the progressive education scale. It was felt that high scores on change orientation would represent departure from the status quo and high relationship to new ideas and concern for the quality of care and equality of treatment for the disabled.

H-7 through H-11 were derived from the assumptions that persons working in the area of special education and rehabilitation would have more favorable attitudes toward disabled persons; would be more asset minded; would have

more progressive attitudes toward education; would be more change oriented; and would have more contact with mentally or emotionally handicapped persons.

Instrumentation

The Attitudes Toward Disabled Persons Scale was adapted from the attitudes scale developed by Yuker and associates (1960). The scale was modified so as to make provisions for respondent scoring. The Likert-type format was retained, but the response categories were reduced from seven to four.

The Attitudes Toward Education Scale, developed by Kerlinger (Kerlinger, 1958, 1961; Kerlinger and Kaya, 1959) was used to measure both traditional and progressive attitudes toward education. A relationship between progressive attitudes toward education and favorable attitudes toward physically disabled persons was measured.

The Gordon Survey of Interpersonal Values (Gordon, 1960), was used to test the values of asset and comparative orientation toward others. On the basis of the description, item content, and intercorrelations with the EPPS, it was felt that the Benevolence Value sub-scale would be an adequate operationalization of asset value. Recognition and Leadership sub-scales were judged to be most representative of comparative values.

Contact with education, preferences for personal relationships, change orientation, institutional

satisfaction, religiosity and other demographic characteristics were taken from the Personal Questionnaire: General. The Personal Questionnaire: HP measured contact with physically handicapped persons with intervening variables such as amount, kind, type, alternative to, enjoyment of, and material gain from contacts with disabled persons.

Statistical Procedures

Two frequency programs, FCC I and FCC II (Clark, 1964) were used in tabulating frequency distributions for every item.

The one- and two-way analysis of variance was used for testing hypotheses concerned with differences between group means. The effect of sex on attitude scores was held constant by two-way analysis of variance procedures (Ruble, Paulson, and Rafter, 1966). Since the samples were not equal in size or in sex ratio, where a significant F occurred an "adjusted mean" and mean's test was indicated. The procedure used for testing for significance among multiple means is approximately equal to Duncan's Multiple Means test (Edwards, 1950; Kramer, 1956, pp. 307-310) up to and including three treatment means.

Relational and predictive statistics were obtained by zero-order, partial, and multiple correlation analyses. The zero-order correlational analysis provided a matrix of simple correlations between all variables for the total

sample used in the study. The multiple correlation analyses used as a criterion the total raw scores from the ATDP Scale, the Progressive and Traditional Education Scales, and change orientation items. Partial correlation analyses allowed the examination of a number of variables which were assumed to have some relationship to a criterion or dependent variable. Tests of significance of the correlation coefficients from zero are the usual ones, with tables entered (Edwards, 1950, p. 362) for the appropriate degrees of freedom.

Part II: Discussion of the Results and Implications of Hypothesis Testing

There were a total of 18 hypotheses which were divided into four major categories pertaining to: (a) contact frequency, contact intensity and attitude scores; (b) attitude-value interactions, (c) change orientation and attitude; and (d) differences between SER and other occupational groups. Each major category had several hypotheses and sub-hypotheses with a view to comparing relationships and making appropriate inferences and predictions about respondent groups.

Hypotheses Relating to Contact Frequency and Intensity

It was hypothesized in this section that higher contact frequency with disabled persons and education would lead to greater intensity of attitude irrespective of whether attitude content is positive or negative,

traditional or progressive. England was dropped from the problem due to the availability of only three groups.

This hypothesis was confirmed in Belgium, Denmark, and The Netherlands. Low frequency of contact was found to be related to less intense attitudes toward the disabled. In France and Yugoslavia ($P < .09$) there was also reasonable support for the hypothesis. Zero-order correlations for the four occupational groups (Tables 10-12) show trends in the direction of the hypothesis but the N in various categories is too small to allow generalizations.

The findings do not support the hypothesis that frequency of contact with education (progressive or traditional) leads to greater intensity. However, it is true that on the progressive intensity scale, those with low frequency of contact scored lower in progressive intensity than the high frequency group.

This direction would tend to support Friesen (1966) who suggested that those who hold progressive attitudes toward a given cause in Latin America tend to be active in challenging the status quo with reference to that cause, while those holding traditional attitudes toward a given cause emphasize the dangers and risks involved. The implication is that those holding progressive attitudes in Latin America might tend toward greater intensity of feeling.

It can be asked whether the concepts relating to traditional and progressive attitudes toward education

take on the same meaning in different cultures. It was not determined that contact frequency is related to attitude intensity on attitudes toward education, except in Belgium on the traditional attitude scale.

Felty (1965) and Friesen (1966) reported that contact frequency was not significantly related to intensity of attitudes toward disabled persons. The findings of this study would not support the interpretation given (Felty, 1965, p. 170).

Partial and multiple correlations between attitudes toward disabled persons and toward education as related to contact variables are indicated in Table 13. A significant correlation is indicated between combined contact variables and favorable attitudes toward disabled persons in all countries of the total sample. When partialled out, enjoyment of contact contributes highly to the criterion variable. Amount of contact contributed most in England, while ease of avoidance would be the best predictor variable in France along with enjoyment of contact.

The multiple correlation between the combined contact variables (predictors) and attitudes toward education (progressive and traditional) are not significant in all countries as is the ATDP scale, nor are the multiple correlations as high as on the ATDP scale. Significant multiple correlations were not found on progressive attitudes toward education in France and The Netherlands, or in Belgium, Denmark, and England on traditional attitudes

toward education. The partial correlations indicated that amount and enjoyment of contact were significant contributors to this multiple correlation.

It is interesting to note that the multiple correlations are higher for the ATDP scales. This might tend to suggest that the nature of the attitude object is an important factor in respect to attitude intensity and content.

Hypotheses Related to Attitude and Value Interactions

Personal contact has been found to relate to attitudes toward a social object. Values are also believed to be determinants of attitudes and instrumental to maintenance of attitudes. An attempt was made to determine the relation between values and attitudes with the help of several hypotheses.

It was hypothesized that those who score high in need for power and control over others would tend to have unfavorable attitudes toward the disabled. This hypothesis was not confirmed. However, with the exception of The Netherlands, those scoring low on leadership did appear to have more favorable attitudes toward the disabled. These findings would tend to lend some support to the hypothesis.

There was a significant relationship between Leadership value and progressive attitudes toward education in Belgium and Yugoslavia. Those who scored low on Leadership

value scored high on progressive attitudes toward education. The hypothesis is only confirmed in these two countries. As reported by Felty (1965), Friesen (1966), and Sinha (1966) the present study also reports that there is no significant relationship between high and low leadership value scores and traditional attitudes toward education. It should be mentioned that the only relationships on zero-order correlations between leadership and traditional attitudes toward education are negative, thus in the opposite direction of the hypothesis.

Although the results seem to confirm the hypothesis in Belgium and Yugoslavia on leadership and progressive attitudes, there appears to be a contradiction in both samples. The high leadership group seems to respond differentially on progressive and traditional attitudes. They have responded as you would expect, in the direction of traditional attitudes. However, the low group responded in both directions. This would suggest that those who score low on leadership value are clearly responding to both progressive and traditional attitudes.

One explanation of this could be that in the European culture individuals are expected to show leadership qualities or submit to them. It is questionable whether the distinction between leadership, recognition, and benevolence is made differentially by occupational groups within or between countries. For example, it conceivably would be possible for a person to score high on leadership value

while at the same time using the Rogerian theory and technique in counseling without perceiving there was supposed to be a difference.

It could be postulated that in Yugoslavia there is considerable stress placed upon the need for strong identification with the social system and structure, and at the same time, a desire for change and reform which will allow for a progressive approach to solving social problems.

There is also a strong feeling in Europe toward the traditional which in no way is viewed as "traditionalism." The European people seem to be able to combine acceptance of new ideas with a respect for tradition. This may be a factor in considering results between value and attitudes.

The value of Recognition includes achievement orientation, the tendency to attract favorable attention and to receive admiration from others. Recognition was considered as related to comparative orientation as opposed to asset orientation measured by Benevolence value.

The Recognition hypotheses were not confirmed for attitudes toward disabled persons or traditional attitudes toward education. A significant difference was found in The Netherlands between those who scored low on Recognition value with scores on progressive attitudes toward education.

It is interesting to note the response pattern in Denmark. Those who scored low in recognition value scored high on progressive attitudes. This group also scored high

on traditional attitudes. The same pattern can be observed in The Netherlands. This appears to be another example of lack of clear-cut differentiation where respondents are responding ambivalently to the attitude scales. It may be true that in some cultures, progressive and traditional concepts are not perceived as being distinctive.

Benevolence value refers to the need to help others, and to be generous. When the sample for each country was divided into high and low groups on Benevolence and compared to attitudes toward disabled persons, no significant differences were computed. However, the findings give some support to value and attitude theory upon careful examination of Table 20. Exceptions are again found in Denmark and The Netherlands. In the other countries, high scores on Benevolence value led to lower mean scores on the ATDP scale, thus in the direction of the hypothesis.

A similar pattern of results obtained on the recognition value in Denmark and The Netherlands occurred on Benevolence value and attitudes toward education. Those in the high group on Benevolence scored high on both progressive and traditional attitudes toward education. Perhaps it could be said that in certain cultures values have a long history of being viewed in traditional ways.

A look at the data for France on the relationship between Benevolence value and the attitude scales raises some speculation. It was not possible to make a "good"

cut on high and low Benevolent scores due to respondent grouping. This no doubt had considerable effect on the analysis of variance due to the size of the N in the high and low categories. However, one could speculate about the homogeneous nature of the response pattern on Benevolence and its obvious lack of relationship to the criterion variables, attitudes toward disabled persons, and attitudes toward progressive and traditional education. The same observation can be made on the other value scales in France.

It was also hypothesized that women would score higher than men on Benevolence, positive attitudes toward the physically disabled, and progressive attitudes toward education. As predicted, females had significantly higher mean scores on Benevolence value in The Netherlands, and Yugoslavia. While the results in Denmark and France were in the direction of the hypothesis, the means were not significantly different.

It can be observed from Table 24 that while the female group had differentiated means on Benevolence, there is no significant difference on attitudes toward disabled persons.

Contrary to Felty's (1965) findings, there was very little difference in terms of mean scores between men and women on progressive attitudes toward education. A significant difference was found in France to confirm the

hypothesis for that country. Other minor differences were in the direction of the hypothesis except in Yugoslavia.

Change Variables as Related to Attitude Scores

Felty (1965) suggested that attitudes toward change might have a salient relationship to attitudes toward education and toward the disabled and recommended change orientation variables be included in the study. Table 26 indicates that significant multiple correlations were obtained in all countries between combined contact variables and the three attitude scales with the exception of Denmark on traditional attitudes toward education.

While several significant multiple and partial correlations were found, low amount and inconsistency of results with expected directions makes interpretation somewhat difficult. It can be observed that the multiple correlation for combined change variables is higher on progressive attitudes toward education than for traditional attitudes in Belgium, Denmark, The Netherlands and Yugoslavia. In England, change variables are more related to attitudes toward disabled persons than to education.

Child-reading practices seems to have a general consistency of relationship to the criterion variables. It is negatively related to traditional attitudes in several countries and makes a significant differential contribution in respect to progressive attitudes toward education in all countries except England. Some of the

findings between self change and attitude scores are not easily explained. It might be assumed that these kind of inconsistencies are the result of lack of perceived concept equivalence or of conflicting loyalties between the traditional and the progressive, the old and the new.

Hypotheses Related to Characteristics of Those Working Directly with the Physically Disabled (SER)

It was hypothesized that persons working directly with disabled persons (SER) will have a lower mean attitude-toward-disabled-persons score than will persons in other occupational groups. This hypothesis can only be considered confirmed in Belgium. The findings for France indicate a significant difference between the groups, but the means' test suggests that SER is only significantly lower than the L group. However, the findings for France are in the direction of the hypothesis.

It is interesting to observe again the similarity in Denmark and The Netherlands in respect to group comparisons on attitudes toward disabled persons scores. In both countries, the Labor group reflects the most favorable attitudes while the SER group ranks next to highest. The question is raised as to why the Labor group has the most favorable attitudes toward the disabled in Denmark and The Netherlands? One would expect that professionals working in the field would tend to have more favorable

attitudes. It may be that the L group in these countries is well aware of the problems of disability resulting from industrial accidents.

Friesen (1966) and Sinha (1966) have discussed the adequacy of the attitude scales used in the study. They have suggested that the attitude instruments may be measuring a limited portion of the attitude universe related to the disabled. The items on these scales are possibly reflecting only stereotyped statements about disabled persons, so that an individual with a direct and prolonged personal contact might appear less accepting on a "stereotype" level than those whose relationships are less frequent and perhaps more superficial. Further discussion in this regard will be made in the following section.

It was hypothesized that the SER group would have a higher mean score than persons in other occupational categories in respect to Benevolence value and lower mean scores in respect to Leadership and Recognition value.

Benevolence scores are given in Table 40. Significant differences between the groups are found in Belgium, Denmark, England, and The Netherlands. In Yugoslavia, the four occupational groups did not respond differentially. The hypothesis is confirmed only in England and The Netherlands as indicated by the mean's test. The SER group scored significantly higher than all other groups on Benevolence in these two countries. In Belgium the findings

were in the direction of the hypothesis but did not achieve an acceptable level of significance. The SER group scored significantly higher than other groups except the E group in Belgium.

The hypothesis on Recognition value is not confirmed for any country. The L group in Yugoslavia scored significantly higher than the other occupational groups. This raises speculation as to why the L group obtained a significantly higher score on Recognition value than all other groups. Perhaps the answer is related to the social and political value system within the country. Significant differences were also found in Denmark and France. In these countries the M group scored lower than the SER group.

Leadership value results are indicated in Table 42. The hypothesis is not supported in any of the countries for the SER group. It is the researcher's current thinking that the E group could normally be expected to score lower on Leadership value than other groups. There may be an inherent tendency for professional "paternalism" to exist among the SER group. The L group consistently scored lower than the M group on Leadership value, which would be expected.

Tables 43 and 44 compare SER with other groups on progressive and traditional attitudes toward education. A significant difference for progressive education was found only in France with the E group scoring highest. This may be due to the composition of the SER sample. It

is not likely that there would be much difference between the E and SER groups if SER were educators. However, there are some medical and para-medical personnel in the SER sample.

The F statistic in Yugoslavia is .99 on progressive attitudes and .92 for traditional attitude comparisons. This suggests that the Yugoslavian groups do not respond differentially on either progressive or traditional attitudes toward education. It is likely that in Yugoslavia a clear-cut dicotomization of progressive and traditional education does not exist. The significant differences found in Table 44 do not support the hypothesis that the SER group will score higher on progressive and lower on traditional attitudes than other groups. The E group generally had lower scores on traditional education.

It was hypothesized that the SER groups would have higher mean scores on the following change orientation variables: (a) health practices, (b) child-rearing practices, (c) birth control practices, (d) automation, and (e) self change.

This hypothesis was not confirmed for any of the change orientation variables in any countries. It is my feeling that these findings on comparisons between change variables and SER are due in part to the hetergeneous composition of the SER sample. It can also be postulated that in a more highly developed culture the need for change in social services is not perceived as being as

great as in developing cultures. Hence the theoretical consideration of Jordan (1963) and the findings of Friesen (1966) in Latin America, would not appear to be applicable in Europe.

As indicated by Tables 50 and 51, the SER group had significantly more contact with mentally retarded and emotionally disturbed persons than did the other groups. The exception to this is with the M group in France on contacts with emotionally disturbed persons. The results clearly confirm the hypotheses.

Summary of Hypothesis Testing

Table 52 gives a summary of the confirmation or nonconfirmation of hypotheses for the sample in each country. There was a significant relationship between contact frequency and intensity on the ATDP scale in Belgium, Denmark and The Netherlands. The F statistic was nearly at an acceptable level of significance in France and Yugoslavia. This data lends support to the theory that contact frequency with disabled persons is related to attitude intensity regardless of content direction. The results do not show a relationship between contact and attitudes toward education.

The theoretical position of Homans (1954) and Zetterberg (1966) stressing the volitional nature of contact as related to attitude, finds some support in this study. Enjoyment of contact and the ease of avoidance

of contact was frequently related to attitude favorableness.

While the hypothesis relating Leadership and attitudes toward disabled persons (H-3a,b) was not confirmed, there was evidence to show that those who scored low on Leadership value tend to have more favorable attitudes toward disabled persons. The hypothesis (H-3b) on Leadership and attitudes toward education was confirmed in Belgium and Yugoslavia on the progressive education scale.

Recognition value hypotheses were not confirmed for attitudes toward disabled persons or traditional attitudes toward education. A relationship was confirmed between Recognition and attitudes toward progressive education in The Netherlands.

The only significant relationship on Benevolence value and attitude scales was in The Netherlands on progressive attitudes toward education. However, part of the findings are in the direction of H-5a,b.

The hypothesis (H-5c) on sex differences on Benevolence value was confirmed in England, The Netherlands, and Yugoslavia. The results in other countries were in the direction of the hypothesis. No difference was found on the attitudes toward disabled persons scale. In France, women scored significantly higher than men on progressive attitudes toward education. This was the only hypothesis confirmation on the education scales.

It was felt that high scores on change orientation represents departure from the status quo and high relationship to new ideas (i.e., progressivism) and concern for the disabled. The multiple correlation for the combined change orientation variables indicates support for this theoretical position.

Table 52 also indicates that group membership may be an important factor in values and contact. Significant differences were found among occupational groups on contact, attitude scales, values scales, and change orientation items. However, very few hypotheses comparing the SER group with other groups within countries were confirmed. In Belgium, the SER group had significantly more favorable attitudes toward physically disabled persons. In England and The Netherlands the SER group was found to have higher Benevolence value scores than all other groups. The SER group had significantly higher contact with mentally retarded persons except in France and significantly higher contact with emotionally disturbed persons in Denmark, The Netherlands, and Yugoslavia.

Part III: Recommendations

Recommendations Relating to the Instruments

It has been stated by Felty (1965) and Friesen (1966) that one of the probable reasons for failure to obtain sufficient evidence that the items would form Guttman-type

scales is related to the complexity of attitude composition. It is much more reasonable to assume that attitudes are multidimensional and scale and intensity analyses must be designed to take this into account. Guttman-type computer programs that make provisions for both unidimensional and multidimensional analyses are not yet available at Michigan State University. It has been implied that the attitude instruments used in this study may be measuring a limited portion of the attitude universe related to the disabled or to education.

It has been recommended by Friesen (1966) and Sinha (1966) that the model for the selection and scaling of attitude items within the framework of a component approach as developed by Guttman (1959, 1961) would be useful for further study. This model, known as "facet theory" attempts to substructure an attitude universe into logically established components.[1] It is felt that use of these procedures would solve some problems relating to determination of attitude content, sampling of the items, and length of the scales.

Recommendations Regarding Sampling Procedures

Since the present study was an exploratory study with limited resources, serious questions arise as to the

---

[1]A detailed discussion of Guttman's facet theory and its implications for study of attitudes can be found in Felty (1965), Friesen (1966), and Sinha (1966).

representativeness of the sample. Observation of the data reveals certain obvious inadequacies in regard to sex and group distribution.

It is recommended that an effort be made to obtain a representative sample with the cooperation of a research group in Europe that is now able to more fully understand the purposes and objectives of the international cross-cultural study. This could perhaps best be done by the interview method rather than the group procedures used in this study. This personal interview approach would enable data collection from "illiterate sectors" of the national samples. Interview data will also enable a more detailed clinical analysis of the data, which was not possible in the present study.

It is suggested that further differentiation of the occupational groups be made. There is some indication in the present study that the SER group is diverse in nature and interest. This no doubt was influential in the rejection of a number of hypotheses. Knowledge of differences among other social interest groups toward an attitude object would be useful in planning for social development and progress.

Recommendations Relating to Cross-National Comparisons

The present study was not concerned with cross-national comparisons. Some of these were obvious at times due to the organization of the data analysis. The next

step in the international study will be to make a cross-national comparison on a number of similar hypotheses or variables relating to differing value systems, contact, and attitudes toward social objects.

It is recommended that this phase of the research program be carried out with the cooperation of the research group in each European country. Their knowledge of the culture, and their "feel" for its underlying meaning and value structure is indispensable to analysis and meaningful interpretation.

Recommendations Regarding Statistical Analysis

It is recommended that the Guttman-Lingoes's MSA-I computer program be used in subsequent studies. This procedure has been previously discussed, and it was indicated that MSA-I allows for multidimensional and multi-unidimensional data analyses.

It is suggested by Felty (1965) that factor analysis also appears to be of great value in determining predictor variables for subsequent multiple regression analyses. This would possibly lead to a reduction of predictor variables to a more realistic size. This method will reduce the matrix of inter-correlations among variables to a minimum number of psychological dimensions (traits, factors) which will account for the diversity of responses and a reasonable amount of the total variance.

Recommendations Relating to the Findings of the Study

It has been postulated by Jordan (1963) that the special education and rehabilitation group represents what the social psychologist might label as "the growing edge of a pragmatic social consciousness in Latin America." This idea led to the development of hypotheses concerning the SER group and studies to compare the group cross-culturally. There is evidence in this study to indicate a role reversal between SER and E groups in Europe. Further study should be made of the SER group in developed and developing nations as well as the nature of the SER group itself. It may be that the teachers in the SER group are more benevolent, change oriented, and progressive than the other groups but that "subgroups" (i.e., medical or para-medical) within the SER group effect its comparative standing.

It is recommended that further exploration be made of the apparent similarities in attitude and value structure in Denmark and The Netherlands.

It was suggested earlier in this study that values in France as measured by the Gordon Scale were somewhat undifferentiated. This may be a cultural phenomenon, or it is possible that some other instrument purporting to measure values may be more useful.

The present study casts some doubt on the relationship between contact and intensity on attitudes toward

progressive and traditional education. On the other hand, contact and intensity seemed to be related to attitudes toward physically disabled persons. Further exploration should be made regarding the human or personal versus the conceptual or institutional dimension in the contact-intensity relationship.

REFERENCES

REFERENCES

Adams, Don. Education and the Wealth of Nations. Phi Delta Kappan, Vol XLVII, 1965, pp. 169-174.

Afari, N. M. Education for Freedom and Authority in Ghana Including an Investigation of the Attitudes of Her Teachers. Unpublished doctoral dissertation, Clark University, 1964.

Allport, F. H. Theories of Perception and the Concept of Structure. New York: Wiley, 1955.

Allport, G. W. Attitudes. In C. Murchison (ed.), Handbook of Social Psychology. Worcester, Mass.: Clark University Press, 1935.

Allport, G. W. The Nature of Prejudice. Garden City, New York: Doubleday Anchor Books, Doubleday and Company, Inc., 1958.

Allport, G. W., Vernon, P. E. and Lindzey, G. A Study of Values: A Scale for Measuring the Dominant Interests in Personality. (Rev. ed.) Boston: Houghton Mifflin, 1951.

Almond, G. and Coleman, J. S. (eds.). The Politics of the Developing Areas. Princeton University Press, 1960.

Anderson, L. R. and Fishlein, M. Prediction of Attitude from the Number, Strength, and Evaluative Aspects of Belief about the Attitude Object. A Comparison of Summation and Conguity Theories, J. of Personality and Social Psychology, Vol. 2, No. 3, pp. 437-443.

Anderson, Sara E. The Changes in Attitudes of Prospective Teachers Toward Education and Teaching in Secondary Schools. Unpublished doctoral dissertation, Indiana University, 1964.

Arnholter, E. G. Attitudes toward the disabled. Rehab. Counsel Bull., Vol. 6, No. 1, March 1963, pp. 26-30.

Ashby, G. M. The Lands and Peoples Series, Belgium. London, Adam and Charles Black. New York: The Macmillan Company, 1955.

Badt, Margit I. Attitudes of university students toward exceptional children and special education. Except. Child, 23:387, April 1957.

Barker, R. G. and Wright, B. A. The Midwest and Its Children. Row, Peterson and Co., Evanston, Illinois, 1955.

Barker, R. G., Wright, B. A., Meyerson, L. and Gonick, M. R. Adjustment to Physical Handicap and Illness. Social Science Research Council, N. Y., 1953.

Barker, R. G. The social psychology of physical disability. J. of Soc. Issues, 1948, Vol. 4, No. 4, pp. 28-38.

Baron, R. M. A Cognitive Model of Attitude Change. Unpublished doctoral dissertation, New York University, 1963.

Barry, R. and Wolf, B. An Epitaph for Vocational Guidance New York: Teachers College, Columbia University, 1962.

Bastide, R. and van den Berghe, P. Stereotypes, norms and inter-racial behavior in Sao Paulo, Brazil. Amer. Soc. Rev., Vol. 22, December 1957, pp. 689-694.

Bastide, R. Stereotypes et prejuges de couleru. Sociologia, Brazil, Vol. 18, May 1955.

Beach, D. N., III. Dissonance as a Factor in Planned Change. Unpublished doctoral dissertation, University of Cincinnati, 1963.

Becker, H. Through Values to Social Interpretation. Durham, North Carolina: Duke University Press, 1950, Esp. Ch. 1, pp. 3-92.

Bem, D. J. An Experimental Analysis of Beliefs and Attitudes. Unpublished doctoral dissertation, University of Michigan, 1964.

Bennis, G., Benne, K. D. and Chin, R. (eds.). The Planning of Change. New York: Holt, Rinehart and Winston, 1961.

Benoit, R. B. An Investigation of Changes in Knowledge and Attitudes of Counselor-Trainees During the Course of an NDEA Guidance Institute and Their Relation to Counseling Competence. Unpublished doctoral dissertation, University of California, 1964.

Berg, I. A. Cultural trends and the task of psychology. American Psychologist. The American Psychological Association, Vol. 20, No. 3, March 1965.

Berg, R. H. Mothers' Attitudes on Child Bearing and Family Life Compared for Achieving and Underachieving Elementary School Children. Unpublished doctoral dissertation, University of Southern California, 1963.

Bernardo, R. A. Cultural Background of Students and Cooperating Teachers as Related to Attitudes Toward Children, Problems of Student Teaching, and Achievement of Student Teaching. Unpublished doctoral dissertation, The Pennsylvania State University, 1962.

Berwald, Helen D. Attitudes Toward Women College Teachers in Institutions of Higher Education Accredited by the North Central Association (Volumes I and II). Unpublished doctoral dissertation, University of Minnesota, 1962.

Better, M. An Analysis of Attitude Modifications Toward Educational Assumptions by Prospective Secondary Teachers in a Teacher Training Program. Unpublished doctoral dissertation, Wayne State University, 1963.

Block, J. R. and Yuker, H. E. Correlates of an Intellectual Orientation Among College Students. Proceedings of the 73rd Annual Convention of the American Physiological Association, 1965.

Block, W. E. A study of somatopsychtiological relationships in cerebral palsied children. J. Except. Child., May, 1955, 20, (8), pp. 347-350.

Bloom, W. Attitudes of Mentally Retarded Students Identified by Education Level, Ethnic Group, Sex, and Socio-Economic Class. Unpublished doctoral dissertation, University of Texas, 1964.

Blumenfeld, W. S. The Image of the Physician: A Cross-sectional Study of Attitudes and Their Correlates. Unpublished doctoral dissertation, Purdue University, 1963.

Brim, B. J. Changes in Teacher Education Students. Unpublished doctoral dissertation, University of Denver, 1964.

Brown, M. D. A Comparative Study of Attitudes and Opinions Among Selected Groups in Two Michigan Cities with Authoritative Judgments Concerning Occupational and Technical Education in Community Colleges. Unpublished doctoral dissertation, University of Michigan, 1964.

Buric, Oliver A. Attitudes regarding the status of women in Yugoslavia. International Social Science Journal, Vol. 14, No. 1, 1962, pp. 166-174.

Carlson, E. R. Attitude change through modification of attitude structure. J. Abn. and Soc. Psych., Vol. 52, 1956, pp. 256-261.

Cartwright, D. Some principles of mass persuasion. Human Relations, Vol. 2, 1949, pp. 253-268.

Chambers, J. A. A Study of Attitudes and Feelings Toward Windowless Classrooms. Unpublished doctoral dissertation, University of Tennessee, 1963.

Chesler, M. A. Ethnocentrism and attitudes toward the physically disabled. J. Pers. Soc. Psychol., 1965.

Christiansen, B. Attitudes Toward Foreign Affairs as a Function of Personality. Oslo: Oslo University Press, 1959.

Clark, J. Manual of Computer Programs, Research Services, Department of Communications, Michigan State University, 1964 (mimeo).

Classon, M. E. A Correlation Study of Elementary School Teachers' Attitudes Toward Children and Teaching and Toward Supervision. Unpublished doctoral dissertation, Colorado State College, 1963.

Costello, P. M. The Attitudes of Parents of Mentally Retarded Children Toward Counseling They Have Received (Research Study No. 1). Unpublished doctoral dissertation, Colorado State College, 1963.

Cowen, E. L., Underberg, R. P. and Verilla, R. T. The development and structure of an attitude to blindness scale. J. of Soc. Psy., Vol. 48, 1958, pp. 297-304.

Cowen, Emory L. and Cowen, Renee S. Comparison of the Attitudes of American and French College Students Toward Deafness and Blindness (Paper presented at APA Meeting, Philadelphia, Pa.), August, 1963.

Crowell, T. R., Jr. A Comparative Study of Teacher Personalities, Attitudes, and Values in Relation to Student Nonpromotion in the Elementary Schools of Rockford, Illinois (Research Study No. 1). Unpublished doctoral dissertation, Colorado State College, 1964.

Cruickshank, W. M. (ed.). Psychology of Exceptional Children and Youth. Englewood Cliffs, N. J.: Prentice-Hall, 1955.

Cruickshank. W. M. (ed.). Psychology of Exceptional Children and Youth. Second edition, Englewood Cliffs, N. J.: Prentice-Hall, 1963, pp. 311-368.

Cutright, P. National political development. American Soc. Rev., Vol. 28, No. 2, April 1963.

Davis, E. E. Attitude Change: A Review and Bibliography of Selected Research. UNESCO, No. 19, 1964.

Davis, K. Population. Scientific American, Vol. 209, No. 3, September 1963, pp. 63-71.

Dean, P. and Eichlon, R. L. The cross-sectional field survey in Doby (ed.). An Introduction to Social Research. Harrisburg, P. A.: The Stackpole Co., 1954, pp. 199-224.

DeJonge, J. J. and Sim, F. M. Use of Factor Analysis Programs for the CDC 3600. Michigan State University Computer Laboratory for Social Science Research, Technical Report, 2, January 20, 1964.

Dembo, T., Leviton, G. R. and Wright, Beatrice A. Adjustment to misfortune--a problem of social-psychological rehabilitation. Artificial Limbs, Vol. 3, 1956, pp. 4-6.

Dickstein, Joan and Dripps, Elaine. An Analysis of Attitudes to Acceptance-rejection Towards Exceptional Children. Master of Education Thesis, Boston University, 1958.

Diekema, A. J. Level of Occupational Aspiration, Performance in College, and Facilitation: A Preliminary Test of Certain Postulates Concerning the Relationship Between Attitudes and Bel. Unpublished doctoral dissertation, Michigan State University, 1965.

Dotson, L. An empirical study of attitude component thoery. Public Opin. Q., Vol. 26, No. 1, Spring, 1963, pp. 64-76.

Duijker, H. C. J. Comparative research in social science with special reference to attitude research. International Social Science Bulletin, Vol. VII, No. 4, 1955.

Edmonson, M. S. Los Manitos, A Study of Institutional Values. Middle American Research Institute, Tulane, University, 1957.

Education in Britain. Reference Division Central Office of Information, London, 1964.

Edwards. A. L. Experimental Design in Psychological Research. New York: Holt, Rinehart & Winston, 1960.

Edwards, L. Techniques of Attitude Scale Construction. New York: Appleton-Century-Crofts, Inc., 1957.

Elley, Warwick B. Attitude change and education for international understanding. Sociology of Education, Vol. 37, No. 4, Summer, 1964, p. 320.

Epperman, D. C. and Schmuk, R. A. The uses of social psychology in comparative education. Comp. Educ. Rev., February 1963, pp. 182-190.

Ernatt, R. A Survey of Pupils' Attitudes Toward Intergrade Ability Grouping for Reading Instruction. Unpublished doctoral dissertation, Wayne State University, 1963.

Faulkner, J. E. Attitudes Associated with Differential Participation in the Church on the Part of Labor Union Members. Unpublished doctoral dissertation, The Pennsylvania State University, 1963.

Felty, F. E. The Measurement of Attitudes Toward Disability in San Jose, Costa Rica. A Scale Approach to the Problem of Concept Equivalence (Paper read at the Ninth Interamerican Congress of Psychology, Miami, Florida), December, 1964.

Felty, F. E. Attitudes Toward Physical Disability in Costa Rica and Their Determinants: A Pilot Study. Unpublished doctoral dissertation, Michigan State University, 1965.

Festinger, L. A Theory of Cognitive Dissonance. Evanston, Illinois: Row Peterson, and Co., 1957.

Fisher, Anita H. Factors Identified with Positive and Negative Attitudes Toward Physical Education. Unpublished doctoral dissertation, University of Southern California, 1964.

FitzPatrick, T. K. Rehabilitation Programs and Facilities of Western Europe. Washington: U. S. Department of Health, Education, and Welfare, 1963.

Foa, U. G. Scale and intensity analysis in opinion research. Int. J. of Opin. and Attitude Research, Vol. 4, 1950, pp. 192-208.

Foa, U. G. The contiguity principle in the structure of interpersonal relations. Human Relations, Vol. 11, August 1958, pp. 229-238.

Foa, U. G. Convergences in the analysis of the structure of interpersonal behavior. Psych. Rev., Vol. 68, No. 5, 1961, pp. 341-353.

Foa, U. G. A facet approach to the prediction of communalities. Behavioral Science, Vol. 8, No. 3, July 1963, pp. 220-226.

Force, D. G. Social status of physically handicapped children. Except. Child., Vol. 23, No. 3, 1956.

Foster, R. L. A Multi-Phase Approach Into Community Attitudes Toward Education in the Reed School Distict in Marin County, California. Unpublished doctoral dissertation, University of California, 1964.

Frank, W. W. An Exploratory Study of Attitudes and Perceptions Toward Change Amond AID Technical Assistance Program Participants. Unpublished doctoral dissertation, Michigan State University, 1965.

Frazer, D. W. A Study of Parental Attitudes Toward the Special Education Class for the Mentally Gifted Sixth Grade Students in Atchison, Kansas. Unpublished doctoral dissertation, University of Nebraska Teacher's College, 1963.

Freeman, Otis W. and Morris, John W. World Geography. New York: McGraw-Hill Book Company, 1965.

Freeze, C. R. A Study of Openness as a Factor of Change in Student Teachers. Unpublished doctoral dissertation, University of Alabama, 1963.

Friesen, Eugene W. Nature and Determinants of Attitudes Toward Education and Toward Physically Disabled Persons in Colombia, Peru, and the United States. Unpublished doctoral dissertation, Michigan State University, 1966.

Glasner, D. M. Factor Analytic Investigations of the Components of Attitude Structure. Unpublished doctoral dissertation, Purdue University, 1963.

Goocher, B. E. Changes in Descriptive Word Meanings as a Function of Change in Attitudes and Experience. Unpublished doctoral dissertation, Southern Illinois University, 1963.

Good, H. G. A History of Western Education. Second edition. New York: The Macmillan Company, 1960.

Goode, W. J. and Hatt, P. K. Methods in Social Research. New York: McGraw-Hill Book Co., Inc., 1952.

Goodman, N., Dornbusch, S. M. Richardson, S. A. and Hastorf, A. H. Varient reactions to physical disabilities. Amer. Sociol. Rev., 1963.

Gorden, R. L. Interaction between attitude and definition of the situation in expression of opinion. American Sociological Review, Vol. 17, 1952, pp. 50-55.

Gordon, L. V. Manual for Survey of Interpersonal Values. Chicago, Illinois: Science Research Associates, Inc., No. 7-2761, 1960.

Gordon, L. V. Research Briefs on Survey of Interpersonal Values. Chicago, Illinois: Science Research Associates, Inc., 1963, p. 28.

Gorfein, D. S. Phenomenal regression and the need for control groups in attitude change studies. Psychological Reports, Vol. 1, 1962, pp. 23-24.

Gowman, A. G. The War Blind in American Social Structure. New York: American Foundation for the Blind, 1957.

Green, B. F. Attitude measurement. In G. Lindzey (ed.). Handbook of Social Psychology, Vol. 1, Theory and Method. Reading, Massachusetts: Addison-Wesley Publishing Company, 1954.

Greenberg, M. S. The Effect of Social Support for One's Beliefs on Two Techniques of Attitude Change. Unpublished doctoral dissertation, University of Houston, 1963.

Greenwald, H. J. The Involvement-Discrepancy Controversy in Opinion Change. Unpublished doctoral dissertation, Columbia University, 1964.

Guilford, J. P. Psychometric Methods. New York: McGraw-Hill, 1954.

Guttman, L. The Cornell technique for intensity and scale analysis. Educ. and Psych. Meas., Vol. 7, 1947, pp. 247-280.

Guttman, L. The problem of attitude and opinion measurement. In S. A. Stouffer (ed.), Measurement and Prediction. Princeton University Press, 1950.

Guttman, L. An outline of some new methodology for social research. Publ. Opin. Q., Vol. 18, No. 4, Winter 1954, pp. 395-404.

Guttman, L. The principal components of scalable attitudes. In P. F. Lazerśfeld (ed.), Mathematical Thinking in the Social Sciences. The Free Press, 1954.

Guttman, L. A structural theory for intergroup beliefs and action. Amer. Soc. Rev., Vol. 24, 1959, pp. 318-328.

Guttman, L. and Suchman, E. A. Intensity and a zero-point for attitude analysis. Amer. Soc. Rev., Vol. 12, 1947, pp. 57-67.

Guttman, L. and Stouffer, S. A. et al. Measurement and Prediction. Princeton University Press, 1950.

Guttman, L. and Foa, U. G. Social contact and an intergroup attitude. Publ. Opin. Q., Spring 1951, pp. 43-53.

Haberman, M. A Study of Changes in Pre-Service Students Expressed Perceptions Regarding the Elementary Classroom Teachers Out-of-Class Professional Responsibilities. Unpublished doctoral dissertation, Columbia University, 1962.

Hadwiger, K. E. The Effect of Expectancy on Attitude Change in Communication. Unpublished doctoral dissertation, University of Oklahoma, 1964.

Hafterson, J. M. Multiple Scalogram Analysis (MSA) on the CDC 3600. Michigan State University Computer Institute for Social Science Research, Technical Report 6, February 10, 1964.

Hafterson, J. M. The "CUT" program for Guttman scalogram analysis. Computer Center, Michigan State University, 1965, (mimeo-undocumented).

Hagen, E. E. On the Theory of Social Change. Homewood, Illinois: The Dorsey Press, Inc., 1962.

Haltzman, W. H. The measurement of attitudes toward the Negro in the South. J. Soc. Psych., Vol. 48, 1958, pp. 305-317.

Hand, Mary C. Teacher Characteristics Associated with Changed Attitudes and Performance in the Teaching of Reading. Unpublished doctoral dissertation, The Pennsylvania State University, 1964.

Handel, A. F. Community attitudes and adjustment to disability. Outlook for the Blind, 1960.

Hanks, J. R. and Hanks, L. M., Jr. The physically handicapped in certain non-occidental societies. J. of Soc. Issues, Vol. 4, 1948.

Hardaway, C. S., Beymer, C. L. and Engbretson, W. E. A Study of Attitudinal Changes of Teachers and Pupils Toward Educational Television and an Analysis of Attitudes of Various Groups Toward Educational Television. Terre Haute, Indiana: Office of Research and Testing, Indiana State College, June, 1963, Project 988.

Haring, N. G., Stern, G. G. and Cruickshank, W. M. Attitude of Educators Toward Exceptional Children. Syracuse, New York: Syracuse University Press, 1958.

Harper, Mary S. Changes in Concepts of Mental Health, Mental Illness, and Perceptions of Interpersonal Relationships as a Result of Patient, Family and Member of Family-Friend System Participation in Conjoint Family Therapy in a Hospital. Unpublished doctoral dissertation, St. Louis University, 1963.

Heider, F. The Psychology of Interpersonal Relations. New York: Wiley and Sons, 1958.

Hentig, Haus von. Physical disability, mental conflict and social crisis. J. Social Issues, Vol. 4, No. 4, Fall, 1948, pp. 21-27.

Hess, E. H. Social Insurance, Disability Benefits and Rehabilitation. In Disability Prevention-Rehabilitation. Proceedings of the Ninth World Congress of the International Society for Rehabilitation of the Disabled, Copenhagen, Denmark, 1963. International Society for Rehabilitation of the Disabled, 219 East 44th Street, New York.

Himes, J. B. Measuring social distance in relations with the blind. Outlook for the Blind, 1960.

Hobbs, D. J. Value and Attitude Prediction of Differential Farm Management Ability. Unpublished doctoral dissertation, Iowa State University of Science and Technology, 1963.

Hoke, G. A. A Comparative Study of the Comprehensive Secondary School in England and the U. S. Unpublished doctoral dissertation, Michigan State University, 1965.

Homans, G. C. The Human Group. New York: Harcourt Brace and World, 1950.

Householder, W. A. An Evaluation of Work Experience Programs as an Element of Agriculture Education in a Panamanian School of Agriculture. Unpublished doctoral dissertation, Michigan State University, 1965.

Howard, D. H. The American Negro's Dilemma: Attitudes of Negro Professionals Toward Competition with White. Unpublished doctoral dissertation, Indiana University, 1963.

Hulon, H. E. Liberal-Conservative Attitudes of Public School Personnel in North Carolina. Unpublished doctoral dissertation, The University of North Carolina at Chapel Hill, 1963.

Hurst, Jean M. An Exploratory Study of Change in Students Expressed Attitudes Toward Professional Responsibility in the Pre-Service Program of Teachers College, Columbia University. Unpublished doctoral dissertation, Columbia University, 1963.

Hyman, H. Survey Design and Analysis. Glencoe, Illinois: Free Press, 1955.

Jacob, P. E. Changing Values in College. New York: Harper and Brothers, 1957.

Jacobson, E., Humata, H. and Gullahorn, J. E. Cross-cultural contributions to attitude research. Publ. Opin. Q., Vol. 24, No. 2, Summer 1960, pp. 205-223.

Jacobson, E. and Schachter, S. Cross-national research: a case study. J. of Social Issues, Vol. 10, No. 4, 1954.

James, F., III. Occupational Choice and Attitude Change: The Effect of the Decision to be a School Teacher on Self-Expectation and School Teacher Stereotype. Unpublished doctoral dissertation, University of Virginia, 1963.

Jarnagin, R. A. Farmer Attitudes Toward the Cooperative Extension Service in Illinois: A Basis for Communication Strategy. Unpublished doctoral dissertation, Michigan State University, 1964.

Johnson, K. F. Urbanization and Political Change in Latin America. Unpublished doctoral dissertation, University of California, Los Angeles, 1963.

Jordan, J. E. The Guatemala research and training center in rehabilitation and special education. Selected convention papers - 40th Annual Convention. Washington D. C.: The Council for Exceptional Children, NEA, 1962A.

Jordan, J. E. The university looks at rehabilitation: an international perspective. J. of the Mich. Med. Soc., Vol. 61, 1962B, p. 620.

Jordan, J. E. Rehabilitation and Special Education in Latin America. Papers read at the Inter-American Congress of Psychology, Mar del Plata, Argentina, April, 1963; at the second International Seminar on Special Education, Nyborg, Denmark, 1963A.

Jordan, J. E. Special Education in Latin America. World Horizons in Special Education. Proceedings of 1963, Summer Lecture Series, College of Education, Michigan State University, 1963B.

Jordan, J. E. Revista Mexicana de Psicologia. La Rehabilitacion y Educacion Especial En La America Latina. February, 1964A.

Jordan, J. E. Problems and Promises of Education in Latin America. Special Education in Latin America. Phi Delta Kappan, January, 1964B.

Jordan, Sidney. The disadvantaged group: a concept applicable to the handicapped. J. Psychol., 1963.

Kamenski, Gloria C. Some Personality Factors in Attitudes Toward Technological Change in a Medium Sized Insurance Company. Unpublished doctoral dissertation, Michigan State University, 1965.

Katz, D. and Stotland, E. A preliminary statement to a theory of attitude structure and change. In S. Koch (ed.), Psychology: A Study of a Science, Vol. 3, Formulation of the Person and the Social Context. New York: McGraw-Hill Book Company, Inc., 1959, pp. 423-475.

Katz, D. The functional approach to the study of attitudes. Publ. Opin Q., Vol. 24, No. 2, Summer 1960, pp. 163-204.

Katz, E., Levin, M. L. and Hamilton, M. Research on the diffusion of innovation. Amer. Soc. Rev., Vol. 28, No. 2, April 1963.

Kelly, H. H. et al. Some implications of social psychological theory for research on the handicapped. In L. H. Lofquist (ed.), Psychological Research and Rehabilitation. Washington, D. C.: American Psychological Research and Rehabilitation, American Physiological Association, 1960.

Kelmen, H. C. The Induction of Action and Attitude Change. Proceedings of the XIV International Congress of Applied Psychology, Vol. 2, (ed.) G. Neilson, Personality Research, pp. 81-110.

Kenworthy, A. L. Use of analysis of variance routines on the CDC 3600. AES Program Description 2, Computer Laboratory, Michigan State University, September 1963.

Kerlinger, F. N. The attitude structure of the individual; a Q-study of the educational attitudes of professors and laymen. Genetic Psychology, Vol. 53, 1956, pp. 283-329.

Kerlinger, F. N. Progressiveness and traditionalism: basic factors of educational attitudes. J. of Soc. Psych., Vol. 68, 1958, pp. 111-135.

Kerlinger, F. N. Factor invariance in the measurement of attitudes toward education. Educ. Psychol. Measmt., 1961.

Kerlinger, F. N. and Kaya, E. The construction and factor analytic validation of scales to measure attitudes toward education. Educ. and Psych. Meas., Vol. 19, 1959, pp. 13-29.

Kilpatrick, F. P. and Cantril, H. Self-anchoring scaling: a measure of individuals' unique reality worlds. J. Indiv. Psychology, Vol. 16, 1960, pp. 158-173.

King, G. W. Selected Patterns of Behavior and Social Characteristics of White Collar and Blue Collar Residents in Three Suburban Subdivisions. Unpublished doctoral dissertation, Michigan State University, 1965.

Kirk, S. A. Educating Exceptional Children. Boston: Houghton, Mifflin, 1962.

Klineberg, O. Tensions Affecting International Understanding. New York: Social Science Research Council Bulletin 62, 1950.

Kluckhohn, F. R. and Strodtbeck, F. L. Variations in Value Orientations. Evanston, Illinois: Row, Peterson, and Co., 1961.

Knittel, M. G. A Comparison of Attitudes Toward the Disabled Between Subjects Who had a Physically Disabled Sibling and Subjects Who did not Have a Physically Disabled Sibling. Unpublished doctoral dissertation, State University of South Dakota, 1963.

Knower, F. H. Experimental studies of changes in attitudes: a study of the effect of oral argument on change of attitude. J. of Social Psychology, Vol. 6, 1935, pp. 315-347.

Koo, M. American Students' Contacts With and Attitudes Toward Foreign Students. Unpublished doctoral dissertation, Michigan State University, 1962.

Kostiuk, N. Attitude Changes of Culturally Deprived School Children in a Large Metropolitan Gray Areas Project. Unpublished doctoral dissertation, The Pennsylvania State University, 1963.

Kramer, A. S. The Interrelation of Belief Systems and Educational Values: A Study of the Educational Attitudes of Individual School Teachers. Unpublished doctoral dissertation, New York University, 1963.

Krans, S. Modifying prejudice: attitude change as a function of the race of the communication. Audio-visual Communication Review, Vol. 10, No. 1, 1962, pp. 14-22.

Krich, Blanche L. A Study of Certain Values and Attitudes of Students in a Liberal Arts College. Unpublished doctoral dissertation, Indiana University, 1963.

Kvaraceus, W. C. Acceptance-rejection and exceptionality. Except. Child., 1956.

Kvaraceus, W. D. Juvenile delinquency. Dept. of classroom teachers, American Education Research Ass. of the National Education Ass't, 1958.

Lauritzen, P. W. Development of Scales to Measure Parental Attitudes Toward Education. Unpublished doctoral dissertation, State University of Iowa, 1964.

Law, J. B. Attitude Change as Related to Change in Perception of the Group Norm, 1954, Dissertation Abstract 14, 1108, 160.

Lawrence, Edna R. The Relationship of Teachers' Expressed Self-Acceptance and Acceptance of Children to Social Beliefs and Educational Attitudes. Unpublished doctoral dissertation, New York University, 1963.

Lerner, D. The Passing of Traditional Society. New York: Free Press of Glencoe, 1958.

Levine, S. A. Conceptual framework for special education. Except. Child., Vol. 28, No. 2, 1961, pp. 83-90.

Lewis, H. B. Studies in principles of judgment and attitudes: the operation of the prestige suggestion. J. of Social Psychology, Vol. 14, 1941, pp. 220-229, 256.

Lindow, H. A. Overseas Business Reports, Bureau of International Commerce. Washington, D. C: U. S. Department of Documents, 1964.

Lingoes, J. C. Multiple scalogram analysis: a set theoretical model for analyzing dichotomous items. Educ. and Psych. Meas., Vol. 23, No. 3, 1963, pp. 501-524.

Lingoes, J. C. An IBM-7090 Program for Guttman-Lingoes Multidimensional Scalogram Analysis - I. Ann Arbor, Michigan: University of Michigan, 1965.

Lingoes, J. C. New computer developments in pattern analysis and nonmetric techniques. I. B. M. Journal, 1966.

Lipset, S. M. The value patterns of democracy. Amer. Soc. Rev., Vol. 28, No. 4, August 1963.

Litchfield, T. B. Interpretations of a Factor Analysis of Personal Attitudes of Lay Citizens Toward Schools in Selected New York Central School Districts. Unpublished doctoral dissertation, Columbia University, 1963.

Lofquist, L. (ed.). Psychological Research and Rehabilitation. Washington, D. C.: American Psychological Association, 1960.

Logan, J. B. The Relationship Between Teachers Attitudes Toward Supervisors and Certain Selected Variables that Might Affect Their Attitude. Unpublished doctoral dissertation, The Pennsylvania State University, 1962.

Loomis, C. P. Social Systems. Princeton, New Jersey: D. Van Nostrand Co., Inc., 1960.

Loomis, C. P. and McKinney, J. C. Systematic differences between Latin American communities of family farms and large estates. Amer. J. of Sociol., Vol. 61, March 1956, pp. 404-412.

Mahoudi, K. M. The Relationship Between "Authoritarianism" and Attitude Toward Educational Television. Unpublished doctoral dissertation, Indiana University, 1962.

Malferrari, C. J. The American Overseas Executive: An External Profile. Unpublished doctoral dissertation, Michigan State University, 1965.

Manunpicha, K. A Survey of Social Attitudes Among THAI Students in American Educational Institutions. Unpublished doctoral dissertation, Colorado State College, 1964.

Maslow, A. H. (ed.). New Knowledge in Human Values. New York: Harper and Brothers, 1959.

McAlees, D. C. An Exploratory Study of Special Education in the Central American Republic of Guatemala. Unpublished doctoral dissertation, Michigan State University, 1963.

McCreary, J. R. The Modification of International Attitudes: A New Zealand Study. Wellington, New Zealand: Victoria University College, Publications in Psychology, 1953.

McVicker, Charles P. Titoism Pattern for International Communism. New York: St. Martin's Press, 1957.

Mead, M. Cultural Patterns and Technical Change. UNESCO, 1955.

Mehling, R. A simple test for measuring intensity of attitudes. Publ. Opin. Q., 1959, p. 23.

Merton, R. K. Social Theory and Social Structure. New York: The Free Press of Glencoe, 1957.

Meyerson, L. Physical disability as a social psychological problem. J. of Social Issues, Vol. 4, No. 4, 1948, pp. 2-10.

Meyerson, L. Somatopsychology of physical disability. In W. M. Cruickshank (ed.), Psychology of Exceptional Children and Youth. Englewood Cliffs, N. J.: Prentice-Hall, 1963, pp. 1-52.

Miles, A. P. American Social Theory: A Critique and a Proposal. New York: Harper and Brothers, 1954.

Miller, J. E. A Study of the Attitudes of Oklahoma Public School Elementary and Secondary Classroom Teachers, and Public School District Superintendents Toward the Oklahoma Education Association. Unpublished doctoral dissertation, University of Oklahoma, 1963.

Morris, C. Varieties of Human Value. Chicago, Ill.: The University of Chicago Press, 1956.

Murphy, A. T. Attitudes of educators toward the visually handicapped. Sight-Saving Review, Vol. 30, No. 3, Fall 1960.

Nash, M. V. A Study of Attitudes of a Group of Non-handicapped People Toward the Orthopedically Handicapped. Unpublished doctoral dissertation, Columbia University, 1962.

Norris, Eleanor L. Belief Change and Stress Reduction as Methods of Resolving Cognitive Inconsistency. Unpublished doctoral dissertation, University of Wisconsin, 1964.

Nunally, J. C. and Babren, H. M. Attitude change with false information. Publ. Opin. Q., Vol. 23, No. 2, 1959, pp. 260-266.

Oliver, R. A. C. and Butcher, H. J. Teacher's attitudes to education. British J. of Social and Clinical Psychology, Vol. I, 1962, pp. 56-69.

Ordway, Tead. Value emphasis in college teaching. Christian Scholar, Vol. 43, June 1959.

Osgood, C. The Measurement of Meaning. Urbana, Illinois: University of Illinois Press, 1957.

Parsons, F. The Social System. New York: The Free Press of Glencoe, 1951.

Parson, T and Shils, E. A. (eds.). Toward a General Theory of Action. Cambridge, Mass.: Harvard University Press, 1951.

Parsons, T. and White, W. The link between character and society. In S. M. Lipset and L. Lowenthal (eds.), Culture and Social Character. New York: The Free Press, 1961, pp. 98-103.

Payne, S. L. The Art of Asking Questions. Princeton, N. J.: Princeton University Press, 1951.

Peifer, J. E. The Development of an Attitude Scale to Measure Students Attitudes Toward Reading in the Secondary Schools. Unpublished doctoral dissertation, The Pennsylvania State University, 1962.

Priest, Z. A. Changes in Student Attitudes Toward Safety Education in the Graphic Arts Laboratory. Unpublished doctoral dissertation, Colorado State College, 1964.

Purcell, W. J. Some Factors Affecting Attitudes of Prospective Teachers Toward Elementary Mathematics. Unpublished doctoral dissertation, Columbia University, 1964.

Rachlis, Eugene. The Low Countries. New York: Times, Inc., 1963.

Radtke, R. C. An S-R Approach to Attitude Intensity. Unpublished doctoral dissertation, State University of Iowa, 1963.

Ramer, H. R. Perceptions of University Departments and of the Role of Their Chairman: A Study of Some Attitudes and Opinions of Selected Professors, Department Chairmen, Deans, and Central Administrators of the Ohio State University. Unpublished doctoral dissertation, Ohio State University, 1963.

Reuchlin, Maurice. Education in Europe. Section II, General and Technical Education, No. 3. Pupil Guidance Facts and Problems, translated by W. R. Elliott and Mrs. W. R. Elliott. Strasbourg 1964.

Richard, P. H. A Descriptive Study of Teachers' Attitudes About Different Aspects of Their Work. Unpublished doctoral dissertation, University of Nebraska Teachers College, 1964.

Richardson, S. A., Goodman, N., Hastorf, A. H. and Dornbusch, S. M. Cultural uniformity in reaction to physical disabilities. Amer. Soc. Rev., Vol. 27, April 1961, pp. 241-247.

Riley, M. W., Riley, J. W. and Jackson, T. Sociological Studies in Scale Analysis. New Brunswick: Rutgers University Press, 1954.

Riley. M. W. Sociological Research. New York: Harcourt, Brace and World, 1963.

Robbins, R. E. The Development of a Scale to Measure the Attitude of Teachers Toward Teaching as a Profession (Research Study No. 1). Unpublished doctoral dissertation, Colorado State College, 1962.

Robinson, M. E. Education for Social Change. Washington, D. C.: The Brookins Institute, May 1961.

Roeber, G. A. A Study of Certain Public Attitudes Toward the Orthopedically Disabled. Unpublished doctoral dissertation, New York University, 1959.

Roeber, G. A. Significance of public attitudes in the rehabilitation of the disabled. Rehab. Literature, 1961.

Rogers, C. R. Client-centered Therapy. Boston, Mass.: Houghton-Mifflin, 1951.

Rogers, E. M. Diffusion of Innovations. New York: The Free Press of Glencoe, 1962.

Rokeach, M. The Open and Closed Mind. New York: Basic Books, Inc., 1960.

Rose, Richard. Politics in England. Boston and Toronto: Little, Brown and Company, 1964.

Rosenberg, M. J. Cognitive structure and attitudinal affect. J. of Abn. and Soc. Psych., Vol. 53, 1956, pp. 367-373.

Rosenberg, M. J. A structural theory of attitude dynamics. Publ. Opin Q., Vol. 24, No. 2, Summer 1960, pp. 319-340.

Ross, B. E. A Study of Attitude and Value Indeterminancy in Entering College Freshman. Unpublished doctoral dissertation, Ohio State University, 1963.

Rothschild, C. S. The Reaction to Disability in Rehabilitation. Unpublished doctoral dissertation, Ohio State University, 1963.

Ruble, W. L. and Rafter, Mary E. Calculation of Basic Statistics When Missing Data is Involved, (The MDSTAT Routine). Stat. Series Description No. 6, Agricultural Experiment Station, Michigan State University, 1966.

Ruble, W. L., Kiel, D. F. and Rafter, Mary E. Calculation of Least Squares (Regression) Problems on the LS Routine. Stat. Series Description No. 7, Agricultural Experiment Station, Michigan State University, 1966.

Ruble, W. L., Kiel, D. F. and Rafter, Mary E. One-Way Analysis of Variance with Unequal Number of Replications Permitted, (UNEQ1 Routine). Stat. Series Description No. 13, Agricultural Experiment Station, Michigan State University, 1966.

Ruble, W. L., Paulson, Sara, J. and Rafter, Mary E. Analysis of Covariance and Analysis of Variance with Unequal Frequencies Permitted in the Cell--No Interaction Effects (LS Routine-Temporary. Stat. Series Description No. 115, Agricultural Experiment Station, Michigan State University, May 1966.

Russo, E. J. Group Affiliation and Its Relationship to Attitudes Toward Support of Public Education. Unpublished doctoral dissertation, University of California, Berkeley, 1963.

Salkins, I. Changing employers attitudes toward the psychologically handicapped. J. of Rehabilitation, Vol. 28, No. 3, 1962, p. 26.

Scholten, E. A. School Readiness: A Study Comparing the Attitudes of School and Kindergarten Teachers. Unpublished doctoral dissertation, Michigan State University, 1965.

Scott, W. A. Impirical assessment of values and ideologies. Amer. Soc. Rev., Vol. 24, 1959, pp. 299-310.

Secord, P. F. and Backman, C. W. Social Psychology. New York: McGraw-Hill, 1965.

Shartle, Carroll L. Occupational Information: Its Development and Application. 1959.

Shibutani, T. Society and Personality. Englewood Cliffs, N. J.: Prentice-Hall, 1961.

Siller, J. Personality determinants of reactions to the physically disabled. Amer. Found. for the Blind, 1964.

Siller, J. and Chipman, A. Factorial structure and correlates of the attitudes toward disabled persons scale. Educ. Psychol. Meas., 1964.

Sinha, Birendra K. Maternal Attitudes and Values in Respect to Emotionally Disturbed and Physically Disabled Persons. Unpublished doctoral dissertation, Michigan State University, 1966.

Smith, B. M. Attitudes and adjustment in cross-cultural contact: recent studies of foreign students. J. of Social Issues, Vol. 12, No. 1, 1965.

Smith, G. M. A Study of State Employment Counselors' Attitudes Toward and Knowledge of the Mentally Retarded (Research Study No. 1). Unpublished doctoral dissertation, Colorado State College, 1964.

Smith, H. E. An Analysis of the Effects of University Prestige Figures in Changing the Attitudes of Students in the Area of the University Image. Unpublished doctoral dissertation, Indiana University, 1964.

Smith, Inez L. The Invariance of Educational Attitudes and Their Relations to Social Attitudes: An Inverse Factor Analytic Study. Unpublished doctoral dissertation, New York University, 1963.

Smith, M. B. Personal values as determinants of a political attitude. J. of Psych., Vol. 23, 1949, pp. 477-486.

Speer, S. C. A Study of Dropouts Among Vocational High School Pupils With Respect to Attitudes Toward School. Unpublished doctoral dissertation, University of Connecticut, 1964.

Spranger, E. Types of Men. (Trans. by P. J. W. Pigors). Halle: Niemyer, 1928.

Staley, E. The Future of Underdeveloped Countries. New York: Frederick A. Praeger, 1961.

Stauffer, S. A. Social Research to Test Ideas. New York: The Free Press of Glencoe, 1962.

Stefflre, B. Vocational Value Inventory. Tentative Manual. East Lansing, Michigan: Michigan State University, 1958.

Sterle, D. E. Attitudes Toward Important Issues Involving Principal National Professional Organizations in Recreation. Unpublished doctoral dissertation, Indiana University, 1963.

Sterns, G. G. Measuring noncognitive variables in research on teaching in Gage, N. L. (ed.). Handbook of Research on Teaching, pp. 398-447.

Stouffer, S. A. An overview of the contributions to scaling and scale theory. In S. A. Stouffer et al. Measurement and Prediction. Princeton, N. J.: Princeton University Press, 1950.

Strauss, A. (ed.). The Social Psychology of George Herbert Mead. Chicago: Phoenix Books, University of Chicago Press, 1956.

Suchman, E. A. The intensity component in attitude and opinion research. In S. A. Stouffer et al., Measurement and Prediction. Princeton, N. J.: Princeton University Press, 1950.

Suchman, E. A. Public opinion research across national boundaries. Publ. Opin. Q., Vol. 22, No. 2, Summer 1958.

Suchman, E. A. An analysis of bias in survey research. Publ. Opin. Q., Spring, 1962.

Suchman, E. A. The comparative method in social research. Rural Soc., June, 1964.

Suchman, E. A. and Guttman, L. A solution to the problem of question bias. Publ. Opin. Q., Vol. 11, 1947, pp. 445-455.

Suedfeld, P. Conceptual and Environmental Complexity as Factors in Attitude Change. Unpublished doctoral dissertation, Princeton University, 1963.

Super, D. E. Work Value Inventory. Form D. New York: Teachers College, Columbia University, 1961.

Tackuma, S. Health Attitude Scaling: An Empirical Study of the Criterion. Unpublished doctoral dissertation, Standord University, 1962.

Tanaka, J. and Osgood, C. E. Cross-culture, cross-concept and cross-subject generality of affecting meaning system. J. of Personality and Social Psychology, Vol. 2, 1965, pp. 143-153.

Tannenbaum, P. H. Initial attitude toward source and concept as factors in attitude change through communication. Publ. Opin. Q., Vol. 20, 1956, pp. 413-423.

Taylor, J. L. A Study of the Relationship Between Attitudes Toward Education and the Extent to Which Teachers Participate in Certain Professional Activities. Unpublished doctoral dissertation, Arizona State University, 1963.

Taylor, W. W. and Taylor, E. W. Special Education of Physically Handicapped Children in Western Europe. New York: International Society for the Welfare of Cripples, 1960.

Thomas, Mary M. A Comparative Study of Personality Patterns and Attitudes Toward Mental Retardation and Child-Rearing Practices of Parents of Intellectually Normal and Educable and Trainable Mentally Retarded Children. Unpublished doctoral dissertation, University of Minnesota, 1963.

Thoreson, W. P. Conflicting Social Norms as They Affect Attitudes. Unpublished doctoral dissertation, University of Minnesota, 1963.

Tisdale, John R. Psychological Value Theory and Research: 1930-1960. Unpublished doctoral dissertation, Boston University, 1961.

Tollefeon, T. I. The Relationship Between Attitudes, Personal Values, Biographical Data and Proficiency Ratings Obtained Upon Psychiatric Aides. Purdue University, 1963.

Tomick, Vera. Education in Yugoslavia and the New Reform University of California, Los Angeles. Washington, D. C.: Office of Education, U. S. Department of Health, Education and Welfare, 1963.

Toth, J. E. An Analysis of the Nature and Extent of Rehabilitation in Guatemala. Unpublished doctoral dissertation, Michigan State University, 1963.

UNESCO. Comparative cross-national research. Int. Soc. Sci. Bull., Vol. 7, No. 4, 1955.

UNESCO. Sociology of development in Latin America. Int. Soc. Sci. J., Vol. 14, No. 4, 1963.

UNESCO. Opinion surveys in developing countries. Int. Soc. Sci. J., Vol. 15, No. 1, 1963.

Vittetoi, J. O. The Influence of Cooperating Teachers on Attitudes of Student Teachers. Unpublished doctoral dissertation, The Pennsylvania State University, 1963.

VRA (Vocational Rehabilitation Administration). Department of Health, Education and Welfare. Rehabilitation of the Disabled in Fifty-One Countries. Washington, D. C.: U. S. Printing Office, 1962.

Wagman, M. Attitude change and authoritian personality. J. of Psychology, Vol. 40, 1958, pp. 3-24.

Waisanen, F. B. A notation technique for scalogram analysis. The Soc. Q., Vol. 1, No. 4, 1960, pp. 245-252.

Waisanen, F. B. Finding a Place in Contemporary Mass Society: A Problem of Roles. East Lansing, Mich.: Department of Social Science, The University College, Michigan State University, 1962.

Waisanen, F. B. Some Theoretical Convergencies in the Social Psychology of Alienation. A paper for the VIII Inter-American Congress of Psychology, Mar del Plata, Argentina, April 1963.

Wallis, G. W. Some Social Dimensions of Attitudes Toward Civil Defense. Unpublished doctoral dissertation, Florida State University, 1963.

Ward, H. J., Jr. Multiple linear regression models. In H. Borko (ed.), Computer Applications in the Behavioral Sciences. Englewood Cliffs, N. J.: Prentice-Hall, 1962.

Watts, H. J. Methodological Problems in the Measurement of Values. Unpublished doctoral dissertation, Michigan State University, 1962.

Webb, J. R. A Study of the Relationship of Teaching Difficultire Reported by Beginning Secondary Teachers to Teacher-Pupil Attitudes and Other Variables. Unpublished doctoral dissertation, University of Arkansas, 1962.

Wells, D. E. The Effect of Choice Messages on Attitude Change. East Lansing, Mich.: Michigan State University, 1964.

White, Marjorie. A Study of the Change of Achievement and Attitudes Toward Arithmetic by Prospective Elementary School Teachers Under the Condition of Television. Unpublished doctoral dissertation, Wayne State University, 1963.

Whiteman, M. and Luckoff, I. F. Public attitudes toward blindness. The New Outlook for the Blind, May 1962, pp. 153-158.

Williams, R. American Society. New York: Alfred A. Knopf, 1951, pp. 372-442.

Wilson, E. C. Problems of survey research in modernizing areas. Publ. Opin. Q., Vol. 22, No. 3, Fall 1958, pp. 230-234.

Windle, C. and Vallance, T. F. The future of military psychology: para-military psychology. American Psychologist, Vol. 19, No. 2, February 1964, pp. 119-128.

Woodruff, A. D. and Di Vesta, F. J. The relationship between values, concepts and attitudes. Educ. and Psych. Meas., Vol. 8, 1948, pp. 645-660.

Wright, Beatrice A. Physical Disability-A Psychological Approach. New York: Harper and Brothers, 1960.

Wright, W. A Study to Determine the Extent of Agreement on General Educational Goals, Objectives, and in Attitudes Among the New and Beginning Teachers, the Experienced Teachers, and the Administrators in the Six Public High Schools in Alburquerque, New Mexico (Research Study No. 1). Unpublished doctoral dissertation, Colorado State College, 1962.

Wu, Y. Attitudes of Individuals with Visible and Invisible Physical Impairments Toward Their Disability. Unpublished doctoral dissertation, New York University, 1963.

Yuker, H. E., Block, J. R. and Campbell, W. J. A scale to measure attitudes toward disabled persons. Human Resources Stud., 1960.

Zetterberg, H. L. On Theory and Verification in Sociology. Totawa, N. J.: The Bedminster Press, 1963.

Zimmerman, Carle C. Ideological movements and social change, in Roucek, Joseph S. (ed.), Contemporary Political Ideologies. New York: Philosophical Library, 1961.

APPENDICES

APPENDIX A-1

HANDICAPPED PERSONS SCALE (ATDP)

No._____ Location_____

Male_____ Group_____

Female_____ Date_____

HANDICAPPED PERSONS SCALE (ATDP)

Instructions: Given below are 20 statements of opinion about physically handicapped persons. We all think differently about persons with physical handicaps. Here you may 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 circle around the number in front of the answer you select.

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 circle around the number in front of the answer you select.

---

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

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

   About how strongly do you feel about your answer?

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

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

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

   About how strongly do you feel about your answer?

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

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

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

About how strongly do you feel about your answer?

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

4. Most physically handicapped people feel sorry for themselves.

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

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. Physically handicapped people are the same as anyone else.

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

About how strongly do you feel about your answer?

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

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

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

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. 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

About how strongly do you feel about your answer?

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

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

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

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. Most physically handicapped people worry a great deal.

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

About how strongly do you feel about your answer?

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

10. 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

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

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

About how strongly do you feel about your answer?

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

12. Severely physically handicapped people are no harder to get along with than those with minor handicapps.

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

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

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

About how strongly do you feel about your answer?

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

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

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

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

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

About how strongly do you feel about your answer?

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

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

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

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. Physically handicapped persons cannot have a normal social life.

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

About how strongly do you feel about your answer?

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

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

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

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

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

About how strongly do you feel about your answer?

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

20. Physically handicapped people are often grouchy.

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

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 A-2

EDUCATION SCALE

No. _____ Location _____

Male _____ Group _____

Female _____ Date _____

EDUCATION SCALE

Instructions: Given below are 20 statements of opinion about education. We all think differently about schools and education. Here you may 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 circle around the number in front of the answer you select.

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 circle around the number in front of the answer you select.

---

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

About how strongly do you feel about your answer?

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

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

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

About how strongly do you feel about your answer?

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

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

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

About how strongly do you feel about your answer?

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

4. 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

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. 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

About how strongly do you feel about your answer?

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

6. 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 disagree

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

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

About how strongly do you feel about your answer?

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

8. 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

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. 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

About how strongly do you feel about your answer?

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

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

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

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 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

About how strongly do you feel about your answer?

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

12. 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

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. 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

About how strongly do you feel about your answer?

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

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

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

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

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

About how strongly do you feel about your answer?

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

16. 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

About now strongly do you feel about your answer?

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

17. 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

About how strongly do you feel about your answer?

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

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

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

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. 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

About how strongly do you feel about your answer?

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

20. 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

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 A-3

GORDON SURVEY OF INTERPERSONAL VALUES

SRA SURVEY OF INTERPERSONAL VALUES

By LEONARD V. GORDON

DIRECTIONS

In this booklet are statements representing things that people consider to be important to their way of life. These statements are grouped into sets of three. This is what you are asked to do:

Examine each set. Within each set, find the **one statement** of the three which represents what you consider to be **most important** to you. Blacken the space beside that statement in the column headed M (for **most).**

Next, examine the remaining two statements in the set. Decide which **one** of these statements represents what you consider to be **least important** to you. Blacken the space beside that statement in the column headed L (for **least).**

For every set you will mark **one statement** as representing what is **most important** to you, **one statement** as representing what is **least important** to you, and you will leave **one statement unmarked.**

Example

	M	L
To have a hot meal at noon	:::::	▬
To get a good night's sleep	:::::	:::::
To get plenty of fresh air	▬	:::::

Suppose that you have examined the three statements in the example, and although all three of the statements may represent things that are important to you, you feel that "To get plenty of fresh air" is the **most important** to you. You would blacken the space in the column headed M (for **most**) beside the statement. Notice that this has been done in the example.

You would then examine the remaining two statements to decide which of these represents something that is **least important** to you. Suppose that "To have a hot meal at noon" is the **least important** to you. You would blacken the space in the column headed L (for **least**) next to this statement. Notice that this has been done in the example.

You would leave the remaining statement unmarked.

In some cases it may be difficult to decide which statement to mark. Make the best decision that you can. This is not a test; there are no right or wrong answers. Be sure to mark **only one M (most)** choice and **only one L (least)** choice in a set. Do not skip any sets. Answer every set. Turn this booklet over and begin.

SRA SCIENCE RESEARCH ASSOCIATES, INC.
259 EAST ERIE STREET, CHICAGO 11, ILLINOIS

Reorder No. 7-2760

RAW SCORE | PERCENTILE | NORM GROUP

%
%
%
%
%
%

Date Marital Status

Grade or Occupation School or Firm

To be free to do as I choose
To have others agree with me
To make friends with the unfortunate

To be in a position of not having to follow orders
To follow rules and regulations closely
To have people notice what I do

To hold an important job or office
To treat everyone with extreme kindness
To do what is accepted and proper

To have people think of me as being important
To have complete personal freedom
To know that people are on my side

To follow social standards of conduct
To have people interested in my well being
To take the lead in making group decisions

To be able to do pretty much as I please
To be in charge of some important project
To work for the good of other people

To associate with people who are well known
To attend strictly to the business at hand
To have a great deal of influence

To be known by name to a great many people
To do things for other people
To work on my own without direction

To follow a strict code of conduct
To be in a position of authority
To have people around who will encourage me

To be friends with the friendless
To have people do good turns for me
To be known by people who are important

To be the one who is in charge
To conform strictly to the rules
To have others show me that they like me

To be able to live my life exactly as I wish
To do my duty
To have others treat me with understanding

To be the leader of the group I'm in
To have people admire what I do
To be independent in my work

To have people act considerately toward me
To have other people work under my direction
To spend my time doing things for others

To be able to lead my own life
To contribute a great deal to charity
To have people make favorable remarks about me

Turn the page and go on.

PERCENTILE	%	%	%	%	%	%	%
NORM GROUP							

Date

Marital Status

rade or Occupation

hool or Firm

th

yo
he

re
in

on
m

of
of
(fo

so
le
th

th
M
Tu

Mark your answers in column B → B A

	M	L	M	L
To be a person of influence	:::::	:::::	:::::	:::::
To be treated with kindness	:::::	:::::	:::::	:::::
To always maintain the highest moral standards	:::::	:::::	:::::	:::::
	M	L	M	L
To be praised by other people	:::::	:::::	:::::	:::::
To be relatively unbound by social conventions	:::::	:::::	:::::	:::::
To work for the good of society	:::::	:::::	:::::	:::::
	M	L	M	L
To have the affection of other people	:::::	:::::	:::::	:::::
To do things in the approved manner	:::::	:::::	:::::	:::::
To go around doing favors for other people	:::::	:::::	:::::	:::::
	M	L	M	L
To be allowed to do whatever I want to do	:::::	:::::	:::::	:::::
To be regarded as the leader	:::::	:::::	:::::	:::::
To do what is socially correct	:::::	:::::	:::::	:::::
	M	L	M	L
To have others approve of what I do	:::::	:::::	:::::	:::::
To make decisions for the group	:::::	:::::	:::::	:::::
To share my belongings with other people	:::::	:::::	:::::	:::::
	M	L	M	L
To be free to come and go as I want to	:::::	:::::	:::::	:::::
To help the poor and needy	:::::	:::::	:::::	:::::
To show respect to my superiors	:::::	:::::	:::::	:::::
	M	L	M	L
To be given compliments by other people	:::::	:::::	:::::	:::::
To be in a very responsible position	:::::	:::::	:::::	:::::
To do what is considered conventional	:::::	:::::	:::::	:::::
	M	L	M	L
To be in charge of a group of people	:::::	:::::	:::::	:::::
To make all of my own decisions	:::::	:::::	:::::	:::::
To receive encouragement from others	:::::	:::::	:::::	:::::
	M	L	M	L
To be looked up to by other people	:::::	:::::	:::::	:::::
To be quick in accepting others as friends	:::::	:::::	:::::	:::::
To direct others in their work	:::::	:::::	:::::	:::::
	M	L	M	L
To be generous toward other people	:::::	:::::	:::::	:::::
To be my own boss	:::::	:::::	:::::	:::::
To have understanding friends	:::::	:::::	:::::	:::::
	M	L	M	L
To be selected for a leadership position	:::::	:::::	:::::	:::::
To be treated as a person of some importance	:::::	:::::	:::::	:::::
To have things pretty much my own way	:::::	:::::	:::::	:::::
	M	L	M	L
To have other people interested in me	:::::	:::::	:::::	:::::
To have proper and correct social manners	:::::	:::::	:::::	:::::
To be sympathetic with those who are in trouble	:::::	:::::	:::::	:::::
	M	L	M	L
To be very popular with other people	:::::	:::::	:::::	:::::
To be free from having to obey rules	:::::	:::::	:::::	:::::
To be in a position to tell others what to do	:::::	:::::	:::::	:::::
	M	L	M	L
To always do what is morally right	:::::	:::::	:::::	:::::
To go out of my way to help others	:::::	:::::	:::::	:::::
To have people willing to offer me a helping hand	:::::	:::::	:::::	:::::
	M	L	M	L
To have people admire me	:::::	:::::	:::::	:::::
To always do the approved thing	:::::	:::::	:::::	:::::
To be able to leave things lying around if I wish	:::::	:::::	:::::	:::::

S	C	R	I	B	L

APPENDIX A-4

PERSONAL QUESTIONNAIRE (GENERAL)

No. _____ Location _____

Male _____ Group _____

Female _____ Date _____

PERSONAL QUESTIONNAIRE

This questionnaire has two parts to it. The first part has to do with your contacts with schools and education, and what you know about education. You may have had considerable contact with schools and education, or you may know a great deal about education. On the other hand, you may have had little or no contact with schools or education and may have never thought much about it at all.

For the purposes of this investigation, the answers of all persons are important. If you know very little or nothing about schools or education, your answers are important. If you know a great deal about them, 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.

No. _____ PERSONAL QUESTIONNAIRE

Please read each question carefully and do not omit any questions. Please answer by circling the correct answer (or answers) or fill in the answer as requested.

SECTION 1: Experiences with Schools and Education

1. Below are listed several different kinds of schools or educational divisions. In respect to these various kinds or levels of education, which one have you had the most professional or work experience with, or do you have the most knowledge about? This does not refer to your own education. Please answer by circling the number of the group you select. Circle only one.

Elementary School (Grade School) 1

Secondary School (High School) 2

College or University 3

Other Types (Please Specify) _____ 4

I have had no such experience 5

2. Which other groups, in addition to the one indicated above, have you also had some professional or work experience with? Please circle the number of each additional group with which you have had some experience.

Elementary School (Grade School) 1

Secondary School (High School) 2

College or University 3

Other Types (Please Specify) _____ 4

I have had no such experience 5

3. The following questions have to do with additional kinds of contracts you have had with schools or education. Please circle the number of each experience that applies to you. Be sure and circle the number of every experience that applies to you.

I know little or nothing about education 1

I have read or heard a little about schools and education 2

I have studied about schools and education through reading, movies, lectures, or observations 3

A neighbor of mine works in education 4

A friend of mine works in education 5

Some relative works in education 6

My father, mother, brother, sister, wife (husband), or child works in education (in any position, professional or non-professional) 7

I have worked in education, as a teacher, administrator, counselor, volunteer, etc. 8

Other (Please Specify) _____ 9

If on the preceding three questions you indicated that you have had no personal experience with any kind of education, please skip Questions #4 through #7. If you indicated that you have had experience with one or more of the levels of education listed, please answer Questions #4 through #7.

4. About how much have you worked in schools or educational settings? Please circle the number of the one best answer.

Less than three months 1

Between three and six months 2

Between six months and one year 3

Between one and three years 4

Between three and five years 5

Between five and ten years 6

Over ten years 7

Over fifteen years 8

5. If you have ever worked in education, about what per cent of your income was derived from such work?

Less than 10% 1

Between 10 and 25% 2

Between 25 and 50% 3

Between 50 and 75% 4

Between 75 and 100% 5

6. If you have ever worked in education, how have you generally felt about it?

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

7. If you have ever worked in education for personl 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

8. How old are you? (Write age in box) ..... ☐

9. Where were you mainly reared or "brought up" in your youth (that is, up to the age of 15 or 16)?

Country 1

Country Town 2

City 3

City Suburb 4

10. Where have you (or the main bread winner in your family) been employed during the past three years?

Country 1

Country Town 2

City 3

City Suburb 4

11. **Where you have mainly lived during the past three years?**

Country 1

Country Town 2

City 3

City Suburb 4

12. **What is your marital status?**

Married 1

Single 2

Divorced 3

Widowed 4

Separated 5

13. How many children do you have? (Please write number in box). ☐

14. Please answer either A or B, which applies best to your present situation. Please read both choices, than answer only one.

A. If you are self-supporting, about what is your total yearly income before taxes (or, if you are married, the total yearly income in the family). Include extra income from any regular sources such as dividends, insurance, etc. Please write the total in the box . ☐

B. If you are not self-supporting (or, if you are married, if your family is not self-supporting), what is the approximate total yearly income before taxes of the persons who mainly provide your support (that is, parents, relatives or others). Make the best estimate you can. ☐

15. According to your answer to Question 14, about how does your income compare with that of most people in the total community where you live?

Much lower 1

Lower 2

About the same 3

Higher 4

Much higher 5

16. How many brothers have you? (Please write number in box).

17. How many sisters have you? (Please write number in box).

18. About how does (or did) your father's income compare with that of most people in the community in which he lives (or lived)?

Much lower 1

Lower 2

About the same 3

Higher 4

Much higher 5

19. What is your religion?

Catholic 1

Protestant 2

Jewish 3

None 4

Other (Please Specify) _____ 5

20. 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

21. During an "average" work day, you probably have occasion to talk and make contact with other adult persons where you are employed. Estimate about what per cent of these contacts and conversations are with people you feel personally close to, whom you consider to be close friends, or that are relatives of yours.

None 1

I do not usually talk or make contact with other adult persons where I am employed 2

Less than 10% 3

Between 10 and 30% 4

Between 30 and 50% 5

Between 50 and 70% 6

Between 70 and 90% 7

More than 90% 8

22. 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

23. Now please consider all of the personal contacts you have with people when you are not at work. Would you estimate about what per cent of your contacts apart from working hours are spent with people whom you know because of your job; that is, those who work at the same job, trade, or profession, or in the same place that you do, or that you otherwise contact in the pursuit of your job.

None 1

Less than 10% 2

Between 10 and 30% 3

Between 30 and 50% 4

Between 50 and 70% 5

Between 70 and 90% 6

More than 90% 7

24. What social class do you believe you are in?

Lower 1

Lower Middle 2

Middle 3

Upper Middle 4

Upper 5

Upper Upper 6

25. Which social class do you believe your father is (or was) in?

Lower 1

Lower Middle 2

Middle 3

Upper Middle 4

Upper 5

Upper Upper 6

26. About how much education do you have (Circle only one).

3 years of school or less 1

6 years of school or less 2

9 years of school or less 3

12 years of school or less 4

Some college or university 5

A college or university degree 6

Some graduate work beyond the first degree 7

One or more advanced degrees 8

Other (Please note number of years of study or diploma obtained) _____ 9

27. About how does your education compare with that of most people?

Much less than most 1

Less than most 2

About average 3

More than most 4

Much more than most 5

28. About how does (or did) your father's education compare with that of most people in his time?

Much less than most 1

Less than most 2

About average 3

More than most 4

Much more than most 5

29. What type of living arrangement do you have?

Rent a house 1

Rent an apartment 2

Rent a room (meals in a restaurant, etc.) 3

Purchase a room and board (rooming house, etc.) 4

Own an apartment 5

Own a house 6

Other (Please Specify) _____ 7

30. Please answer either A or B. Please read both before answering.

A. If you are renting the house in which you live, about how much money per month do you pay for rent? (Write amount in box). ..... ☐

B. If you own the house in which you live (house, apartment, or other), about how much money per month do you believe you could rent the house for? (Write amount in box). ..... ☐

31. 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 circle the appropriate number to indicate how you feel each job is being done). Please answer for each group.

A. Elementary Schools

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

B. Secondary Schools

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

31. Continued from Page 11. The instructions on the previous page apply to the following sections, C through E.

C. Universities

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

D. Businessmen

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

E. Labor

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

31. Continued from Page 12. The instructions on Page 11 apply to the following sections, F through I.

F. Local Government

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

G. National Government

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

H. Health Services (Doctors and Hospitals)

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

I. Churches

Do not know 1

Poor 2

Fair 3

Good 4

Excellent 5

32. How long have you lived in your present community?

Less than 1 year 1

From 1 to 2 years 2

From 3 to 6 years 3

From 7 to 10 years 4

Over 10 years 5

33. Have you changed your residency (from one community to another) during the past two years? Please circle the correct number.

Yes 1

No 2

34. Have you changed your employment during the past two years? Please circle the correct number.

Yes 1

No 2

35. About how many times have you changed residency (communities) during the past 10 years? Please circle the correct number.

None 1

1 Time 2

2 - 3 Times 3

4 - 6 Times 4

7 - 10 Times 5

Over 10 Times 6

36. About how many times have you changed jobs during the past 10 years? Please circle the correct number.

None 1

1 Time 2

2 - 3 Times 3

4 - 6 Times 4

7 - 10 Times 5

Over 10 Times 6

37. Please state your occupation. Briefly state the title or name of your job and the nature of your work.

_____

_____

_____

38. In respect to your religion, about to what extent do you observe the rules and regulations of your religion? Please circle the correct number.

I have no religion 1

Seldom 2

Sometimes 3

Usually 4

Almost always 5

39. 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? Please circle the correct number.

Probably not 1

No 2

Maybe 3

Yes 4

40. 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

41. 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

42. People have different ideas about what should be done concerning automation and other new ways of doing things. How do you feel 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

43. 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 regularly, even if they are doing a good job."

Strongly disagree 1

Slightly disagree 2

Slightly agree 3

Strongly agree 4

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

Strongly disagree 1

Slightly disagree 2

Slightly agree 3

Strongly agree 4

46. 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

Education planning should be primarily directed by the national government 3

47. Some people are more set in their ways than others. How would you rate yourself? Please circle the number of your choice.

I find it very difficult to change 1

I find it slightly difficult to change 2

I find it somewhat easy to change my ways 3

I find it very easy to change my ways 4

48. I find it easier to follow rules than to do things on my own.

Agree strongly 1

Agree slightly 2

Disagree slightly 3

Disagree strongly 4

49. I like the kind of work that lets me do things about the same way from one week to the next. Circle the number of your choice.

Agree strongly 1

Agree slightly 2

Disagree slightly 3

Disagree strongly 4

50. A good son will try to find work that keeps him near his parents even though it means giving up a good job in another part of the country.

Agree strongly 1

Agree slightly 2

Disagree slightly 3

Disagree strongly 4

51. We should be as helpful to people we do not know as we are to our friends.

Disagree strongly 1

Disagree slightly 2

Agree slightly 3

Agree strongly 4

52. Planning only makes a person unhappy because your plans hardly ever work out anyway.

Agree strongly 1

Agree slightly 2

Disagree slightly 3

Disagree strongly 4

53. Which one of the following requisities do you consider most important to make your life more happy and satisfactory in the future? Circle the single, most important choice.

Nothing 1

More money 2

More friends 3

Better job 4

Good health 5

Other (Please Specify) _____ 6

54. What do you think you can do to make this possible? Please answer one of the two alternatives below.

Nothing _____

Please Specify _____

_____

_____

_____

APPENDIX A-5

PERSONAL QUESTIONNAIRE (HP)

No. _____ Location _____

Male _____ Group _____

Female _____ Date _____

PERSONAL QUESTIONNAIRE: HP

This questionnaire deals with your contacts with physically handicapped persons, and what you know about them. Perhaps you have had much contact with physically handicapped 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.

PERSONAL QUESTIONNAIRE: HP

Please read each question carefully and do not omit any questions.

Please answer by circling the correct answer (or answers) or fill in the answer as requested.

1. Some physically handicapping conditions are listed below. In respect to these various handicaps, which have you had the most actual experience with. Please answer by circling the number of the group you select. Circle only one.

   1. blind
   2. partially blind
   3. deaf (and deaf-mute)
   4. partially deaf
   5. crippled or amputated limbs
   6. disfigured (such as severe burns or scars on face)
   7. spastic (or cerebral palsy)
   8. speech disorders
   9. none

2. Which other groups have you also had some experience with? Please circle the number of each additional group with which you have had some experience.

   1. blind
   2. partially blind
   3. deaf (and deaf-mute)
   4. partially deaf
   5. crippled or amputated limbs
   6. disfigured (such as severe burns or scars on face)
   7. spastic (or cerebral palsy)
   8. speech disorders
   9. none

If on the preceding question you indicated that you have had no personal experience with physically handicapped persons (by circling response No. 9, please skip questions #3 through #9. If you indicated that you have had the experience with one or more of the above handicapping conditions, please answer questions #3 through #9.

3. The following questions have to do with the kinds of experiences you have had with physically handicapped persons. Please circle the number of each experience that applies to you. If more than one experience applies, please circle a number for each experience that applies.

I have read or heard a little about physically handicapped persons 1

I have studied about physically handicapped persons through reading, movies, lectures, or observations .. 2

A friend is physically handicapped 3

Some relative is physically handicapped 4

I have personally worked with physically handicapped persons, as a teacher, counselor, volunteer, child care, etc. 5

My father, mother, brother, sister, wife (husband) or child is physically handicapped 6

I, myself, have a physical handicap. (Briefly, please indicate the kind of handicap) _____ 7

_____

4. Considering all of the times 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 circle the number of 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

5. When you have been in contact with physicially 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

6. 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

7. If you have never been paid for working with handicapped persons, go on to the next question. If you have been paid, about what per cent 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

8. How have you generally felt about your experience 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

9. 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

The following questions should be answered by all persons, regardless of whether or not they have had any personal contact with persons who are physically handicapped.

10. Have you had any experience with mentally retarded persons? Considering all of the times you have talked, worked, or in some other way had personal contact with mentally retarded persons, about how many times has it been altogether? Please circle the number of 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

11. Have you had any experience with emotionally ill persons? Considering all of the times you have talked, worked, or in some other way had personal contact with emotionally ill persons, about how many times has it been altogether? Please circle the number of 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

APPENDIX A-6

DEFINITIONS OF PHYSICAL HANDICAP

DEFINITIONS

What is meant by "physical handicap."

The words "physically handicapped" will be used often in the questions and statements that follow. Where these words are used, they will include persons with any of the following handicaps:

1. blind persons--those who have no useful sight at all.

2. partly blind persons--those who have some sight but have trouble reading and getting about even with glasses.

3. deaf persons--those who have no useful hearing at all.

4. partly deaf persons--those who have some hearing but have trouble understanding other persons even with a hearing aid.

5. cripples or amputees--those 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)--those who have poor control and coordination of their leg, arm, and head movements. Movements are often jerky and speech hard to understand.

7. disfigured--those who have been obviously damaged about the face, such as with burns or scars, so that the face has been changed.

APPENDIX B-1

ADMINISTRATION PROCEDURES

PROCEDURES FOR ADMINISTRATION:

CROSS-CULTURAL ATTITUDE STUDY

John E. Jordan
Michigan State University
East Lansing, Michigan
December, 1964

The specific instructions will vary in detail from nation to nation. However, the following outline is presented on the basis of my experience thus far with the questionnaires and attitude scales.

1. Arrange for a meeting room and/or place. The respondents should have a table (or similar surface) on which to write and ample room between respondents (in group administration) to minimize influencing each other.

2. After introducing oneself (or being introduced), state briefly the following kind of rationale for the study:

   "This is an <u>international study</u> of attitudes toward education; part of it deals with education in general and part of it deals with the education of handicapped persons. Each part is clearly stated. Remember, in a study like this, there are <u>no right or wrong</u> answers to the attitude questions. We want you to answer <u>how you feel</u> about certain things. Therefore, <u>we do not want</u> your name on the questionnaire. Please answer quickly, with your first idea first, and <u>do not</u> spend a lot of time thinking about each item.

   Remember this is an international study and all the people in the other countries will be answering in the same manner. If there is no answer that <u>exactly</u> fits what you would like to answer, please choose the alternative nearest to your desired answer.

   <u>Please answer all items</u>.

If you have any questions as you proceed, please raise your hand and we will come to you and discuss it individually so as not to disturb the other people. When we have all completed the questionnaires, I will be glad to discuss the study in more detail if you desire. Thank you very much for taking time to cooperate in the study."

3. Distribute the page of definitions.

"We will now distribute to you a page of definitions of certain handicapping conditions which will be referred to in some of the questionnaires. We will all take a few minutes to read these so we will all have the same idea about the same words. You may refer to these later if you so desire.

Also, we want you to put a number in the upper left hand corner of the page like this (show them what you mean). Since we do not want you to put your name on the questionnaire, you will use this number. In this manner no one will know your answers. We must have your number and group (special education, teacher, business, etc.) on each questionnaire so we can put all the answers of one person together at the end."

Here the respondents "number off" and see that no two persons have the same number. Remember if two people in a group have the same number, the data cannot be analyzed.

4. Distribute the attitude scales and questionnaires in the following order. In group administration be sure to pass out only one instrument at a time.

Order of Administration of Instruments

1. Page of definitions
2. Education Scale
3. Survey of Interpersonal Values
4. Personal Questionnaire
5. Handicapped Persons Scale
6. Personal Questionnaire: HP

5. Distribute the Education Scale. Have the respondent fill out data on the top of scale: (1) Number, (2) Sex, (3) Location, (4) Group, and (5) Date. Either instruct the respondents to read silently the instructions or the administrator may read them to the group; this is left to each country to do in the manner they consider most appropriate. Our experience shows that if the instructions are well understood on this first instrument, the other instruments are easily understood.

   When the respondents have completed the Education Scale, collect them and distribute the next one as indicated above in Point Number Four. Proceed in a similar manner until all <u>five</u> instruments have been completed.

6. If situations arise where the instruments are left with the respondent (i.e., either in an office or to take home), try to impress on them the order in which to take them (e.g., number them 1-2-3-4-5 in the upper right hand corner) and <u>not to look</u> at them ahead of time.

   Do not leave instruments with respondents except when absolutely necessary and in such cases <u>mark on them later</u> to indicate they were given in this manner.

7. Respondent identification. See discussion under Points Numbered 3 and 6 above. Remember we need a <u>minimum of 50 persons</u> per each of the four groups: (1) special education, (2) teacher-primary and secondary, (3) workers-blue and white collar, and (4) employers-business, commerce, industry. We would prefer to have more so secure as many as you can conveniently locate up to 100 per group.

   Each of these respondents must fill out <u>all five instruments</u>, using the <u>same respondent number and group</u>. If either the respondent number or group is omitted or duplicated, the data cannot be collated for data analysis!

8. When you have secured enough completed sets of instruments for a "usual size" mailing package in your country, please mail to me rather than waiting to send all of them at one time. In this manner I can have the data scored and tabulated for computer processing in an orderly manner. If I receive all the data at one time, it will be difficult to hire assistants here at the university on any regular basis.

   <u>Each time you mail a package of data</u>, you should send me a letter describing it so I can keep records.

APPENDIX B-2

BASIC VARIABLES OF THE STUDY

A. Attitudes Toward Education

1 Traditional attitudes, Items 3, 4, 6, 10, 11, 12, 13, 14, 18, 19 - Content
Raw Score total
Adjusted total score (dichotomized)

2 Traditional attitudes, Items 3, 4, 6, 10, 11, 12, 13, 14, 18, 19 - Intensity
Raw Score total
Adjusted total score (dichotomized)

3 Progressive attitudes, Items 1, 2, 5, 7, 8, 9, 15, 16, 17, 20 - Content
Raw Score total
Adjusted total score (dichotomized)

4 Progressive attitudes, Items 1, 2, 5, 7, 8, 9, 15, 16, 17, 20 - Intensity
Raw Score total
Adjusted total score (dichotomized)

B. Contact with Education (Q'aire)

1 Levels of education experienced
Q'aire, Item 1 (primary contact)
Q'aire, Item 2 (additional contacts - no. kinds of)

2 Varieties of contact with education
Q'aire, Item 3

3 Amount of contact (work) with education
Q'aire, Item 4

4 Personal gain through working in education
Q'aire, Item 5 (% of income)

5 Alternative opportunities available
Q'aire, Item 7 (refers to other possible employment)

6 Enjoyment of contact
Q'aire, Item 6

C. Aid to Education - Financial (Q'aire)

Item 44 (local)
Item 45 (federal or national)

D. Education Planning (Q'aire)

Item 46

E. Interpersonal Values - Gordon Scale

1 S scores: Support
2 C scores: Conformity
3 R scores: Recognition (comparative score)
4 I scores: Independence
5 B scores: Benevolence (asset score)
6 L scores: Leadership (comparative score)

F. Demographic, S.E.S., Other Control Data (All from Q'aire)

1 Education (self-amount), Item 26
2 Occupation (specific), Item 37
3 Income and rental (S. E. Class)
Item 14 (income - yearly, self-family)
Item 30 (rental)
4 Age: Item 8
5 Sex: Front sheet of questionnaire
6 Marital status: Item 12
7 Number of children: Item 13
8 Size of family:
Item 16 (brothers - do not use)
Item 17 (sisters - do not use)
Items 16 and 17 (siblings)
9 Housing (type of), Item 29
10 Mobility: Residency, Items 32, 33 and 35
Card 4, Col. 25
Occupational, Items 34 and 36
11 Rural-Urban Status: Items 9, 10 and 11
12 Employment status - current: Item 37

G. Satisfaction with institutions (Q'aire)

1 Satisfaction with elementary schools
Item 31-A
2 Satisfaction with secondary schools
Item 31-B
3 Satisfaction with universities
Item 31-C

4 Satisfaction with businessmen
Item 31-D
5 Satisfaction with labor
Item 31-E
6 Satisfaction with local government
Item 31-F
7 Satisfaction with national government
Item 31-G
8 Satisfaction with health services
Item 31-H
9 Satisfaction with churches
Item 31-I

H. Self-Statements (Q'aire)

1 Comparative income status - self: Item 15
2 Comparative income - father: Item 18
3 Comparative social class - self: Item 24
4 Comparative social class - father: Item 25
5 Comparative education - self: Item 27
6 Comparative education - father: Item 28

I. Religiousity Questionnaire (Q'aire)

1 Religious affiliation: Item 19
2 Perceived importance: Item 20
3 Perceived norm conformity: Item 38

J. Personalism Questionnaire (Q'aire)

1 Orientation toward job personalism
a Statement of extent of personalism on job: Item 21
b Perceived importance of personal relations: Item 22
2 Diffusion of personal relationships
Percent of job-social overlap: Item 23
3 Familialism: Item 50, (Son's work)
4 Other orientation: Altruism: Item 51

K. Attitudes Toward Change (Q'aire)

1 Health practices (water): Item 29
2 Child-rearing practices: Item 40
3 Birth control practices: Item 41

4 Political leadership change: Item 43
5 Automation: Item 42
6 Self Conception
Item 47 (Perceived self-rigidity)
Item 48 (Adherence to rules)
Item 49 (Job regularity and rigidity)
7 Future orientation
Item 52 (Planning - personal)
Item 53 (Requisites for happiness)
Item 54 (Achievement of happiness)

L. Attitudes Toward Handicapped Persons

1 Handicapped Persons Scale, Items 1-20 - Content
Raw Score total
Adjusted total score (dichotomized)
2 Handicapped Persons Scale, Items 1-20 - Intensity
Raw Score total
Adjusted total score (dichotomized)

M. Contact with Handicapped Persons

1 Kinds of handicapped persons experienced
P.Q.-HP, Item 1 (most contact)
P.Q.-HP, Item 2 (additional contacts - no. of)
2 Varieties of relationship with handicapped
P.Q.-HP, Item 3
3 Frequency of contact with physically handicapped
P.Q.-HP, Item 4
4 Ease of avoidance of contacts with handicapped
P.Q.-HP, Item 5
5 Personal gain through working with handicapped persons
P.Q.-HP, Item 6 (experienced gain)
P.Q.-HP, Item 7 (% of income)
6 Alternative opportunities available
P.Q.-HP, Item 9 (refers to other possible employment)
7 Enjoyment of contact with physically handicapped
P.Q.-HP, Item 8
8 Frequency of contact with mentally retarded persons
P.Q.-HP, Item 10
9 Frequency of contact with emotionally disabled persons
P.Q.-HP, Item 11

APPENDIX B-3

CODE BOOK

CODE BOOK

CROSS CULTURAL ATTITUDES TOWARD EDUCATION: THEIR NATURE AND DETERMINANTS

INTERNATIONAL STUDY*

John E. Jordan
College of Education
Michigan State University
August 25, 1965

INSTRUCTIONS FOR THE USE OF THIS CODE BOOK

1. Code 0 or 00 will always mean Not Applicable or Nothing, except as noted.

2. Code + for a one column no response, or -9 for a two column no response, or -99 for a three column no response will mean there was No Information or Respondent did not answer.

3. In each case in the following pages the column to the left contains the column number of the IBM card; the second column contains the question number from the questionnaire; the third column (item detail) contains an abbreviated form of the item; and the fourth column contains the code within each column of the IBM card with an explanation of the code. The fifth column (recode) is reserved to later indicate recoding after the item count is finished; i.e., after all data is key punched, run the data through the M.S.U. computer (ACT II, FCC, and/or Single-Column Frequency Distributions) to determine the patterns of response alternatives to a question. This will indicate if regrouping, etc., need to be considered for the item.

4. Coder instructions always follow a line across the page and are clearly indicated.

5. In some cases when codes are equal to others already used, they are not repeated each time, but reference is made to a previous code or the immediately previous code with "same".

6. Under Code, the first number is the questionnaire question alternative and the second number is the actual code which is entered on the data sheets (i.e., 1-4; one 1 is the questionnaire question alternative and 4 is the code).

---

* This code book is specifically for the United States sample thru Card 4. Limited modifications and/or additions are made in certain nations and/or states. Special instructions are appended for each study before scoring that sample.

Column-Ques.	Item Detail	Code	Recode*
1,2,3 Face Sheet	Nation and Location	UNITED STATES 001 - Mich., Mt. Pleasant 002 - Mich., Cadillac 003 - Mich., Ann Arbor 004 - Mich., Port Huron 005 - Mich., Lansing 006 - Mich., Walden Woods 007 - Mich., Flint 008 - Mich., Misc., Kal., Mid. 009 - Kansas, Wichita 010 - Ohio, Tiffin 011 - West Virginia 012 - Kentucky 013 - Georgia LATIN AMERICA 101 - Costa Rica 102 - Colombia 103 - Peru 104 - Argentina 105 - Mexico 106 - Surinam EUROPE 201 - England 202 - Holland 203 - Belgium 204 - France 205 - Yugoslavia 206 - Denmark 207 - Germany ASIA 301 - Israel 302 - Japan 303 - India 304 - Formosa AFRICA 401 - Kenya 402 - Rhodesia 403 - South Africa	

Column-Ques.		Item Detail	Code	Recode*
4,5	Face Sheet	Group Number (administration)	01 - 99 Check Special Instructions	
6,7	Face Sheet	Respondent Number	01 - 99	
8	Face Sheet	Sex of Respondent	1 - Masculine 2 - Feminine	
9	(Code derived from Col's 22, 23, Card 1)	Occupational Recode (Interest group)	1 - Code 01 - 09, Rehab., Spec. Ed. 2 - Code 10 - 19, Education 3 - Code 20 - 45, Professional, Business, Medical 4 - Code 50 - 86, White Collar, Blue Collar, Laborer	
10	New	Occupational Recode (Spec. Ed., Rehab. SER)*	1 - Teacher, Educable Retarded, (Type A and Type C) 2 - Teacher, Trainable Retarded (Type B) 3 - Teacher, Hearing 4 - Teacher, Vision 5 - Speech Correction 6 - Visiting Teacher (Also Social Worker) 7 - Diagnostician 8 - Other (Professors, Supts., Administrators, etc.) + - Non-teacher	
11,12	Face Sheet	Deck or Card Number	01	
13,14	Face Sheet	Project Director, location and content area	LATIN AMERICA 01 Felty: Costa Rica (total - pilot study) 02 Friesen: Peru and Colombia (total) 03 Taylor: Costa Rica (country study)	

* If respondent is not an SER "educational person", he received a +.

Column-Ques.	Item Detail	Code	Recode*
13,14 Face Sheet (continued)		UNITED STATES 31 Sinha: Ohio (parents-M. R., emot. dist. and normal) 32 Dickie: Kansas (total and blind scale) 33 Weir: Kansas (total and deaf scale) 34 Mader: Michigan (special educ. - intra) 35 Jordan: Michigan - Mt. Pleasant (Spec. Ed.) ASIA 51 Cessna: Japan (total plus university students and government employees) EUROPE 71 Boric: Yugoslavia (total) 72 Fabia: France (total) 73 Hansen: Denmark (total) 74 Loring: England (total) 75 Robaye: Belgium (total) 76 Schweizer: Netherlands (total) 77 Kreider: Europe (total)	
15,16 Face Sheet	Day of Administration (Use the actual day)	01 to 31	
17,18 Face Sheet	Month of Administration	01 - January 02 - February 03 - March . .	

Column-Ques.	Item Detail	Code	Recode*
17,18 Face Sheet (continued)		10 - October 11 - November 12 - December	
19,20 Face Sheet	Year of Administration	64 - 1964 65 - 1965 66 - 1966 . . 70 - 1970	
21 Face Sheet	Type of Administration	1 - Group 2 - Self-administered 3 - Interview, individual + - No information	
22,23 37 Q'aire	Occupation of Respondent* (Specific)	(01 - 09) Rehab. & Spec. Ed. 01 - All administrative persons, public and private schools or agencies 02 - Teachers, elem. and secondary academic and vocational 03 - School Special Services (Psych., soc. work, speech, etc.) 04 - University teachers, professors, researchers, specialists, etc. 05 - Medical (Doctors, Dentists, etc.) 06 - Other professional (Psych., Soc. worker, Speech, etc., not primarily in public or private schools) 07 - Para-medical (Nurse, O.T., R.T., P.T., ect.) 08 - Unskilled Help (Hospital aide, janitor, any non-prof., non-tech. role) 09 - Other	

* See page 4-2

Column-Ques.	Item Detail	Code	Recode*
22,23 37 Q'aire (continued)	Occupation of Respondent* (Specific)	(10 - 19) Educational personnel other than Rehab. and Spec. Ed. 10 - Elementary teachers, (include elem. v.p.'s, counselors, etc.) 11 - Secondary teachers 12 - Guidance and personnel workers (psych., social work, counselor if not elementary) 13 - Other special services (Speech, spec. teacher, audiometric, etc.) 14 - Administrative (elem., sec., central office adm., including elem. principal, sec. v.p. and princ., etc., in non-teach.) 15 - University teachers, professors, researchers, specialists, etc. 16 - 19 Open (20 - 29) Medical, other than Rehab. and Spec. Ed. 20 - General practitioners 21 - Surgeons 22 - Psychiatrists or psychoanalysts 23 - Dentists 24 - All other medical specialties 25 - Open 26 - Tech. and Prof.: Nurse, O.T., P.T., R.T., Audio, etc. 27 - Non-tech. and non-prof.: aide, janitor, attendant, etc. 28 - 29 Open	

*See page 4-2

Column-Ques.	Item Detail	Code	Recode*
22,23 37 Q'aire (continued)	Occupation of Respondent* (Specific)	(30 - 39) Professional and Technical, not Spec. Ed. and Rehab. or Medical or Educ. 30 - Engineers (degrees): civil, electrical, mechanical, etc. 31 - Lawyers, attorneys, public accountants 32 - Ministers, clergymen 33 - Musicians 34 - Clinical psychologist 35 - Researchers, scientists, not primarily in education 36 - Social workers, etc. 37 - 39 Other (40 - 45) Business and Industry, Managers, officials, prop.'s 40 - Gov't and other bureaucratic officials: public administrators and officers, union officials, stage inspectors, public utility, telephone officials, etc. 41 - Manufacturing, industrial officials, exec's, etc. 42 - Non-mfg., service, industry: bankers, brokers, insurance, real estate 43 - Retail trades: food, clothing, furniture, gasoline, vehicle sales, etc. 44 - General: i.e., manager executive, etc., no other qualifications 45 - Open (46 - 49) Farm owners, operators and managers of large farms, e.g., heavy equipment and/or many empl.	

* See page 4-2

Column-Ques.	Item Detail	Code	Recode*
22,23 37 Q'aire (continued)	Occupation of Respondent* (Specific)	46 - Farm owner 47 - Farm operator (renter) 48 - Farm manager 49 - Open (50 - 59) White Collar: office, clerical, etc. 50 - Clerical and similar: tellers, bookkeepers, cashiers, secretaries, shipping clerks, attendants, telephone operators, library asst's, mail clerks and carriers, file clerks, etc. 51 - Sales workers: advertising, sales clerks, all mfg., wholesale, retail and other 52 - Small shopkeeper or dealer 54 - 59 Open (60 - 69) Blue Collar: craftsmen, foremen, and kindred work 60 - Craftsmen: carpenters, bakers, electricians, plumbers, machinists, tailors, toolmakers, photographers, etc. 61 - Foremen: all construction, mfg., transportation and communication, and other industries 62 - Servicemen: telegraph, telephone, etc. 63 - Mechanics and repairmen 64 - Shoemakers, roofers, painters, and plasterers 65 - Merchant marine, sailors (non-military)	

*See page 4-2

Column-Ques.	Item Detail	Code	Recode*
22,23 37 Q'aire (continued)	Occupation of Respondent* (Specific)	66 - Bus and cab drivers, motormen, deliverymen, chauffeurs, truck and tractor drivers 67 - Operatives of all other mech. equipment (machine, vehicle, misc. mfg.) 68 - 69 Open (70 - 74) Serivce and Private Household workers) 70 - Private household: laundress, housekeeper, cook 71 - Firemen and policemen, sheriffs, and baliffs 72 - Attendents, professional and personal (valet, masseur, misc. mfg.) 73 - Misc. attendents and services: hospital attendents, bootblacks, cooks 74 - Open (75 - 79) Military Personnel 75 - Ranking officers, all services (Navy Commander and up, Army and Marines Colonel and up) 76 - Junior Officers, Army and Air 77 - Junior Officers, Navy and Marines 78 - Non-commissioned personnel, Army and Air 79 - Non-commissioned personnel, Navy and Marines (80 - 86) Laborers	

* See page 4-2

Column-Ques.	Item Detail	Code	Recode*
22,23 37 Q'aire (continued)	Occupation of Respondent* (Specific)	80 - Small farm owners, renters, and farm laborers (small farm has no heavy equipment, provides minimal income and substance, employs 3 or less persons, full or part time, except for migrant help) 81 - Non-mfg., non-industrial: fishermen, hunters, lumbermen, miners, gardeners, teamsters, garage laborers, etc. 82 - Manufacturing of durable goods: wood, clay, stone (stonecutter), metal, glass plastic, machinery, of all kinds 83 - Mfg. of non-durable goods: food (bakery, beverages, etc.), tobacco, clothing, cloth, paper, printing, chemicals, rubber, leather, etc. 84 - Non-mfg. industries: railroad, construction, transportation, workers, etc. 85 - 86 Open (87) No employment 87 - Persons that haven't worked, such as housewives, students or others who have never had a regular occupation	

* Instructions for Coder: OCCUPATIONS, COLUMNS 22-23. Coding information is derived from two sources:

1. Occupational description of groups as listed by the administrator.
2. Personal statements by the respondents in Question 37 of the questionnaire. Question 37 is the primary source of information. If vague or incomplete, score entirely from notes of administrator.

* See page 4-2

Column	Ques.	Item Detail	Code	Recode*
24	37 Q'aire	Current Employment Status*	1 - Employed or self-employed 2 - Retired 3 - Temporarily out of work 4 - Housewife, but formerly employed 5 - Unable to work (other than retired or housewife) but formerly employed 6 - Student or persons trained for employment but not working for various reasons	
25 thru 44	1 thru 20 H-P Content**	All questions in handicapped persons scale are to be scored from raw data. See instructions below.	1 - 1, strongly disagree 2 - 2, disagree 3 - 3, agree 4 - 4, strongly agree	

---

* Instructions for Coder: EMPLOYMENT STATUS, COLUMN 24. Code from questionnaire Question 37 if person clearly states employment status. If no employment stated, and no indication with certainty from the administrator, score +.

** Instructions for Coder: HANDICAPPED PERSONS SCALE SCORING, COLUMNS 25-44.

NOTE: CERTAIN STEPS AND PROCEDURES ARE THE SAME FOR THE EDUCATION SCALE AS FOR THE HANDICAPPED PERSONS SCALE. THESE PROCEDURES WILL BE WRITTEN IN CAPITAL LETTERS.

The content part of the question is the first half of the question (i.e., the first score).

1. Reverse the content response numbering for the Handicapped Persons Scale (NOT the intensity response number) for items 2, 5, 6, 11, and 12, as follows:

   The number of response 1 is changed to 4 and scored directly on data sheets.
   2 3
   3 2
   4 1

Column-Ques. Item Detail Code Recode*

2. Special instructions for NO RESPONSE. Count the number of NO RESPONSE items, if more than 6 occur, do not score respondent for this scale. If there are 6 or less in total, and 3 or less in sequence, the NO RESPONSE statement is to be scored either 1 or 2 by the random procedure of coin flipping.

   If a head is obtained, the score assigned will be 1.
   If a tail is obtained, the score assigned will be 2.

3. TOTAL THE RAW SCORES FOR EACH RESPONDENT AND WRITE THE TOTALS ON THE TRANSCRIPTION DATA SHEET DIRECTLY BELOW THE COLUMN TOTALED.*

4. INTENSITY RAW SCORES FOR EACH STATEMENT ARE TO BE SCORED ON THE DATA SHEET EXACTLY AS THEY APPEAR ON THE QUESTIONNAIRE: i.e., IF 1 IS CIRCLED IN THE INTENSITY SECTION OF QUESTION ONE, SCORE IT AS 1 ON THE CORRESPONDING SECTION OF THE TRANSCRIPTION SHEET.

5. Dichotomization Procedures (i.e., for MSA - applied to all scales).

   a) Using raw data scores (i.e., the actual number circled by the respondent) via the Hafterson CUT Program on the M.S.U. CDC 3600, determine the point of least error for each item on the content scales.

   b) Using this point (i.e., between 1 and 2, or between 2 and 3 or between 3 and 4) rescore the items, via recode cards, as 0, 1 via the Hafterson MSA Program on the M.S.U. CDC 3600 to determine which items form a scale. Run at both .01 and .05 level.

   c) For Handicapped Persons Scale[1], items are scored 0 above the column break, 1 below the column break. For education Scale scoring, the reverse is true: items are scored 1 above the column break, 0 below the column break.

   d) Using the same procedure in point 5-a above, determine the CUT points for the intensity component of each item.

---

* By this procedure, the possible range of scores is from 0 to 80. Doubling the obtained score will approximate scores obtained by the method of Yuker, et al., (1960, p. 10)

[1] HP scale, blind scale, and deaf scale.

Column-Ques.	Item Detail	Code	Recode*

5. e) Enter the MSA Program with the CUT points for the intensity component and scale as in Point No. 5-b for content.

   f) Adjusted total scores for content and intensity. Sum the dichotomized content and intensity scores (i.e., 0, 1) obtained by the above procedure for each respondent on these items that scaled for both content and intensity. Maximum score will be 1 x the number of the same items that scaled on both content and intensity.

   g) Zero Point. Using only the items that scaled for both content and intensity, plot and determine the "zero point" for each cultural group (or other desired groupings) via the method detailed on pages 221-234 by Guttman (1950).

6. Dichotomization Procedure (alternative to no. 5 above). Attempt to program the CUT Program into the MSA so that both procedures under 5-a and b are conducted jointly.

45 thru 64	1 thru 20 H-P Intensity*	Handicapped Persons Scale Intensity	1 - 1, not strongly at all 2 - 2, not very strongly 3 - 3, fairly strongly 4 - 4, very strongly

1. Except for NO RESPONSE, intensity scores are to be determined as noted in the preceding section regarding Content.

2. Those scales which are rejected because of an excess of NO RESPONSE items in respect to content will of course also be rejected for intensity. Intensity questions which are unscored, but which occur when the content part of the question is scored, will be scored as follows:

   If content score is 1 or 4, score intensity 4.
   If content score is 2 or 3, score intensity just below the mean intensity score for that item; i.e. mean intensity of the group.

---

* Instructions for Coder: HANDICAPPED PERSONS SCALE, INTENSITY, COLUMNS 45-64. See instructions 1 and 2 above and 3 on the next page.

Column-Ques.	Item Detail	Code	Recode*

3. Intensity questions which are unscored, and which occur when the content part of the question is also unscored, will be scored at the highest point below the respondent's own median on the other intensity questions in the questionnaire; i.e., if respondent generally scored intensity questions either 4 or 3, so that the median was in between 3 and 4, score NO RESPONSE 2, and so forth.

65 thru 74	3,4,6, 10,11 12,13 14,18 19*	Education Scale Traditional, Content Responses **	1 - 1, strongly disagree 2 - 2, disagree 3 - 3, agree 4 - 4, strongly agree

1. Items are to be scored on the transcription sheet as circled by the respondent.

2. Follow the procedures outlined in caps on Pages 1-10, 1-11, and 1-12 for the Handicapped Persons Scale. Be sure to score only those items indicated above as applying to the education traditional scale, content.

---

* The traditional and the progressive scales are both in the Kerlinger education scale but the responses are scored separately on the transcription sheet.

** Instructions for Coder: EDUCATION SCALE, TRADITIONAL, CONTENT, COLUMNS 65-74. See instructions 1 and 2 on page 1-13.

865

Column-Ques.		Item Detail	Code	Recode*
1,2,3	Face Sheet	Nation and Location	Same as Card 1, page 1-1	
4,5	Face Sheet	Group Number	01 - 99	
6,7	Face Sheet	Respondent Number	01 - 99	
8	Face Sheet	Sex of Respondent	Same as Card 1, page 1-2	
9	37 Q'aire	Occupational Recode (Interest group)	Same as Card 1, page 1-2	
10	37 Q'aire	Occupational Recode (Spec. Ed.-Rehab. SER)	Same as Card 1, page 1-2	
11,12	Face Sheet	Deck or Card Number	02	
13,14	Face Sheet	Project Director	Same as Card 1, pages 1-2 and 1-3	
15,16	Face Sheet	Day of Administration	01-31	
17,18	Face Sheet	Month of Administration	01-12	
19,20	Face Sheet	Year of Administration	Same as Card 1, page 1-4	
21	Face Sheet	Type of Administration	Same as Card 1, page 1-4	

Column-Ques.		Item Detail	Code	Recode*
22,23	Face Sheet	Occupation of Respondent	Same as Card 1, pages 1-4 through 1-9	
24	Face Sheet	Current Employment Status	Same as Card 1, page 1-10	
25 thru 34	3,4,6,10, 11,12,13, 14,18,19	Education Scale, Traditional, Intensity Responses*	1 - 1, not strongly at all 2 - 2, not very strongly 3 - 3, fairly strongly 4 - 4, very strongly	
35 thru 44	1,2,5,7, 8,9,15, 16,17,20	Education Scale, Progressive, Content Responses**	1 - 1, strongly disagree 2 - 2, disagree 3 - 3, agree 4 - 4, strongly agree	

---

* Instructions for coder: EDUCATION SCALE, TRADITIONAL, INTENSITY, COLUMNS 24-33. Intensity questions are scored as indicated in caps on pages 1-11, 1-12 and 1-13 and as noted before, Handicapped Persons Scale, pages 1-10, 1-11 and 1-12, instructions 1 through 5.

** Instructions for Coder: EDUCATION SCALE, PROGRESSIVE, CONTENT, COLUMNS 34-43.

1. Items are to be scored exactly as circled.

2. Follow the procedures outlined in caps on pages 1-11, 1-12 and 1-13, Handicapped Persons Scale. Be sure to score only those items indicated above as belonging to the education progressive scale content.

Column	Ques.	Item Detail	Code	Recode*
45 thru 54	1,2,5,7, 8,9,15, 16,17,20	Education Scale, Progressive Intensity Responses*	1 - 1, not strongly at all 2 - 2, not very strongly 3 - 3, fairly strongly 4 - 4, very strongly	
55-56	Raw S score	Value scale, Support score**	01 - 32	
57-58	Raw C score	Value scale, Conformity score**	01 - 32	
59-60	Raw R score	Value scale, Recognition score** (comparative)	01 - 32	
61-62	Raw I score	Value scale, Independence score**	01 - 32	
63-64	Raw B score	Value scale, Benevolence score** (asset)	01 - 32	
65-66	Raw L score	Value scale, Leadership score** (comparative)	01 - 32	

---

* Instructions for Coder: EDUCATION SCALE, PROGRESSIVE, INTENSITY, COLUMNS 44-53. Same as instructions for Education Scale, Progressive content, see page 2-2.

** Entries for columns 63-74 are obtained through scoring according to SRA Manual for Survey of Interpersonal Values, Science Research Associates, Inc., 259 East Erie Street, Chicago, Illinois, 1960. For scoring, coders should use the special keys adapted from the SRA English edition of the scale. Although the summed scores of the six value scales should total 90, scores between 84 and 95 are "acceptable."

Column-Ques.		Item Detail	Code	Recode*
67-68	Sum of item scores, 1-20, Content	Adjusted totals based on item dichotomization, H.P. Scale, Content*	(Check dich. for no. to use here) Code will be: 00 or +9 to obtained score	
69-70	Sum of item scores, 1-20, Intensity	Adjusted totals based on item dichotomization, H.P. Scale, Intensity*	(Check dich. for no. to use here) Code will be: 00 or +9 to obtained score	
71-72	Sum of item scores, 3, 4,6,10,11, 12,13,14, 18,19	Adjusted totals based on item dichotomization Education Traditional Scale, Content*	(Check dich. for no. to use here) Code will be: 00 or +9 to obtained score	
73-74	Sum of item scores, 3, 4,6,10,11, 12,13,14, 18,19	Adjusted totals based on item dichotomization Education Traditional Scale, Intensity*	(Check dich. for no. to use here) Code will be: 00 or +9 to obtained score	

* See Card 1, page 1-12, instruction no. 5-f, to ascertain how adjusted total scores are obtained.

Column-Ques.		Item Detail	Code	Recode*
75-76	Sum of item scores, 1, 2,5,7,8,9, 15,16,17,20	Adjusted totals based on item dichotomization Education Progressive Scale, Content*	(Check here) dich. for no. to use Code will be: 00 or +9 to obtained score	
77-78	Sum of item scores, 1, 2,5,7,8,9, 15,16,17,20	Adjusted totals based on item dichotomization Education Progressive Scale, Intensity*	(Check here) dich. for no. to use Code will be: 00 or +9 to obtained score	

* See Card 1, page 1-12, instruction No. 5-f, to ascertain how adjusted total scores are obtained.

Column-Ques.		Item Detail	Code	Recode*
1,2,3	Face Sheet	Nation and Location	Same as Card 1, page 1-1	
4,5	Face Sheet	Group Number	01-99	
6,7	Face Sheet	Respondent Number	01-99	
8	Face Sheet	Sex of Respondent	Same as Card 1, page 1-2	
9	37 Q'aire	Occupational Recode (Interest group)	Same as Card 1, page 1-2	
10	New	Occupational Recode (Spec. Ed.-Rehab. SER)	Same as Card 1, page 1-2	
11,12	Face Sheet	Deck or Card Number	03	
13,14	Face Sheet	Project Director	Same as Card 1, pages 1-2 and 1-3	
15,16	Face Sheet	Day of Administration	01-31	
17,18	Face Sheet	Month of Administration	01-12	
19,20	Face Sheet	Year of Administration	Same as Card 1, page 1-4	
21	Face Sheet	Type of Administration	Same as Card 1, page 1-4	

Column-Ques.		Item Detail	Code	Recode*
22,23	Face Sheet	Occupation of Respondent	Same as Card 1, pages 1-4 through 1-9	
24	Face Sheet	Current employment status	Same as Card 1, page 1-10	
25,26	1 Q'aire	Contact group (Educ.)	Primary 1 - 01, Elem. School 2 - 02, Sec. School 3 - 03, University 4 - 04, Other as specified 5 - 05, No experience	
27,28	2 Q'aire	Contact group (Educ.)	Secondary 1 - 01 2 - 02 3 - 03 SAME 4 - 04 5 - 05	
29,30	3 Q'aire	Educational Contact (Varieties)	1 - 01 Know nothing about Ed 2 - 02 Read little about Ed 3 - 03 Studied about Ed 4 - 04 Neighbor works 5 - 05 Friend works 6 - 06 Relative works 7 - 07 Family works 8 - 08 I work in Ed 9 - 09 Other	

(1) If any combination of alternatives 1, 2 and 3 are circled, code as 10, Impersonal Contact

(2) If any combination of alternatives 4-8 are circled, code as 11, Personal Contact.

(3) If alternatives are circled in both division, code as 12, Both Impersonal and Personal Contact. This requires coding alternative OTHER (i.e., alternative 9) as either personal or impersonal contact; i.e., according to its content.

Column-Ques.		Item Detail	Code	Recode*
31	4 Q'aire	Amount of Contact (Educ.)	1 - 1, less than 3 months 2 - 2, 3 months to 6 months 3 - 3, 6 months to 1 year 4 - 4, 1 year to 3 years 5 - 5, 3 years to 5 years 6 - 6, 5 years to 10 years 7 - 7, over 10 years 8 - 8, over 15 years	
32	5 Q'aire	Percent of income from Education	1 - 1, less than 10% 2 - 2, 10 to 25% 3 - 3, 25 to 50% 4 - 4, 50 to 75% 5 - 5, 75 to 100%	
33	6 Q'aire	Enjoyment of Educational Work	1 - 2, disliked 2 - 3, not much 3 - 4, somewhat 4 - 5, enjoyed	
34	7 Q'aire	Alternative work (to educ.)	1 - 1, no information 2 - 2, unavailable 3 - 3, not acceptable 4 - 4, not quite acceptable 5 - 5, acceptable	
35,36	8 Q'aire	Age	20 - 20 years 21 - 21 years . . 40 - 40	
37	9 Q'aire	Community in which reared. If more than one is checked try to determine in which one the respondent spent most of the time. If	1 - 1 country 2 - 2 country town 3 - 3 city 4 - 4 city suburb	

Column-Ques.		Item Detail	Code	Recode*
37 (continued)	9 Q'aire	impossible, try to choose a median (i.e. country, city, score country town)		
38	10 Q'aire	Employment community (recent)	1 - 1, country 2 - 2, country town 3 - 3, city 4 - 4, city suburb	
39	11 Q'aire	Recent Residence	1 - 1, country 2 - 2, country town 3 - 3, city 4 - 4, city suburb	
40	12 Q'aire	Marital Status	1 - 1, married 2 - 2, single 3 - 3, divorced 4 - 4, widowed 5 - 5, separated	
41,42	13 Q'aire	Number of children. If blank, check Ques. 13. If single, score 00; if married, score -9.	1 - 01 2 - 02 3 - 03 · 10 - 10	
43,44	14 Q'aire	Yearly Income (self-family) (for other nations see Special Instructions)	UNITED STATES 01 - less than $1,000 02 - $1,000 to $1,999 03 - $2,000 to $2,999 · 10 - $9,000 to $9,999	

865

Column-Ques.		Item Detail	Code	Recode*
45	15 Q'aire	Comparative Income (self-family)	1 - 1, much lower 2 - 2, lower 3 - 3, about the same 4 - 4, higher 5 - 5, much higher	
46,47	16 Q'aire	Brothers. If the respondent answers only one question (17 or 18) and other is blank, assume it to be zero.	1 - 01 2 - 02 3 - 03 . . 10 - 10	
48,49	17 Q'aire	Sisters	Same as number of brothers	
51,51	None	Siblings - Obtain by summing above Questions 16 and 17, Col's 45, 46 and 47, 48	1 - 01 . . 15 - 15	
52	18 Q'aire	Fathers' Income: Comparative	1 - 1, much lower 2 - 2, lower 3 - 3, about the same 4 - 4, higher 5 - 5, much higher	
53	19 Q'aire	Religious Affiliation	1 - 1, Roman Catholic 2 - 2, Protestant 3 - 3, Jewish 4 - 4, None 5 - 5, Other 6 to 9, Other major religions	

Column-Ques.		Item Detail	Code	Recode*
54	20 Q'aire	Religion (Importance)	1 - 1, No religion 2 - 2, Not very 3 - 3, Fairly 4 - 4, Very	
55	21 Q'aire	Personaliam (job-amount)	1 - 1, none 2 - 2, no contact 3 - 3, less than 10% 4 - 4, 10 to 30% 5 - 5, 30 to 50% 6 - 6, 50 to 70% 7 - 7, 70 to 90% 8 - 8, over 90%	
56	22 Q'aire	Personalism (job-importance of)	1 - 1, not at all 2 - 2, not very 3 - 3, fairly 4 - 4, very	
57	23 Q'aire	Personalism (job-diffusion)	1 - 1, none 2 - 2, less than 10% 3 - 3, 10 to 30% 4 - 4, 30 to 50% 5 - 5, 50 to 70% 6 - 6, 70 to 90% 7 - 7, over 90%	
58	24 Q'aire	Social Class Position (Self)	1 - 1, lower 2 - 2, lower middle 3 - 3, middle 4 - 4, upper middle 5 - 5, upper	
59	25 Q'aire	Social Class Position (Father)	Same as above	

Column	Ques.	Item Detail	Code	Recode*
60	26 Q'aire	Education (Self-amount). If more than one is circled, choose the highest amount or determine the appropriate an answer.	1 - 1, three years or less 2 - 2, six years or less 3 - 3, nine years or less 4 - 4, twelve years or less 5 - 5, some college 6 - 6, degree 7 - 7, work beyond degree 8 - 8, advanced degree	
61	27 Q'aire	Education (Self-comparative)	1 - 1, much less 2 - 2, less 3 - 3, average 4 - 4, more 5 - 5, much more	
62	28 Q'aire	Education (Father - comparative)	1 - 1, much less 2 - 2, less 3 - 3, average 4 - 4, more 5 - 5, much more	
63	29 Q'aire	Housing (type of)	1 - 1, rent house 2 - 2, rent apartment 3 - 3, rent room 4 - 4, purchase room and board 5 - 5, own apartment 6 - 6, own house 7 - 7, other	
64	30 Q'aire	Housing (rental-month) (for other nations see Special Instructions)	UNITED STATES 1 - $20 or less 2 - 21 - 40 (dollars) 3 - 41 - 75 4 - 76 - 125 5 - 126 - 200 6 - 201 - 300 7 - 300 or more	

Column-Ques.		Item Detail	Code	Recode*
65	31-A Q'aire	Institutional Satisfaction Elementary Schools	1 - 3 do not know 2 - 1 poor 3 - 2 fair 4 - 4 good 5 - 5 excellent	
66	31-B Q'aire	Institutional Satisfaction Secondary Schools	Same	
67	31-C Q'aire	Institutional Satisfaction Universities	Same	
68	31-D Q'aire	Institutional Satisfaction Businessmen	Same	
69	31-E Q'aire	Institutional Satisfaction Labor	Same	
70	31-F Q'aire	Institutional Satisfaction Government (local)	Same	
71	31-G Q'aire	Institutional Satisfaction Government (National)	Same	
72	31-H Q'aire	Institutional Satisfaction Health Services	Same	
73	31-I Q'aire	Institutional Satisfaction Churches	Same	

865

Column-Ques.		Item Detail	Code	Recode*
74	32 Q'aire	Residency (current length)	1 - 1, less than a year 2 - 2, one to two years 3 - 3, three to six years 4 - 4, seven to ten years 5 - 5, over ten years	
75	33 Q'aire	Residency (change-recent)	1 - 1, yes 2 - 2, no	

Column-Ques.		Item Detail	Code	Recode*
1,2,3	Face Sheet	Nation and Location	Same as Card 1, page 1-1	
4,5	Face Sheet	Group Number	01 - 99	
6,7	Face Sheet	Respondent Number	01 - 99	
8	Face Sheet	Sex of Respondent	Same as Card 1, page 1-2	
9	37 Q'aire	Occupational Recode (Interest group)	Same as Card 1, page 1-2	
10	New	Occupational Recode (Spec. Ed.-Rehab. SER)	Same as Card 1, page 1-2	
11,12	Face Sheet	Deck or Card Number	04	
13,14	Face Sheet	Project Director	Same as Card 1, pages 1-3 and 1-3	
15,16	Face Sheet	Day of Administration	01-31	
17,18	Face Sheet	Month of Administration	01-12	
19,20	Face Sheet	Year of Administration	Same as Card 1, page 1-4	
21	Face Sheet	Type of Administration	Same as Card 1, page 1-4	

Column-Ques.		Item Detail	Code	Recode*
22,23	Face Sheet	Occupation of Respondent	Same as Card 1, pages 1-4 through 1-9	
24	Face Sheet	Current Employment Status	Same as Card 1, page 1-10	
25	34 Q'aire	Job change (recent)	1 - 1, yes 2 - 2, no	
26	35 Q'aire	Residency (change frequency) (i.e., last ten years)	1 - 1, none 2 - 2, one time 3 - 3, two to three times 4 - 4, four to six times 5 - 5, seven to ten times 6 - 6, over ten times	
27	36 Q'aire	Job (change frequency) (i.e., last ten years)	1 - 1, none 2 - 2, one time 3 - 3, two to three times 4 - 4, four to six times 5 - 5, seven to ten times 6 - 6, over ten times	
28,29	37 Q'aire	Occupation (Specific)	Same as Card 1, pages 1-4 through 1-9	
30	38 Q'aire	Religiousity (norm conformity)	1 - 1, no religion 2 - 2, seldom 3 - 3, sometimes 4 - 4, usually 5 - 5, almost always	
31	39 Q'aire	Change Orientation (Health Practices)	1 - 1, no 2 - 2, probably not 3 - 3, maybe 4 - 4, yes	
32	40 Q'aire	Change Orientation (Child Rearing)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	

Column	Ques.	Item Detail	Code	Recode*
33	41 Q'aire	Change Orientation (Birth control Practices)	1 - 1, always right 2 - 2, usually right 3 - 3, probably wrong 4 - 4, always wrong	
34	42 Q'aire	Change Orientation (Automation)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
35	43 Q'aire	Change Orientation (Political Leaders)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
36	44 Q'aire	Education (aid to - local)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
37	45 Q'aire	Education (aid to - federal)	1 - 1, strongly disagree 2 - 2, slightly disagree 3 - 3, slightly agree 4 - 4, strongly agree	
38	46 Q'aire	Education (planning responsibility)	1 - 1, only parents 2 - 2, only city or local government 3 - 3, primarily federal government	
39	47 Q'aire	Change Orientation (self)	1 - 1, very difficult 2 - 2, somewhat difficult 3 - 3, slightly easy 4 - 4, very easy	
40	48 Q'aire	Change Orientation (self-role adherence)	1 - 1, agree strongly 2 - 2, agree slightly 3 - 3, disagree slightly 4 - 4, disagree strongly	

Column	Ques.	Item Detail	Code	Recode*
41	49 Q'aire	Change Orientation (self-routine job)	1 - 1, agree strongly 2 - 2, agree slightly 3 - 3, disagree slightly 4 - 4, disagree strongly	
42	50 Q'aire	Personalism (Famialism-Parental ties)	Same	
43	51 Q'aire	Personalism (Other orientation)	1 - 1, disagree strongly 2 - 2, disagree slightly 3 - 3, agree slightly 4 - 4, agree strongly	
44	52 Q'aire	Future Orientation (Planning)	1 - 1, agree strongly 2 - 2, agree slightly 3 - 3, disagree slightly 4 - 4, disagree strongly	
45	53 Q'aire	Future Orientation (Happiness)	1 - 1, nothing 2 - 2, money 3 - 3, friends 4 - 4, job 5 - 5, health 6 - 6, other	
46,47	54 Q'aire	Future Orientation (Happiness possibility)	01 - Nothing 02 - Marriage 03 - Divorce 04 - Friends 05 - Religion (Satisfaction with life) 06 - Money 07 - Job 08 - Education 09 - Health (Mental) 10 - Health (Physical) -9 - No response	

Column-Ques.		Item Detail	Code	Recode*
		HANDICAPPED PERSONS QUESTIONNAIRE		
48	1-Q-HP	HP Contact Group (Primary)	1 - 1, blind 2 - 2, partially blind 3 - 3, deaf (and mute) 4 - 4, partially deaf 5 - 5, crippled 6 - 6, disfigured 7 - 7, spastic 8 - 8, speech 9 - 0, none	
49,50	2-Q-HP	HP Contact Group (Secondary)	00 If there was no contact to and questions are not 08 answered score 0. The score for this question is the score of the response alternatives circled, i.e., scores can range from 0 to 8.	
51,52	3-Q-HP	HP Contact (varieties)	1 - 01, Minimum knowledge 2 - 02, Studied about HP 3 - 03, Friend HP 4 - 04, Relative HP 5 - 05, Worked with HP 6 - 06, Family HP 7 - 07, Self is HP - 08) - 09)* See note below - 10)	
53	4-Q-HP	HP Contact (amount)	1 - 1, less than ten 2 - 2, ten to fifty 3 - 3, fifty to 100 4 - 4, 100 to 500 5 - 5, over 500	

* NOTE: If either or both alternatives 1 and 2 are circled, code as 08 - Impersonal contact. If either or all alternatives 3-7 are circled, code as 09 - Personal contact. If alternatives from both preceding divisions are circled, code as 10 - Impersonal and Personal contact.

Column	Ques.	Item Detail	Code	Recode*
54	5-Q-HP	HP Contact (ease of avoidance)	1 - 1, great difficulty 2 - 2, considerable difficulty 3 - 3, some inconvenience 4 - 4, no inconvenience	
55	6-Q-HP	HP Contact (gain from)	1 - 1, no rewards 2 - 2, paid 3 - 3, credit 4 - 4, paid and credit	
56	7-Q-HP	HP Contact (% income)	1 - 1, less than 10% 2 - 2, 10 to 25% 3 - 3, 25 to 50% 4 - 4, 50 to 75% 5 - 5, over 75%	
57	8-Q-HP	HP Contact (enjoyment)	1 - 1, disliked, great 2 - 2, disliked, little 3 - 3, liked, some 4 - 4, definitely enjoyed	
58	9-Q-HP	HP Contact (alternatives to)	1 - 1, No information on alternatives 2 - 2, No other job available 3 - 3, Other available job NOT acceptable 4 - 4, Other available job acceptable	
59	10-Q-HP	Contact (amount-M.R.)	1 - 1, less than 10 2 - 2, 10 to 50 3 - 3, 50 to 100 4 - 4, 100 to 500 5 - 5, over 500	
60	11-Q-HP	Contact (amount-EDP)	Same	

Column-Ques.		Item Detail	Code	Recode*
61,62	Sum of item scores 1-20 Content	Handicapped Persons Scale Total Content Raw Score, entry on transcription sheet	00-80	
63,64	Sum of item scores 1-20 Intensity	Handicapped Persons Scale Total Intensity Raw Score, entry on transcription sheet	00-80	
65,66	Sum of item scores 3, 4,6,10,11, 12,13,14, 18,19	Education Scale, Traditional Total Raw Content score entry on transcription sheet	00-40	
67,68	Sum of item scores 3, 4,6,10,11, 12,13,14, 18,19	Education Scale, Traditional Total Raw Intensity, score entry on transcription sheet	00-40	

Column-Ques.		Item Detail	Code	Recode*
69,70	Sum of item scores 1, 2,5,7,8, 9,15,16, 17,20	Education Scale, Progressive Total Raw Content score entry on transcription sheet	00-40	
71,72	Sum of item scores 1, 2,5,7,8, 9,15,16, 17,20	Education Scale, Progressive Total Raw Intensity score entry on transcription sheet	00-40	

APPENDIX B-4

SPECIAL INSTRUCTIONS AND FCC I AND FCC II VARIABLE-COMPUTER PRINT-OUT CODE FORMS

BELGIUM (203)

(Special Instructions)

Card/Column[1]	Ques.	Item Detail	Code[2]
		Card 1	
1:4,5	Group Numbers (Adm.)		01 (EN.S) - SER 02 (ENS.) - EDUC 03 (EMPL.) - M-EX 04 (TRAV.) - L
1:45-64	1-20 Intensity HP Scale		4 The order for intensity only 3 is reversed. Same for all 2 questions. Also "true" 1 for Educ. Scale
		Card 2	
2:25-34	Ed. Scale	Trad. Intensity Ed. Scale	Same as for HP intensity
2:45-54	Ed. Scale	Prog. Items Intensity Ed. Scale	" " " " "
		Card 3	
3:43-44	14 Q'aire	Income	Code for Income 3:43,44 01 under 100,000 francs 02 100,000 - 124,000 francs 03 125,000 - 149,000 francs in 25,000 increments to 600,000 and above
3:45	21 Q'aire	Personalism (Job amount)	1 thru 7 See immediately below for scoring system.

[1]The card/col. designations refers to the location in the Code Book: International Study - 865.

[2]Designates changes and/or additions to the 865 Code Book. All card designations over 4 will indicate additions. In such cases the full code will be given since it will be new and not contained in the 865 Code Book

Card Column	Ques.	Item Detail	Code	
		Belgium used the following scale for this question. Conversion to the numerical 1 thru 7 system is indicated.		
		Parfois. Souvent.		
		1 2 3 4 5 6 7		
3:58	24 Q'aire	Social class Position (self)	1 thru 6	Code alternatives in descending order from 1 thru 6. One additional code (No. 6) added here.
3:59	25 Q'aire	Social Class Position (Father)	1 thru	Same as Q'aire 24.
3:60-62	Q'aire			
	#26--educ.	self-amt.	1 thru 9	Code alternatives
	#27--educ.	self-comp.	1 thru 5	in descending
	#28--educ.	father--comp.	1 thru 5	order from #1 onward.
3:64	30 Q'aire	Rental (monthly)	Code For Rent 3:64 1 under 1,000 francs 2 1,000 - 1,999 francs 3 2,000 - 2,999 francs in 1,000 increments to 8,000 and above	
3:75	33 Q'aire	Residency-change (recent)	Qui - 1 Non - 2	
		Card 4		
4:25	34 Q'aire	Job Change (recent)	Qui - 1 Non - 2	
4:28,29	37 Q'aire	Occupation (Specific)	Omitted.	Code as missing data
4:30	38 Q'aire	Religiousity (Norm conformity)	Omitted.	Code as missing data
4:31	39 Q'aire	Change Orient. (Health)	Omitted.	Code as missing data

Card Column	Ques.	Item Detail		Code
4:36	44 Q'aire	Education-aid (local)	Omitted.	Code as missing data
4:56	7-Q-HP	Contact HP (% income)	1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6	

BELGIUM (203)

FCC 1 and 2

Variable computer print
out code form

John E. Jordan
College of Education
Michigan State University

FCC 1

Belgium
1 of 4
International Study

Card 1

Field Number	Question	Variable Name	Col.
1	Face Sheet of Scales	Nation	3
2	Face Sheet of Scales	Sex	8
3	37 Q'aire	Interest Group Occupation	9
4	Face Sheet of Scales	Type of Administration	21
5	37 Q'aire	Current Employment Status	24
6-25	H-P Scale	H-P Content	25-44
26-45	H-P Scale	H-P Intensity	45-64
46-55	Education Scale	Trad. Education-Content	65-74

Card 2

First 24 Columns SAME as Card 1 expect for Col. 11, 12 (i.e., Deck or Card No.)

56-65	Education Scale	Trad. Education-Intensity	25-34
66-75	Education Scale	Prog. Education-Content	35-44
76-85	Education Scale	Prog. Education-Intensity	45-54

Card 3

86	4 Q'aire	Contact (amount-education)	31
87	5 Q'aire	Contact (gain from education)	32
88	6 Q'aire	Contact (enjoyment-education)	33
89	7 Q'aire	Contact (alternatives to educ.)	34
90	9 Q'aire	Early Youth Community	37
91	10 Q'aire	Employment Community (recent)	38
92	11 Q'aire	Residence Community (recent)	39
93	12 Q'aire	Marital Status	40
94	15 Q'aire	Income (comparative-self fam.)	45
95	18 Q'aire	Income (father's comparative)	52
96	19 Q'aire	Religious affiliation	53
97	20 Q'aire	Religion (Importance)	54
			55
89	22 Q'aire	Personalism (job-importance of)	56
99	23 Q'aire	Personalism (job-diffusion)	57
100	24 Q'aire	Social class position (self)	58
101	25 Q'aire	Social class position father	59
102	26 Q'aire	Education (self-amount)	60
103	27 Q'aire	Education (self-comparative)	61
104	28 Q'aire	Education (father-comparative)	62
105	29 Q'aire	Housing (type of)	63
106	30 Q'aire	Housing (rental-month)	64
107	31-A Q'aire	Institutional satisfaction (Elementary Schools)	65

FCC 1 (Cont.) Belgium 2 of 4

Field Number	Question	Variable Name	Col.
108	31-B Q'aire	Institutional satisfaction (Secondary Schools)	66
109	31-C Q'aire	Institutional satisfaction (Universities)	67
110	31-D Q'aire	Institutional satisfaction (Businessmen)	68
111	31-E Q'aire	Institutional satisfaction (Labor)	69
112	31-F Q'aire	Institutional satisfaction (Local gov't.)	70
113	31-G Q'aire	Institutional satisfaction (National gov't.)	71
114	31-H Q'aire	Institutional satisfaction (Health services)	72
115	31-I Q'aire	Institutional satisfaction (Churches)	73
116	32 Q'aire	Residing (current length)	74
117	33 Q'aire	Residing (change-recent)	75
		Card 4	
1st 24 columns SAME except for Columns 11-12 (i.e., Deck or Card No.)			
118	34 Q'aire	Job (change-recent)	25
119	35 Q'aire	Residing (change-frequency)	26
120	36 Q'aire	Job (change-frequency)	27
121	40 Q'aire	Change orient. (child-rearing)	32
122	41 Q'aire	Change orient. (birth control)	33
123	42 Q'aire	Change orient. (automation)	34
124	43 Q'aire	Change orient. (political ldrs.)	35
125	45 Q'aire	Education (aid to-federal)	37
126	46 Q'aire	Education (planning respon.)	38
127	47 Q'aire	Change orient. (self)	39
128	48 Q'aire	Change orient. (self-rule adherence)	40
129	49 Q'aire	Change orient. (self-routine job)	41
130	50 Q'aire	Personalism (familialism-parental ties)	42
131	51 Q'aire	Personalism (other orientation)	43
132	52 Q'aire	Future Orientation (planning)	44
133	53 Q'aire	Future Orientation (happiness prerequisites)	45
134	1-Q-HP	Contact group (primary-HP)	48
135	4-Q-HP	Contact (amount of HP)	53
136	5-Q-HP	Contact (ease of avoidance)	54

FCC 1 (Cont.) Belgium 3 of 4

Field Number	Question	Variable Name	Col.
137	6-Q-HP	Contact (Gain from HP)	55
138	7-Q-HP	Contact (% Income from HP)	56
139	8-Q-HP	Contact (enjoyment - HP)	57
140	9-Q-HP	Contact (alternative to HP)	58
141	10-Q-HP	Contact (amount MR)	59
142	11-Q-HP	Contact (amount emotional ill)	60

FCC II

Card 1

1	Face Sheet	Group Number	4,5

Card 2

1st 24 columns SAME as Card 1 except for Columns 11-12 (i.e., Deck or Card No.)

2	Value Scale	Support Value	55,56
3	Value Scale	Conformity Value	57,58
4	Value Scale	Recognition Value (comp.)	59,60
5	Value Scale	Independent Value	61,62
6	Value Scale	Benevolence Value	63,64
7	Value Scale	Leadership Value (comp.)	65,66

Card 3

1st 23 Columns SAME as card 1 except for Columns 11-12 (i.e., Deck or Card No.)

8	1 Q'aire	Contact group (primary educ.)	25,26
9	2 Q'aire	Contact group (secondary educ)	27,28
10	3 Q'aire	Contact (varieties of educ.)	29,30
11	8 Q'aire	Age	35,36
12	13 Q'aire	Number of Children	41,42
13	14 Q'aire	Income (yearly-self,family)	43,44
14	16 Q'aire	Brothers (Do not use)	46,47
15	17 Q'aire	Sisters (Do not use)	48,59
16	None	Siblings	50,51

Card 4

1st 23 Columns SAME as Card 1 except for Columns 11-12 (i.e., Deck or Card No.)

FCC II (Cont.)

Belgium
4 of 4

Field Number	Question	Variable Name	Col.
17	54 Q'aire	Future Orientation (happiness possibility)	46,47
18	2-Q-HP	Contact Group (Secondary HP)	49,50
19	3-Q-HP	Contact (Varieties of HP)	51,52
20	HP Scale	HP Total Content Raw Score	61,62
21	HP Scale	HP Total Intensity Raw Score	63,64
22	Education Scale	Trad. Educ. Total Cont. Raw Score	65,66
23	Education Scale	Trad. Educ. Total Int. Raw Score	67,68
24	Education Scale	Prog. Educ. Total Cont. Raw Score	69,70
25	Education Scale	Prog. Educ. Total Int. Raw Score	71,72

DENMARK (206)

(Special Instructions)

Page S-3-1-1[1]

Col.	Question	Item Detail	Code	
			Card 3	
43-44	PQ 14	Income	01	to 4,999 Danish Kroners
			02	5,000 - 9,999
			03	10,000 - 14,999
			04	15,000 - 19,999
			05	20,000 - 24,999
				etc.
64	PQ 30	Rent	1	under 199 Danish Kroners
			2	200 - 299
			3	300 - 399
			4	400 - 499
			5	500 - 599
			6	600 - 699
			7	700 - 799
			8	800 - 999
			9	above 1,000

[1]On all Special Instruction sheets the page code is as follows:

a. S = Special Instructions
b. First digit following S = Card or deck number. If the number is from 1 thru 4; it also refers to the original card or deck in the code book entitled: International Study. If the second digit is 5 or greater it indicates that an additional card or deck is being added to the particular study.
c. Second digit following the S = Page number from the deck in the International Code Book.
d. Third digit following the S = Page number of the Special Instructions.

ATTITUDES TOWARD EDUCATION AND THE HANDICAPPED IN DENMARK: THEIR NATURE AND THEIR DETERMINANTS

FCC I AND FCC II

Variable-Computer print out
code form

John E. Jordan
College of Education
Michigan State University

FCC I

Denmark
1 of 4

Field Number	Question	Variable Name	Col.
		Card 1	
1	Face Sheet of Scales	Nation	3
2	Face Sheet of Scales	Sex	8
3	37 Q'aire	Interest Group Occupation	9
4	Face Sheet of Scales	Type of Administration	21
5	37 Q'aire	Current Employment Status	24
6-25	HP Scale	HP Content	25-44
26=24	HP Scale	HP Intensity	45-64
46-55	Education Scale	Trad. Education-Content	65-74
		Card 2	
First 24 Columns SAME as Card 1 except for Col. 11-12 (i.e., Deck or Card No.)			
56-65	Education Scale	Trad. Education-Intensity	25-34
66-75	Education Scale	Prog. Education-Content	35-44
76-85	Education Scale	Prog. Education-Intensity	45-54
		Card 3	
First 24 Columns SAME as Card 1 except for Col. 11-12 (i.e., Deck or Card No.)			
86	4 Q'aire	ED Contact (amount)	31
87	5 Q'aire	ED Contact (gain from)	32
88	6 Q'aire	ED Contact (enjoyment)	33
89	7 Q'aire	ED Contact (alternatives)	34
90	9 Q'aire	Early Youth Commu	37
91	10 Q'aire	Employment Commu (recent)	38
92	11 Q'aire	Residence Commu (recent)	39
93	12 Q'aire	Marital Status	40
94	15 Q'aire	Income (compar-self fam.)	45
95	18 Q'aire	Income (father's compar)	52
96	19 Q'aire	Religious affilitation	53
97	20 Q'aire	Religion (Importance)	54
98	21 Q'aire	Personalism (job-amount)	55
99	22 Q'aire	Personalism (job-import)	56
100	23 Q'aire	Personalism (job-diffusion)	57
101	24 Q'aire	Social class position (self)	58
102	25 Q'aire	Social class position father	59

1166

FCC I (Cont.) Denmark 2 of 4

Field Number	Question	Variable Name	Col.
103	26 Q'aire	Education (self-amount)	60
104	27 Q'aire	Education (self-compar)	61
105	28 Q'aire	Education (father-compar)	62
106	29 Q'aire	Housing (type of)	63
107	30 Q'aire	Housing (rental-month)	64
108	31-A Q'aire	Insti. satis. (elem. schools)	65
109	31-B Q'aire	Insti. satis. (sec. schools)	66
110	31-C Q'aire	Insti. satis. (univer.)	67
111	31-D Q'aire	Insti. satis. (businessmen)	68
112	31-E Q'aire	Insti. satis. (labor)	69
113	31-F Q'aire	Insti. satis. (local gov't.)	70
114	31-G Q'aire	Insti. satis. (national gov't.)	71
115	31-H Q'aire	Insti. satis. (health services)	72
116	31-I Q'aire	Insti. satis. (churches)	73
117	32 Q'aire	Residency (current length)	74
118	33 Q'aire	Residence (change-recent)	75
		Card 4	
1st 24 columns SAME except for Columns 11-12 (i.e., Deck or Card No.)			
119	34 Q'aire	Job (change-recent)	25
120	35 Q'aire	Residency (change-freq.)	26
121	36 Q'aire	Job (change-frequency)	27
122	38 Q'aire	Religiousity (norm-conformity)	30
123	39 Q'aire	Change orient. (health practices)	31
124	40 Q'aire	Change orient. (child-rearing)	32
125	41 Q'aire	Change orient. (birth control)	33
126	42 Q'aire	Change orient. (automation)	34
127	43 Q'aire	Change orient (political leaders)	35
128	44 Q'aire	Education (aid-to-local)	36
129	45 Q'aire	Education (aid-to-federal)	37
130	46 Q'aire	Education (planning respons.)	38
131	47 Q'aire	Change orient. (self)	39
132	48 Q'aire	Change orient. (self-role adher.)	40
133	49 Q'aire	Change orient. (self-routine job)	41
134	50 Q'aire	Personalism (familialism)	42
135	51 Q'aire	Personalism (other orient.)	43
136	52 Q'aire	Future Orient. (planning)	44
137	53 Q'aire	HP Future Orient (happiness pre-re)	45
138	1-Q-HP	HP Contact group (primary	48
139	4-Q-HP	HP Contact (amount)	53
140	5-Q-HP	HP Contact (ease of avoidance)	54
141	6-Q-HP	HP Contact (gain from)	55

FCC I (Cont.)

Denmark
3 of 4

Field Number	Question	Variable Name	Col.
142	7-Q-HP	HP Contact (% income from)	56
143	8-Q-HP	HP Contact (enjoyment-HP)	57
144	9-Q-HP	HP Contact (alternatives)	58
145	10-Q-HP	MR Contact (amount)	59
146	11-Q-HP	EDP Contact (amount)	60

FCC II

Card 1

1	Face Sheet	Group Number (administration)	4,5
2	37 Q'aire	Specific Occupation	22,23

Card 2

1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)

3	Value Scale	Support Value	55,56
4	Value Scale	Conformity Value	57,58
5	Value Scale	Recognition Value (comparative)	59,60
6	Value Scale	Independence Value	61,62
7	Value Scale	Benevolence Value	63,64
8	Value Scale	Leadership Value (comparative)	65,66

Card 3

1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)

9	1 Q'aire	Contact group (primary education)	25,26
10	2 Q'aire	Contact group (secondary educa.)	27,28
11	3 Q'aire	Contact (varieties of education)	29,30
12	8 Q'aire	Age	35,36
13	13 Q'aire	Number of children	41,42
14	14 Q'aire	Income (yearly-self,family)	43,44
15	16 Q'aire	Brothers (Do not use)	46,47
16	17 Q'aire	Sisters (Do not use)	48,49
17	None	Siblings	50,51

FCC II (Cont.) Denmark 4 of 4

Field Number	Question	Variable Name	Col.
		Card 4	
		1st 24 columns Same as card 1 except for columns 11-12 (i.e., Deck or Card No.)	
18	37 Q'aire	Occupation (specific)	28,29
19	54 Q'aire	Future Orientation (happiness possibility)	46,47
20	2-Q HP	Contact Group (Secondary HP)	49,50
21	3-Q HP	Contact (Varieties of HP)	51,52
22	HP Scale	HP Total Content Raw Score	61,62
23	HP Scale	HP Total Intensity Raw Score	63,64
24	Education Scale	Trad. Educ. Total Cont. Raw Score	65,66
25	Education Scale	Trad. Educ. Total Int. Raw Score	67,68
26	Education Scale	Prog. Educ. Total Cont. Raw Score	69,70
27	Education Scale	Prog. Educ. Total Int. Raw Score	71,72

ENGLAND (201)

(Special Instructions)

Page S-3-2-1[1]

Col.	Question	Item Detail	Code
		Card 3	
25,26	1 Q'aire	Ed Contact (primary)	01 02 01 03 04 02 05 06 03 07 04 08 05
27,28	1 Q'aire	Ed Contact (secondary)	Same as above
37,38, 39	9,10,11 Q'aire	Community reared employ. comm. recent residence	number 4 alternative omitted
43,44	14 Q'aire	Income	01 to 249 British pounds 02 250 - 499 03 500 - 749 04 750 - 999 05 1,000 - 1,249 units of 250
53	19 Q'aire	Religious affiliation	1- 1 Roman Catholic 2- 5 Church of England 3- 2 Protestant 4- 3 Jewish 5- 4 None 6- 9 Other

[1]On all Special Instruction sheets the page code is as follows: (a) S = Special Instructions; (b) First digit following S = Card or deck number. If the number is from 1 thru 4; it also refers to the original card or deck in the code book entitled: International Study. If the second digit is 5 or greater it indicates that an additional card or deck is being added to the particular study; (c) Second digit following the S = page number from the deck in the International Code Book; (d) Third digit following the S = Page number of the Special Instructions.

S-3-2-2

Col.	Question	Item Detail	Code	
64	30 Q'aire	Rental	1	to 7 British pounds
			2	8-14
			3	15-21
			4	22-28
			5	29-35
			6	36-42
			7	43-49
			8	50-56
			9	over 57

ATTITUDES TOWARD EDUCATION AND THE HANDICAPPED IN ENGLAND: THEIR NATURE AND THEIR DETERMINANTS

FCC I and FCC II

Variable Computer print out code form

John E. Jordan
College of Education
Michigan State University

1266

FCC I

Field Number	Question	Variable Name	England 1 of 4 Col.
		Card 1	
1	Face Sheet of Scales	Nation	3
2	Face Sheet of Scales	Sex	8
3	37 Q'aire	Interest Group Occupation	9
4	Face Sheet of Scales	Type of Administration	21
5	37 Q'aire	Current Employment Status	24
6-25	HP Scale	HP Content	25-44
26-45	HP Scale	HP Intensity	45-64
46-55	Education Scale	Trad. Education Content	65-74
		Card 2	
First 24 columns SAME as Card 1 except for col. 11, 12 (i.e., Deck or Card No.)			
56-65	Education Scale	Trad. Education-Intensity	25-34
66-75	Education Scale	Prog. Education-Content	35-44
76-85	Education Scale	Prog. Education-Intensity	45-54
		Card 3	
First 24 Columns SAME as Card 1 except for col. 11, 12 (i.e., Deck or Card No.)			
86	4 Q'aire	ED Contact (amount)	31
87	5 Q'aire	ED Contact (gain from)	32
88	6 Q'aire	ED Contact (enjoyment	33
89	7 Q'aire	ED Contact (alternatives)	34
90	9 Q'aire	Early Youth Commu	37
91	10 Q'aire	Employment Commu (recent)	38
92	11 Q'aire	Residence Commu (recent)	39
93	12 Q'aire	Marital Status	40
94	15 Q'aire	Income (compar-self fam.)	45
95	18 Q'aire	Income (father's compar)	52
96	19 Q'aire	Religious affiliation	53
97	20 Q'aire	Religion (Importance)	54
98	21 Q'aire	Personalism (job-amount)	55
99	22 Q'aire	Personalism (job-import)	56
100	23 Q'aire	Personalism (job-diffusion)	57
101	24 Q'aire	Social class position (self)	58
102	25 Q'aire	Social class position father	59

FCC I (Cont.) England 2 of 4

Field Number	Question	Variable Name	Col.
103	26 Q'aire	Education (self-amount)	60
104	27 Q'aire	Education (self-compar)	61
105	28 Q'aire	Education (father-compar)	62
106	29 Q'aire	Housing (type of)	63
107	30 Q'aire	Housing (rental-month)	64
108	31-A Q'aire	Insti. satis. (elem. schools)	65
109	31-B Q'aire	Insti. satis. (sec. schools)	66
110	31-C Q'aire	Insti. satis. (univers.)	67
111	31-D Q'aire	Insti. satis. (Businessmen)	68
112	31-E Q'aire	Insti. satis. (labor)	69
113	31-F Q'aire	Insti. satis. (local gov't.)	70
114	31-G Q'aire	Insti. satis. (national gov't.)	71
115	31-H Q'aire	Insti. satis. (health services)	72
116	31-I Q'aire	Insti. satis. (churches)	73
117	32 Q'aire	Residency (current length)	74
118	33 Q'aire	Residency (change-recent)	75

Card 4

1st 24 columns SAME except for columns 11-12 (i.e., Deck or Card No.)

119	34 Q'aire	Job (change-recent)	25
120	35 Q'aire	Residency (change-frequency)	26
121	36 Q'aire	Job (change-frequency)	27
122	38 Q'aire	Religiousity (norm-conformity)	30
123	39 Q'aire	Change orient (Health-practices)	31
124	40 Q'aire	Change orient (child-rearing)	32
125	41 Q'aire	Change orient (birth control)	33
126	42 Q'aire	Change orient (automation)	34
127	43 Q'aire	Change orient (political ldrs.)	35
128	44 Q'aire	Education (aid-to-local)	36
129	45 Q'aire	Education (aid-to-federal)	37
130	46 Q'aire	Education (planning respons.)	38
131	47 Q'aire	Change orient (self)	39
132	48 Q'aire	Change Orient (self-role adher.)	40
133	49 Q'aire	Change orient (self-routine job)	41
134	50 Q'aire	Personalism (familialism)	42
135	51 Q'aire	Personalism (other orient)	43
136	52 Q'aire	Future Orient (planning)	44
137	53 A'aire	HP Future Orient (happiness pre-re.)	45
138	1-Q-HP	HP Contact group (primary)	48
139	4-Q-HP	HP Contact (amount)	53
140	5-Q-HP	HP Contact (ease of avoidance)	54
141	6-Q-HP	HP Contact (gain from)	55
142	7-Q-HP	HP Contact (% income from)	56

FCC I (Cont.) England 3 of 4

Field Number	Question	Variable Name	Col.
143	8-Q-HP	HP Contact (enjoyment-HP)	57
144	9-Q-HP	HP Contact (alternatives)	58
145	10-Q-HP	MR Contact (amount)	59
146	11-Q-HP	EDP Contact (amount)	60

FCC II

Card 1

1	Face Sheet	Group Number (administration)	4,5
2	37 Q'aire	Specific Occupation	22,23

Card 2

1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)

3	Value Scale	Support Value	55,56
4	Value Scale	Conformity Value	57,58
5	Value Scale	Recognition Value (comparative)	59,60
6	Value Scale	Independence Value	61,62
7	Value Scale	Benevolence Value	63,64
8	Value Scale	Leadership Value (comparative)	65,66

Card 3

1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)

9	1 Q'aire	Contact group (primary education)	25,26
10	2 Q'aire	Contact group (secondary educ.)	27,28
11	3 Q'aire	Contact (varieties of education)	29,30
12	8 Q'aire	Age	35,36
13	13 Q'aire	Number of children	41,42
14	14 Q'aire	Income (yearly-self,family)	43,44
15	16 Q'aire	Brothers (Do not use)	46,47
16	17 Q'aire	Sisters (Do not use)	48,49
17	None	Siblings	50,51

FCC II (Cont.) England 4 of 4

Field Number	Question	Variable Name	Col.
		Card 4	
		1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)	
18	37 Q'aire	Occupation (specific)	28,29
19	54 Q'aire	Future Orient (happiness possi.)	46,47
20	2-Q HP	Contact Group (Secondary HP)	49,50
21	3-Q HP	Contact (Varieties of HP)	51,52
22	HP Scale	HP Total Content Raw Score	61,62
23	HP Scale	HP Total Intensity Raw Score	63,64
24	Education Scale	Trad. Educ. Total Cont. Raw Score	65,66
25	Education Scale	Trad. Educ. Total Int. Raw Score	67,68
26	Education Scale	Prog. Educ. Total Cont. Raw Score	69,70
27	Education Scale	Prog. Educ. Total Int. Raw Score	71,72

FRANCE (204)

(Special Instructions)

Card, Col.[1]	Ques.	Item Detail	Code[2]
		Card 1	
1:4,5		Group Numbers (Admin.)	01 no occup. group 02 meaning. Each 06 group a mixture.
1:45-64	1-20	HP Scale Intensity	4 the order for 3 intensity only was 2 reversed. Also same 1 for Educ. Scale
		Card 2	
2:25-34		Trad. Ed. Scale Intensity	Same as above for HP Intensity
2:45-54		Prog. Ed. Scale Intensity	Same as above for HP intensity
		Card 3	
3:43,44	14 Q'aire	Income	01 to 999 New Francs 02 1,000 - 1,999 03 2,000 - 2,999 etc. increments of 1,000 New Francs
3:57	23 Q'aire	Personalism (job-diffusion)	Coding error--omit for analysis
3:64	30 Q'aire	Rental (monthly)	1 to 99 New Francs 2 100-149 6 300-399 3 150-199 7 400-499 4 200-249 8 500-599 5 250-299 9 600-up
4:36	44 Q'aire	Education-aid (local)	Omitted in France Code as missing data

[1]The card/col. designations refers to the location in the Code Book: International Study - 865.

[2]Designates changes and/or additions to the 865 Code Book. All card designations over 4 will indicate additions. In such cases the full code will be given since it will be new and not contained in the 865 Code Book.

FRANCE (204)

FCC I and II

Variable computer print out
code form

John E. Jordan
College of Education
Michigan State University

FCC I

France
1 of 3

Field Number	Question	Variable Name	Col.
		Card 1	
1	Face Sheet of Scales	Nation	3
2	Face Sheet of Scales	Sex	8
3	37 Q'aire	Interest Group Occupation	9
4	Face Sheet of Scales	Type of Administration	21
5	37 Q'aire	Current Employment Status	24
6-25	HP Scale	HP Content	25-44
26-45	HP Scale	HP Intensity	45-64
46-55	Education Scale	Trad. Education-Content	65-74
		Card 2	
First 24 columns SAME as Card 1 except for col. 11-12 (i.e., Deck or Card No.)			
56-65	Education Scale	Trad. Education-Intensity	25-34
66-75	Education Scale	Prog. Education-Content	35-44
76-85	Education Scale	Prog. Education-Intensity	45-54
		Card 3	
86	4 Q'aire	Contact (amount-education)	31
87	5 Q'aire	Contact (gain from education)	32
88	6 Q'aire	Contact (enjoyment-education)	33
89	7 Q'aire	Contact (alternatives to education)	34
90	9 Q'aire	Early Youth Community	37
91	10 Q'aire	Employment Community (recent)	38
92	11 Q'aire	Residence Community (recent)	39
93	12 Q'aire	Marital Status	40
94	15 Q'aire	Income (comparative-self fam.)	45
95	18 Q'aire	Income (father's comparative)	52
96	19 Q'aire	Religious affiliation	53
97	20 Q'aire	Religion (Importance)	54
98	21 Q'aire	Personalism (job amount)	55
99	22 Q'aire	Personalism (job-importance of)	56
100	23 Q'aire	Personalism (job-diffusion)	57
101	24 Q'aire	Social class position (self)	58
102	25 Q'aire	Social class position father	59
103	26 Q'aire	Education (self-amount)	60
104	27 Q'aire	Education (self-comparative)	61

FCC I (Cont.) France 2 of 3

Field Number	Question	Variable Name	Col.
105	28 Q'aire	Education (father-comparative)	62
106	29 Q'aire	Housing (type of)	63
107	30 Q'aire	Housing (rental-month)	64
108	31-A Q'aire	Instit. satis. (Elem. Sch.)	65
109	31-B Q'aire	Instit. satis. (Sec. Sch.)	66
110	31-C Q'aire	Instit. satis. (univ.)	67
111	31-D Q'aire	Instit. satis. (Bus.)	68
112	31-E Q'aire	Instit. satis. (Labor)	69
113	31-F Q'aire	Instit. satis. (local gov't.)	70
114	31-G Q'aire	Instit. satis. (Nat. gov't.)	71
115	31-H Q'aire	Instit. satis. (health)	72
116	31-I Q'aire	Instit. satis. (churches)	73
117	32 Q'aire	Residence (current length)	74
118	33 Q'aire	Residence (change-recent)	75
119	34 Q'aire	Job (change-recent)	25
120	35 Q'aire	Residence (change-frequency)	26
121	36 Q'aire	Job (change-frequency)	27
122	38 Q'aire	Religiosity (norm conformity)	30
123	39 Q'aire	Change orient. (health)	31
124	40 Q'aire	Change orient. (child-rearing)	32
125	41 Q'aire	Change orient. (birth control)	33
126	42 Q'aire	Change orient. (automation)	34
127	43 Q'aire	Change orient. (political lead.)	35
128	45 Q'aire	Education (aid-to-federal)	37
129	46 Q'aire	Education (planning respons.)	38
130	47 Q'aire	Change orient. (self)	39
131	48 Q'aire	Change orient. (self-rule adher.)	40
132	49 Q'aire	Change orient. (self-rout. job)	41
133	50 Q'aire	Personalism (familialism)	42
134	51 Q'aire	Personalism (other orient.)	43
135	52 Q'aire	Future Orient. (planning)	44
136	53 Q'aire	Future Orient. (happiness rereq.)	45
137	1-Q-HP	Contact group (primary-HP)	48
138	4-Q-HP	Contact (amount of HP)	53
139	5-Q-HP	Contact (ease of avoidance)	54
140	6-Q-HP	Contact (Gain from HP)	55
141	7-Q-HP	Contact (% income from HP)	56
142	8-Q-HP	Contact (enjoyment HP)	57
143	9-Q-HP	Contact (alternative to HP)	58
144	10-Q-HP	Contact (amount M.R.)	59
145	11-Q-HP	Contact (amount-emotional ill)	60

FCC II

France
3 of 3

Field Number	Question	Variable Name	Col.
		Card 1	
1	Face Sheet	Group Number	4,5
		Card 2	
1st 24 columns SAME as Card 1 except for Col. 11-12 (i.e., Deck or Card No.)			
2	Value Scale	Support Value	55,56
3	Value Scale	Conformity Value	57,58
4	Value Scale	Recognition Value (comparative)	59,60
5	Value Scale	Independent Value	61,62
6	Value Scale	Benevolence Value	63,64
7	Value Scale	Leadership Value (comparative)	65,66
		Card 3	
1st 23 columns SAME as Card 1 except for Col. 11-12 (i.e., Deck or Card No.)			
8	1 Q'aire	Ed. Contact group (primary)	25,26
9	2 Q'aire	Ed. Contact group (secondary)	27,28
10	3 Q'aire	Ed. Contact (varieties)	29,30
11	8 Q'aire	Age	35,36
12	13 Q'aire	Number of Children	41,42
13	14 Q'aire	Income (yearly-self, family)	43,44
14	16 Q'aire	Brothers (Do not use)	46,47
15	17 Q'aire	Sisters (Do not use)	48,49
16	None	Siblings	50,51
		Card 4	
1st 23 columns SAME as Card 1 except for Col. 11-12 (i.e., Deck or Card No.)			
17	37 Q'aire	Occupation (specific	28,29
18	54 Q'aire	Future Orient. (happ. possib.)	46,47
19	2-Q-HP	HP Contact Group (Secondary)	49,50
20	3-Q-HP	HP Contact Varieties)	51,52
21	HP Scale	HP-Total Content Raw Score	61,62
22	HP Scale	HP-Total Intensity Raw Score	63,64
23	Education Scale	Trad. Educ. Total Cont. Raw Score	65,66
24	Education Scale	Trad. Educ. Total Int. Raw Score	67,68
25	Education Scale	Prog. Educ. Total Cont. Raw Score	69,70
26	Education Scale	Prog. Educ. Total Int. Raw Score	71,72

THE NETHERLANDS (202)

(Special Instructions)

Page S-3-4-1[1]

Column	Question	Item Detail	Code	Recode*
			Card 1	
4-5	Face Sheet	Group Number	-01 Managers -02 Rehabilitation (SER) -03 Labor -04 Education	
			Card 2	
43-44				

1. The income question (no. 14) was omitted from The Netherlands Personnel Quesionnaire as being "sensitive" to Dutch respondents.

2. Rental. Question 30 is coded below as and scored in Col's 43-44 where income is normally scored. Column 64 is then left blank for possible recoding of the rental question.

Dutch Guilders	Code	Dutch Guilders	Code
0-24	-01	175-199	-08
25-49	-02	200-224	-09
50-74	-03	225-249	-10
75-99	-04	250-274	-11
100-124	-05	275-299	-12
125-149	-06	300-324	-13
150-174	-07	etc. intervals of 25	

[1]On all Special Instruction sheets the page code is as follows: (a) S = Special Instructions; (b) First digit following S = Card or deck number. If the number is from 1 thru 4; it also refers to the original card or deck in the code book entitled: International Study. If the second digit is 5 or greater it indicates that an additional card or deck is being added to the particular study; (c) Second digit following the S = Page number from the deck in the International Code Book; and (d) Third digit following the S = Page number of the Special Instructions.

Column	Question	Item Detail	Code	Recode*
		Card 4		
36	Question No. 44 (local aid to educ.) is omitted from The Netherlands Personnel Questionnaire as not "applicable." It is scored as missing data, i.e., as a +.			
		Card 5		
1-24	Same as other face sheets except Col's 11-12 (Deck or Card No. 05)			
25 thru 76	Questions Value Scale Questions	1 thru 52	1 - Least 2 - Not chosen 3 - Most	
		Card 6		
1-24	Same as other face sheets except Col's 11-12 (Deck or Card No. 06)			
25 thru 62	Questions Value Scale Questions	53 thru 90	1 - Least 2 - Not chosen 3 - Most	
63-64	Raw Score Total	- S (Support)	00-32	
65-66	" " "	- C (Conformity)	00-32	
67-68	" " "	- R (Recognition)	00-32	
69-70	" " "	- I (Independence)	00-32	
71-72	" " "	- B (Benevolence)	00-32	
73-74	" " "	- L (Leadership)	00-32	

THE NETHERLANDS

FCC I and II

Variable Computer print
out code form

John E. Jordan
College of Education
Michigan State University

FCC I

The Netherlands
1 of 4

Field Number	Question	Variable Name	Col.
		Card 1	
1	Face Sheet	Nation and location	3
2	Face Sheet	Sex	8
3	37 Q'aire	Interest group	9
4	None	Occup. recod (rehab.)	10
5	Face Sheet	Adm. type	21
6	Face Sheet	Employment status	24
7-26	HP Scale	HP Content	24-44
27-46	HP Scale	HP Intensity	46-64
47-56	Ed Scale	Trad. Educ. Content	65-74
		Card 2	
First 24 Columns SAME as card 1 except for Col. 11-12 (i.e., Deck or Card No.)			
57-66	Education Scale	Trad. Education-Intensity	25-34
67-76	Education Scale	Prog. Education-Content	35-44
77-86	Education Scale	Prog. Education-Intensity	45-54
		Card 3	
87	4 Q'aire	Contact (amount-education)	31
88	5 Q'aire	Contact (gain from education)	32
89	6 Q'aire	Contact (enjoyment-education)	33
90	7 Q'aire	Contact (alternatives to educ.)	34
91	9 Q'aire	Early Youth Community	37
92	10 Q'aire	Employment Community (recent)	38
93	11 Q'aire	Residence Community (recent)	39
94	12 A'aire	Marital Status	40
95	15 Q'aire	Income (comparative-self family)	45
96	18 Q'aire	Income (father's comparative)	52
97	19 Q'aire	Religious affiliation	53
98	20 Q'aire	Religion (Importance)	54
99	21 Q'aire	Personalism (job-amount)	55
100	22 Q'aire	Personalism (job-importance of)	56
101	23 Q'aire	Personalism (job-diffusion)	57
102	24 Q'aire	Social class position (self)	58
103	25 Q'aire	Social class position (father)	59
104	26 Q'aire	Education (self-amount)	60

FCC I (Cont.) The Netherlands
2 of 4

Field Number	Question	Variable Name	Col.
105	27 Q'aire	Education (self-comparative)	61
106	28 Q'aire	Education (father-comparative)	62
107	29 Q'aire	Housing (type of)	63
108	31-A Q'aire	Insti. satis. (Ele. Schools)	65
109	31-B Q'aire	Insti. satis. (Sec. Schools)	66
110	31-C Q'aire	Insti. satis. (Universities)	67
111	31-D Q'aire	Insti. satis. (Businessmen)	68
112	31-E Q'aire	Insti. satis. (Labor)	69
113	31-F Q'aire	Insti. satis. (Local gov't.)	70
114	31-G Q'aire	Insti. satis. (National gov't.)	71
115	31-H Q'aire	Insti. satis. (health services)	72
116	31-I Q'aire	Insti. satis. (Churches)	73
117	32 Q'aire	Residence (current length)	74
118	33 Q'aire	Residence (change-recent)	75

Card 4

1st 24 columns SAME except for columns 11-12 (i.e., Deck or Card No.)

119	34 Q'aire	Job (change-recent)	25
120	35 Q'aire	Residence (change-frequency)	26
121	36 Q'aire	Job (change-frequency)	27
122	38 Q'aire	Religiousity (norm-conformity)	30
123	39 Q'aire	Change orient. (health practice)	31
124	40 Q'aire	Change orient. (child-rearing)	32
125	41 Q'aire	Change orient. (birth control)	33
126	42 Q'aire	Change orient. (automation)	34
127	43 Q'aire	Change orient. (political leaders)	35
128	44 Q'aire	Education (aid-to-local)	36
129	45 Q'aire	Education (aid-to-federal)	37
130	46 Q'aire	Education (planning responsibility)	38
131	47 Q'aire	Change orient. (self)	39
132	48 Q'aire	Change orient. (self-rule adherance)	40
133	49 Q'aire	Change orient. (self-routine job)	41
134	50 Q'aire	Personalism (familialism-par. ties)	42
135	51 Q'aire	Personalism (other orientation)	43
136	52 Q'aire	Future orient. (planning)	44
137	53 Q'aire	Future orient. (happiness prereq.)	45
138	1-Q-HP	Contact group (primary HP)	48
139	4-Q-HP	Contact (amount of HP)	53
140	5-Q-HP	Contact (ease of avoidance)	54
141	6-Q-HP	Contact (gain from HP)	55
142	7-Q-HP	Contact (% Income from HP)	56
143	8-Q-HP	Contact (enjoyment HP)	57
144	9-Q-HP	Contact (alternative to HP)	58

FCC I (Cont.) — The Netherlands 3 of 4

Field Number	Question	Variable Name	Col.
145	10-Q-HP	Contact (amount M.R.)	59
146	11-Q-HP	Contact (amount-emotional ill)	60
		Card 5	
1st 24 columns SAME except for col's. 11-12 (i.e., deck or card no.)			
147 thru 198	Value Scale Items 1-52	Value Scale	25 thru 76
		Card 6	
1st 24 columns SAME except for col's. 11-12 (i.e., deck or card no.)			
199 thru 236	Value Scale Items 53-90	Value Scale	25 thru 62
		FCC II	
		Card 1	
1	Face Sheet	Group Number	4,5
2	37 Q'aire	Specific Occupation	22,23
		Card 3	
1st 24 Columns SAME as Card 1 except for Col. 11-12 (i.e., deck or card no.)			
3	1 Q'aire	Educ. Contact group (primary)	25,26
4	2 Q'aire	Educ. Contact group (secondary)	27,28
5	3 Q'aire	Educ. Contact (varieties of)	29,30
6	8 Q'aire	Age	35,36
7	13 Q'aire	Number of children	41,42
8	30 Q'aire	Rental	43,44
9	16 Q'aire	Brothers (Do not use in fan,etc.)	46,47
10	17 Q'aire	Sisters (Do not use in fan, etc.)	48,49
11	None	Siblings	50,51

FCC II (Cont.) The Netherlands
4 of 4

Field Number	Question	Variable Name	Col.
		Card 4	
		1st 24 Columns SAME as Card 1 except for Columns 11-12 (i.e., Deck or Card No.)	
12	37 Q'aire	Occupation (Specific)	28,29
13	54 Q'aire	Future Orient. (happi. poss.)	46,47
14	2-Q-HP	HP Contact group (secondary)	49,50
15	3-Q-HP	HP Contact (varieties of)	51,52
16	None	HP Scale, Total Content raw score	61,62
17	None	HP Scale, Total Intensity raw sc.	63,64
18	None	ED Scale, Trad. Content raw score	65,66
19	None	ED Scale, Trad. Inten. raw score	67,68
20	None	ED Scale, Prog. Content raw score	69,70
21	None	ED Scale, Prog. Inten. raw score	71,72
		Card 6	
		1st 24 Columns SAME as Card 1 except for Columns 11-12 (i.e., Deck or Card No.)	
22	Value Scale	S - Support Value	63,64
23	Value Scale	C - Conformity Value	65,66
24	Value Scale	R - Recognition Value (comp.)	67,68
25	Value Scale	I - Independent Value	69,70
26	Value Scale	B - Benevolence Value (asset)	71,72
27	Value Scale	L - Leadership Value (comp.)	73,74

YUGOSLAVIA (205)

(Special Instructions)

Page S-1-1-1[1]

Col.	Question	Item Detail	Code
		Card 1	
4,5	Face Sheet	Administration Group	(1- (2- (3- (4- (5- (6- (7- (8-
		Card 3	
43-44	PQ 14	Income	01 to 500,000 dinars 02 500,000 - 749,999 03 1,000,000 - 1,249,999 04 1,250,000 - 1,499,999 to (units of 250,000) 22
58	PQ 24	Social Class (self)	Omitted[2] = score as ±
59	PQ 25	Social Class (father)	Omitted[2] = score as ±

[1]On all Special Instruction Sheets the page code is as follows: (a) S = Special Instructions; (b) First digit following S = Card or deck number. If the number is from 1 thru 4; it also refers to the original card or deck in the code book entitled: International Study. If the second digit is 5 or greater it indicates that an additional card or deck is being added to the particular study; (c) Second digit following the S = Page number from the deck in the International Code Book; and (d) Third digit following the S = Page number of the Special Instructions.

[2]Question not "acceptable" in Yugoslavia.

Col.	Question	Item Detail	Code
64	PQ 30	Rent	1 up to 4,000 dinars 2 4,000 - 7,999 3 8,000 - 11,999 4 12,000 - 15,999 5 16,000 - 19,999 6 20,000 - 23,999 7 24,000 - 27,999 8 28,000 - 31,999 9 40,000 and above
		Card 4	
36	PQ 44	Aid to Educ. (local)	Omitted = score as ±

ATTITUDES TOWARD EDUCATION AND THE HANDICAPPED IN YUGOSLAVIA: THEIR NATURE AND THEIR DETERMINANTS

FCC I and FCC II

Variable Computer print out code form

John E. Jordan
College of Education
Michigan State University

FCC I

Yugoslavia
1 of 4

Field Number	Question	Variable Name	Col.
		Card 1	
1	Face Sheet of Scales	Nation	3
2	Face Sheet of Scales	Sex	8
3	37 Q'aire	Interest Group Occupation	9
4	Face Sheet of Scales	Type of Administration	21
5	37 Q'aire	Current Employment Status	24
6-25	HP Scale	HP Content	25-44
26-45	HP Scale	HP Intensity	45-64
46-55	Education Scale	Trad. Education-Content	65-74
		Card 2	
First 24 Columns SAME as Card 1 except for Col. 11, 12 (i.e., Deck or Card No.)			
56-65	Education Scale	Trad. Education-Intensity	25-34
66-75	Education Scale	Prog. Education-Content	35-44
76-85	Education Scale	Prog. Education-Intensity	45-54
		Card 3	
First 24 Columns SAME as Card 1 except for Col. 11, 12 (i.e., Deck or Card No.)			
86	4 Q'aire	ED Contact (amount)	31
87	5 Q'aire	ED Contact (gain from)	32
88	6 Q'aire	ED Contact(enjoyment)	33
89	7 Q'aire	ED Contact (alternatives)	34
90	9 Q'aire	Early Youth Community	37
91	10 Q'aire	Employment Community (recent)	38
92	11 Q'aire	Residence Community (recent)	39
93	12 Q'aire	Marital Status	40
94	15 Q'aire	Income (compar.-self fam.)	45
95	18 Q'aire	Income (father's compar.)	52
96	19 Q'aire	Religious affiliation	53
97	20 Q'aire	Religion (importance)	54
98	21 Q'aire	Personalism (job-amount)	55
99	22 Q'aire	Personalism (job-import)	56
100	23 Q'aire	Personalism (job-diffusion)	57
101	24 Q'aire	Social class position (self)	58
102	25 Q'aire	Social class position father	59

FCC I (Cont.) Yugoslavia 2 of 4

Field Number	Question	Variable Name	Col.
103	26 Q'aire	Education (self-amount)	60
104	27 Q'aire	Education (self-compar)	61
105	28 Q'aire	Education (father-compar)	62
106	29 Q'aire	Housing (type of)	63
107	30 Q'aire	Housing (rental-month)	64
108	31-A Q'aire	Insti. satis. (elem. schools)	65
109	31-B Q'aire	Insti. satis. (sec. schools)	66
110	31-C Q'aire	Insti. satis. (univer.)	67
111	31-D Q'aire	Insti. satis. (businessmen)	68
112	31-E Q'aire	Insti. satis. (labor)	69
113	31-F Q'aire	Insti. satis. (local gov't.)	70
114	31-G Q'aire	Insti. satis. (national gov't.)	71
115	31-H Q'aire	Insti. satis. (health services)	72
116	31-I Q'aire	Insti. satis. (churches)	73
117	32 Q'aire	Residency (current length)	74
118	33 Q'aire	Residency (change-recent)	75

Card 4

1st 24 Columns SAME except for Columns 11-12 (i.e., Deck or Card No.)

119	34 Q'aire	Job (change-recent)	25
120	35 Q'aire	Residency (change-frequency)	26
121	36 Q'aire	Job (change-frequency)	27
122	38 Q'aire	Religiousity (norm-conformity)	30
123	39 Q'aire	Change orient. (health practices)	31
124	40 Q'aire	Change orient. (child-rearing)	32
125	41 Q'aire	Change orient. (birth control)	33
126	42 Q'aire	Change orient. (automation)	34
127	43 Q'aire	Change orient. (political leaders)	35
128	44 Q'aire	Education (aid-to-local)	36
129	45 Q'aire	Education (aid-to-federal)	37
130	46 Q'aire	Education (planning respons.)	38
131	47 Q'aire	Change orient. (self)	39
132	48 Q'aire	Change orient. (self-role adher.)	40
133	49 Q'aire	Change orient (self-routine job)	41
134	50 Q'aire	Personalism (familialism)	42
135	51 Q'aire	Personalism (other orient.)	43
136	52 Q'aire	Future Orient. (planning)	44
137	53 Q'aire	HP Future Orient. (happiness prere)	45
138	1-Q-HP	HP Contact group (primary)	48
139	4-Q-HP	HP Contact (amount)	53
140	5-Q-HP	HP Contact (ease of avoidance)	54
141	6-Q-HP	HP Contact (gain from)	55
142	7-Q-HP	HP Contact (% Income from)	56

FCC I (Cont.) Yugoslavia 3 of 4

Field Number	Question	Variable Name	Col.
143	8-Q-HP	HP Contact (enjoyment-HP)	57
144	9-Q-HP	HP Contact (alternatives)	58
145	10-Q-HP	MR Contact (amount)	59
146	11-Q-HP	EDP Contact (amount)	60
		FCC II	
		Card 1	
1	Face Sheet	Group Number (administration)	4,5
2	37 Q'aire	Specific Occupation	22,23
		Card 2	
1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)			
3	Value Scale	Support Value	55,56
4	Value Scale	Conformity Value	57,58
5	Value Scale	Recognition Value (comparative)	59,60
6	Value Scale	Independence Value	61,62
7	Value Scale	Benevolence Value	63,64
8	Value Scale	Leadership Value (comparative)	65,66
		Card 3	
1st 24 columns SAME as card 1 except for columns 11-12 (i.e., Deck or Card No.)			
9	1 Q'aire	Contact group (primary educ.)	25,26
10	2 Q'aire	Contact group (secondary educ.)	27,28
11	3 Q'aire	Contact(varieties of educ.)	29,30
12	8 Q'aire	Age	35,36
13	13 Q'aire	Number of children	41,42
14	14 Q'aire	Income (yearly-self,family)	43,44
15	16 Q'aire	Brothers (Do not use)	46,47
16	17 Q'aire	Sisters (Do not use)	48,49
17	None	Siblings	50,51

FCC II (Cont.) Yugoslavia
4 of 4

Field Number	Question	Variable Name	Col.
		Card 4	
		1st 24 columns SAME as Card 1 except for columns 11-12 (i.e., Deck or Card No.)	
18	37 Q'aire	Occupation (specific)	28,29
19	54 Q'aire	Future Orient. (happiness poss.)	46,47
20	2-Q HP	Contact Group (Secondary HP)	49,50
21	3-Q HP	Contact (Varieties of HP)	51,52
22	HP Scale	HP Total Content Raw Score	61,62
23	HP Scale	HP Total Intensity Raw Score	63,64
24	Education Scale	Trad. Educ. Total Cont. Raw Score	65,66
25	Education Scale	Trad. Educ. Total Int. Raw Score	67,68
26	Education Scale	Prog. Educ. Total Cont. Raw Score	69,70
27	Education Scale	Prog. Educ. Total Int. Raw Score	71,72

APPENDIX B-5

DATA TRANSCRIPTION SHEET

Attitudes Toward Education: International Study

Handicapped Persons Scale (Card 1)		Education Scale - Traditional		Education Scale - Progressive	
		Card 1	Card 2	Card 1	Card 2
Content (Col)	Intensity (Col)	Content (Col)	Intensity (Col)	Content (Col)	Intensity (Col)
1. _____(25)	_____(45)	3. _____(65)	_____(25)	1. _____(35)	_____(45)
2. _____(26)	_____(46)	4. _____(66)	_____(26)	2. _____(36)	_____(46)
3. _____	_____	6. _____(67)	_____(27)	5. _____(37)	_____(47)
4. _____	_____	10. _____(68)	_____(28)	7. _____(38)	_____(48)
5. _____	_____	11. _____(69)	_____(29)	8. _____(39)	_____(49)
6. _____	_____	12. _____(70)	_____(30)	9. _____(40)	_____(50)
7. _____	_____	13. _____(71)	_____(31)	15. _____(41)	_____(51)
8. _____	_____	14. _____(72)	_____(32)	16. _____(42)	_____(52)
9. _____	_____	18. _____(73)	_____(33)	17. _____(43)	_____(53)
10. _____(34)	_____(54)	19. _____(74)	_____(34)	20. _____(44)	_____(54)
11. _____	_____				
12. _____	_____	_____	_____	_____	_____
13. _____	_____				
14. _____	_____				
15. _____(39)	_____(59)				
16. _____	_____				
17. _____	_____				
18. _____	_____				
19. _____	_____				
20. _____(44)	_____(64)				
_____	_____				

Location _____

Group _____

Respondent No. _____

APPENDIX B-6

ADDENDUM TO REVIEW OF LITERATURE

While the following studies were not available for review (since they are still in process) they are related to the larger concurrent-replicative cross cultural research project on attitudes toward education and toward handicapped persons underway at Michigan State University. They are listed to make them known to the professional public.

The additional studies, (with their projected completion dates) examine: attitudes in Japan (Cessna, 1967); of various subgroups of special educators (Mader, 1967); comparison of special versus regular educators (Green, 1967); relationships between attitudes, values, contact and theological orientations (Dean, 1967); attitudes of college counselors (Palmerton, 1967); ministers attitudes toward mental retardation (Heater, 1967); attitudes toward general disability versus blindness (Dickie, 1967); attitudes toward general disability versus deafness (Weir, 1968); and factors influencing attitudes toward integration of handicapped children in regular classes (Proctor, 1967).

Cross Cultural Attitude Research Project

Cessna, W. C. Jr. The nature and determinants of attitude toward education and toward physically disabled persons in Japan. Unpublished doctoral dissertation, Michigan State University, 1967 (c. June).

Dean, J. T. An analysis of attitudes toward education, theological orientations, interpersonal values, and educational experience. Unpublished doctoral dissertation, Michigan State University, 1967.

Dickie, R. F. An investigation of differential attitudes toward the physically disabled, blind persons, and attitudes toward education and their determinants among various occupational groups in Kansas. Unpublished doctoral dissertation, Michigan State University, 1967 (C. June).

Felty, F. E. Attitudes toward physical disability in Costa Rica and their determinants: A pilot study. Unpublished doctoral dissertation, Michigan State University, 1965.

Friesen, E. W. Nature and determinants of attitudes toward education and toward physically disabled persons in Columbia, Peru, and the United States. Unpublished doctoral dissertation, Michigan State University, 1966.

Green, J. H. Attitudes of special educators versus regular teachers toward the physically handicapped and toward education. Unpublished doctoral dissertation, Michigan State University, 1967 (C. Sept.).

Heater, W. H. Attitudes of ministers toward mental retardation and toward education: Their nature and determinants. Unpublished doctoral dissertation, Michigan State University, 1967 (C. June).

Kreider, P. E. The social-psychological nature and determinants of attitude toward education and toward physically disabled persons in Belgium, Denmark, England, France, The Netherlands, and Yugoslavia. Unpublished doctoral dissertation, Michigan State University, 1967.

Mader, J. B. Attitudes of special educators toward the physically disabled and toward education. Unpublished doctoral dissertation, Michigan State University, 1967.

Palmerton, K. E. Attitudes of college counselors toward education and toward physically disabled persons. Unpublished doctoral dissertation, Michigan State University, 1967 (C. Sept.).

Proctor, Doris I. The relationships between knowledge of disabilities, kind and amount of experience, and classroom integration of exceptional children. Unpublished doctoral dissertation, Michigan State University, 1967 (C. June).

Sinha, B. K. Material attitudes and values in respect to emotionally disturbed and physically disabled persons. Unpublished doctoral dissertation, Michigan State University, 1966.

Weir, R. C. An investigation of differential attitudes toward the physically disabled, deaf persons, and attitudes toward education, and their determinants among various occupational groups in Kansas. Unpublished doctoral dissertation, Michigan State University, 1968 (C. June).

Additional Theses--i.e., Out of the U. S. A. Mainland

Gilbert, O. E. An assessment of the usefulness of the Wartegg Drawing Completion Test as a cross-cultural non-language predictor of academic achievement among elementary school children in Guatemala. Unpublished doctoral dissertation, Michigan State University, 1965.

Keith, J. P. Assessing academic achievement with specific variables of the Drawing Completion Test in certain Sub-Saharan tribal groups: A pilot study. Unpublished doctoral dissertation, Michigan State University, 1963.

McAlees, D. C. An exploratory study of the field of special education in the Central American Republic of Guatemala. Unpublished doctoral dissertation, Michigan State University, 1963.

Tanaka, I. I. The development of the Drawing Completion Test as a cross-cultural non-language measurement of academic achievement among elementary school children in Hawaii. Unpublished doctoral dissertation, Michigan State University, 1964.

Toth, J. C. An analysis of the nature and extent of rehabilitation in Guatamala. Unpublished doctoral dissertation, Michigan State University, 1963.

NOTE: A second series of theses is being planned on mental retardation.