DEVELOPMENT OF AN INSTRUMENT TO MEASURE ACTION CHOICES TOWARD HANDICAPPED PERSONS REFLECTIVE OF UNDERLYING GENERAL SOCIO-MORAL REASONING

by

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DEDICATION

The writer dedicates this study to the many special children and adults worked with during the past 12 years. She has learned so much from those who called her "teacher."

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CHAPTER 1

INTRODUCTION

The way in which handicapped members of a society are treated reflects prevailing social values of that society (Burrello and Sage, 1979; Howe, 1981; Magrab and Elder, 1979). In the eighteenth and early nineteenth century in America, conventional values based on absolute justice resulted in many debtors and other dependent members of society confinement to prison or poor farms. Handicapped individuals who were unable to support themselves or had no one to assume responsibility for them were often among those punished by segregation (Magrab and Elder, 1979).

During the 1800's social values also continued to reflect an emphasis on conformity to externally imposed norms of compliance with authority and an equal exchange of reward and effort, but a sense of social responsibility for taking care of dependent members of society developed (Magrab and Elder, 1979). Segregation during this period was thus benevolent, resulting in the development of institutions for the old, ill, and handicapped.

The 1900's have witnessed increased concern with principled socio-moral values, with emphasis on integration, reciprocity, and equality replacing segregaton and human value defined by economic productivity. Burrello and Sage

(1979), Magrab and Elder (1979), and Howe (1981) attribute this growing emphasis on equality, tolerance for variance, and self-actualization to such world events as the civil rights movement, World War II and other wars, and the women's rights movement. These socio-moral values obviously have implications for the handicapped. Manifestations of social morality in the context of the handicapped include: increased emphasis on maximizing the individual's abilities, i.e. the normalization movement; comprehensive education; entitlement to the same legal and human rights as others; and most significantly, reintegration into the mainstream of society (Burrello and Sage, 1979, pp. 34-37; Howe, 1981, pp. 164-169; Magrab and Elder, 1979, pp. 3-6). Integration of handicapped and nonhandicapped is therefore seen as a reflection of socio-moral values of society. As discussed in this research, integration also is credited as being a catalyst to development of socio-moral values in the non-handicapped.

Integration of handicapped and nonhandicapped students in a regular education setting has increased significantly in the past decade. Citizen advocacy, political pressure from parental and professional groups, and changing social values have culminated in state and federal legislation requiring integration of handicapped to the greatest extent possible. Many handicapped students are in closer contact than they were when schools segregated, or in some cases,

did not provide education for the handicapped.

The effect of this integration on both handicapped and nonhandicapped students has received increased attention during the past few years. Numerous researchers have studied the potential benefits of integration, popularly called mainstreaming, to the handicapped in the areas of academic progress and social development (Barngrover, 1971; Bradford, 1973; East, 1976; Enright, 1979; Sapon-Shevin, 1978; Yaffe, 1979). In contrast, few data have accumulated as to the effect of mainstreaming on the nonhandicapped. As discussed in Chapter 2, the vast majority of studies on the effect of mainstreaming on the nonhandicapped have assessed the cognitive and/or affective attitudes of the nonhandicapped toward the handicapped. These studies have not attempted to relate the attitudes to underlying characteristics of the attitude holder however.

Socio-moral Value Development through Integration

Numerous authors have expressed the opinion that integration has the potential to positively affect non-handicapped students' respect for others' needs and rights, recognition of individual differences, appreciation of individual worth, and responsibility for cooperative interaction among people.

A general theme of much mainstreaming literature is that through integration children learn to accept individual

differences (Cohen, 1978; Markus, 1980; N.E.A. Panel, 1978; Solomon, 1977; Yaffe, 1979). Turnbull and Schulz (1979) expressed the opinion that children must be exposed to differences in people if they are to reach their personal potential and respect differences in others (p. 57). Other authors have contended that mainstreaming holds the potential for nonhandicapped learners to acquire new repertoires in interacting successfully with a broader range of people while recognizing the inherent similarities in the general needs of all people (Gerler, 1979; Sapon-Shevin, 1978, p. 374). Sapon-Shevin stated that an atmosphere accepting of differences creates a more positive welcoming environment for all children regardless of the nature or magnitude of their differences, creating an opportunity for fostering cooperative attitudes and mutual and self respect. Redl (1959) emphasized that a cooperative integrated environment fosters a group spirit in which normal children see the fairness and justice of treating group members in accordance with their abilities and problems.

In reporting on mainstreaming experiments, Poorman (1980), Grunwald (1981), and East (1976), each concluded that the nonhandicapped peers became more aware of individual problems and more willing to help all classmates and understand others' feelings. Their opinion was reinforced by Solomon's position that acceptance of others is

learned by sharing and helping (1977, p. 609).

According to Royer (1977), integration has the potential to make our society more humane. Gearheart (1976) expressed the opinion that "today's adults were disadvantaged to some extent because when they were in school they did not have the opportunity to know classmates who were handicapped or different"(p. 29).

In summary, integration is purported to 1) foster acceptance of, and respect for differences in people, 2) enable the nonhandicapped to increasingly interact successfully with a broader range of people, 3) foster recognition of inherent similarities in all people, 4) increase cooperation between handicapped and nonhandicapped based on mutual and self-respect, 5) and foster insight into the fairness and justice of treating people in accordance with their individual needs. These personal attributes purported to be enhanced through integration may be thought of as socio-moral values. Socio-moral values are restricted to concepts of fairness and justice in social cooperation, and are not individual values which have no relation to social interaction (Rest, 1979, pp. 17-20). For example, an individual's desire for personal accomplishment is not a socio-moral value. Halloran (1967) provided a similar distinction between preference values, i.e. those involving personal likings, needs, desires, and interests; and normative values involving "ought to, or obligation" (p. 19). Socio-

moral values are normative.

Socio-moral Values

Socio-moral values involve development of social collaboration, beginning with acceptance of norms of a caretaker and culminating in a concept of mutual expectations founded on a logical analysis of an ideal system of cooperation (Rest, 1979, p. 17). Such concepts of fairness and justice are notions about balancing individual interests and benefits of cooperation (Rest, 1979, p. 20). As the ability to make mature socio-moral judgments develops, individuals are increasingly concerned with how the benefits and responsibilities of social cooperation are to be distributed.

Kohlberg (1964) differentiated three major levels of socio-moral development: the preconventional; conventional; and principled (pp. 395-431). The preconventional level is oriented toward obedience and punishment, and later instrumental hedonism and exchange in which an individual will do something for someone if the favor is returned. At the conventional level the person's moral obligations are oriented toward receiving approval and personal concordance. The later substage of the conventional level is oriented toward law and order, and majority rule. The most advanced level, principled moral reasoning, is oriented toward social welfare and contract consistent with rights and welfare of

all individuals. Principled reasoners recognize majority views and authority, but feel that individual human rights have moral precedence over societal perspective. There is respect for human rights and moral equity as principles of justice. There is a desire for reciprocity so that all may maximize themselves (Kohlberg, 1964; Rest, 1979).

Rationale for Emphasis on Socio-moral Development through Integration

Our society holds principled socio-moral values as desirable, and is concerned with ways of fostering their development in individuals (Biskin and Hoskisson, 1974; Fraenkel, 1980; Halloran, 1967; Kohlberg, 1972; Krech, 1962; Shaver, 1981). Shaver (1981) stated that "humaneness of understanding and empathy is an important end of citizenship in itself, without that quality of individuals, the quality of life in society suffers" (p. 6).

As discussed earlier in this chapter, integration allows schools a unique opportunity to foster development of socio-moral values. Educators are members of society who reflect dominant values of society whether they deliberately attempt to or not (Affleck, 1980; Biskin, 1974; Cohen, 1978; Griffen, 1977). Davy (1980) stated that schools can nurture fraternity, open doors to relationships based on insights into the needs of others rather than custom or rules, and develop a concept of equality based on respect for humaneness

(pp. 345-360). Reynolds (1980) stated that teachers are in a position to influence the development of students from highly egocentric to more socially oriented behavior. Affleck and Sapon-Shevin supported the role of education in socio-moral development, stating that education should develop positive precepts concerning the value and respectability of every human being, and that schools hold great potential for communicating to children that differences can and should be esteemed (Affleck, 1980, p. 161; Sapon-Shevin, 1978, p. 372). When educators demonstrate a respect for individual differences, teaching underlines the value of justice (Cohen, 1978; Redl, 1959).

Given this support for the role of education in the development of socio-moral values, and the opinion that mainstreaming facilitates educational opportunities for socio-moral development, it is surprising that so few empirical studies have been done on the development of socio-moral values in integrated settings.

Current State of Research on the Effect of Integration on Nonhandicapped

The major approach to date in assessing nonhandicapped students' reaction to mainstreaming has been to measure which characteristics nonhandicapped students attribute to the handicapped (Alese, 1973; Altrocchi, 1961; Clore and Jeffrey as reported in Donaldson, 1980; Comer, 1975; Evans,

1976; Goldstein and Blackman, 1975; Golin, 1970; Gottlieb, 1980; Ingwell, 1973; Jones, 1980; Linsky, 1963; Palmertown, 1969; Rapier et.al., 1972; Sadlick, 1975; Wheeless, 1974; Wilson and Alcorn as reported in Donaldson, 1980).

Informational assessments such as these reflect non-handicapped students' "beliefs" about the handicapped, a knowledge function of their attitudes. Results of informational assessments have been ambivalent in regard to characteristics nonhandicapped attributed to handicapped. Changes in "beliefs" about handicapped were achieved in studies allowing for reduction of misconceptions about handicapped, avoidance of reinforcement of sterotypes, and those providing new or significantly different information about handicaps.

Research on nonhandicapped students beliefs, or stereotypes about the handicapped have been based on an interest in the effect of the attitudes on the attitude object rather than their effect on the attitude holder. The following excerpts taken from statements of significance in informational attitudinal studies demonstrate the interest in the attitude object:

> "nurse's attitudes potentially influence the patient's progress" (Godejohn 1975).
>
> "negative attitudes....have implications in terms of the disabled person's self concepts" (Golin, 1970).
>
> "public attitudes profoundly influence the ability of

persons with impairment to function in society" (Asher, 1973).

Such research is thus primarily interested in attitudes from the perspective of the attitude object rather than the attitude holder. But what do attitudinal measures reflect about the holder of the attitude? For example, does a change to a more positive attitude toward the handicapped indicate an increased awareness of individual differences? The studies published to date on attitudes toward the handicapped have not attempted to relate attitudes to underlying values purportedly enhanced by mainstreaming. Nor has there been any indication that the various attitudinal measures are intended to reflect underlying values. There is support, however, that attitudes can serve a value reflective function.

The Relationship of Attitudes to Values

Attitudes are defined by Krech as an enduring system of positive or negative evaluations, emotional feelings, and pro or con tendencies with respect to a social object (1962, pp. 137-140). Attitudes have cognitive and affective components which may be manifested together or individually, and a conative component which reflects cognition and emotion (Krech, 1962, pp. 137-140).

Attitudes as well as values are disclosure concepts, and thus rely on narrative and metaphoric language (Hartoonian, 1973). Attitudes can be seen as superficial or surface

indicators of underlying basic moral values (Halloran, 1967 ; Matefy and Acksen, 1976). Expressed attitudes can serve to facilitate or support a person's underlying values. Hollen (1972) paraphrased Rokeach by stating that a person attempts to act in such a way as to maintain his/her values ... "attitudes can be seen and understood as they interact with values, i.e. a person will have a positive attitude toward something that confirms a value they have" (p. 16). Halloran reinforced this concept that attitudes can enable the individual to give indication of their central values (1967, p. 55). An example might be that a person who values equal rights should have a positive attitude toward education of the handicapped in order for the attitude to support the underlying value of equality. This is not the same as a person having an attitudinal "belief" that handicapped people have particular desirable characteristics. The potential relationship between attitudes and values is reflected by Krech (1962) who stated that attitudes may reflect an individual's value of what is good and desirable (p. 226).

Studies have been conducted correlating measures of attitudes and socio-moral values. Rest (1979) reported nine studies correlating a test of socio-moral reasoning, the Defining Issues Test (D.I.T.), with an attitudinal survey on Law and Order. All but one of the nine experiments resulted in a significant positive correlation.

The Law and Order Survey items were deliberately "value laden" to be sensitive to socio-moral judgment levels. For example, rather than simply asking the subjects whether or not people should break a law, the survey asks under what conditions it might be right to break a law, e.g. to save a person's life. Rest also reported a study by Candee in 1976 in which a correlation of .57 was found between the D.I.T. and an attitudinal questionnaire based on the Lt. Calley situation in which American soldiers followed orders in firing on Vietnamese villagers during the Vietnam War. Again, the conative attitudes were stated in ways that either were consistent or inconsistent with principled socio-moral values (Rest, 1979).

Halloran (1967) and Krech (1962) reported a study by Adorno et. al. in 1950 which examined the relationship of attitudes toward minority groups and personal values. Results showed that individuals with high rejection attitudes valued authoritarianism and conventional rules while those with low rejection attitudes valued equalitarian interpersonal relations and internalization of social values (Halloran, pp. 48-51; Krech, pp. 202-203). Individuals who had rejecting attitudes toward minority groups reasoned at a lower level of socio-moral judgment, i.e. relying on external authority. Those accepting of minority groups reasoned at a higher level, favoring equal relationships and internal control.

Results of two large scale surveys of second through twelth graders showed that attitudes toward cooperation correlated positively to valuing other students regardless of their achievement levels (Johnson and Johnson, 1978).

It's important to emphasize that in each of these studies, the attitudinal measures used were deliberately constructed to reflect the level of socio-moral values. Attitudinal measures not constructed to reflect normative values may not correlate positively with a measure of socio-moral reasoning. Rest reported on a political attitude survey which did not correlate with the D.I.T. (1979). A sample attitudinal item is "How often do you read about public affairs or politics in magazines?" (Rest, p. 168). Such an item is based on political interest, or perhaps a personal liking for reading about politics, and would not be expected to correlate with a measure of normative values.

Another reason that any measure of attitudes may not correlate with a measure of socio-moral values is that the relationship may not be linear (Rest, 1979, p. 168). As an individual's reasoning develops from acceptance of external norms to internal expectations about an ideal system of cooperation, attitudes as to actions a person should take in a moral situation may be the same at different levels, but not for the same reasons. For example, a person may favor breaking a law at both the premoral and principled levels for the respective reasons of self gain and helping others;

while a person at the conventional law and order level would have a negative attitude toward breaking a law regardless of circumstances. Therefore, in development of an attitudinal measure to reflect socio-moral reasoning, it is critical to include the characteristic underlying reasoning for value reflective responses when necessary. As discussed previously, a correlation will show clearest if attitudinal items are deliberately constructed to represent characteristic reasoning of persons at particular levels of moral development.

One study has been conducted to determine whether there was a relationship between the commonly used informational attitude assessment, the Attitudes Toward Disabled Persons Scale (A.T.D.P.) and the Defining Issues Test (D.I.T.) of general socio-moral reasoning. Noffsinger (1979) administered both instruments to one hundred nurses in both England and Kentucky. Additionally, tests of need satisfaction, future and control values, and emotionality/impulsivity were administered. Noffsinger found an F ratio of 1.26 for the effect of principled reasoning on scores on the Attitudes Toward Disabled Persons Scale. Although she did not discuss this result, it would not be significant beyond the .25 level for the 1 and 55 degrees of freedom reported.

Results showed that a consistent pattern was not displayed by the two groups even with the restrictions

of a single occupation represented, and reporting only on nurses with satisfied security needs. While American nurses with principled reasoning scored higher on the Attitudes Toward Disabled Persons Scale than did conventional reasoners, the opposite pattern was revealed with British nurses, i.e. the principled reasoners scored somewhat lower than did the conventional. This juxtaposition of scores affected the nonsignificant correlation between scores on the A.T.D.P. and the level of reasoning. The only significant difference reported by Noffsinger was that between British and American nurses at the conventional level of reasoning. At that level, British nurses had significantly higher socres on the A.T.D.P. than did the American nurses. Noffsinger explained this by the fact that conventional reasoners are oriented toward conforming to and maintaining expectations of family and nation. She contended that the British have been more progressive with handicapped legislation, so the conventional reasoners would have stronger positive attitudes toward the handicapped than conventional reasoners in a country less progressive in passing legislation relating to the rights of the handicapped (Noffsinger, 1979, p. 73). The results of this study did not support a consistent positive relationship between the A.T.D.P. and the D.I.T.

Thus far, a potential but ambivalent relationship between attitudes and socio-moral values has been discussed. There is evidence that attitudes can, but do not always reflect socio-moral values. As discussed, attitudinal measures which have shown a positive correlation have been deliberately constructed to reflect normative values (Halloran, 1967; Johnson and Johnson, 1978; Krech, 1962; Rest, 1979). Attitudinal measures which are not developed to be value reflective, e.g. informational attitudinal assessments such as the A.T.D.P., did not correlate with a measure of socio-moral reasoning. Thus, the function of the attitude expressed is a key determinent of its relationship to socio-moral values.

Relationship of Attitudes and Values as Determined by Attitudinal Function

According to Katz, as described in Halloran (1967, pp. 55-87), attitudes can perform four main functions. First is the utilitarian function which implies that people try to maximize rewards and minimize penalties. People associate attitude objects as being consistent or inconsistent with their own need satisfaction. Thus they will develop pro or con attitudes by association of the object with satisfaction or dissatisfaction. The

second function is called the ego-defensive function in which a person protects himself from acknowledging unacceptable basic truths and harsh realities. These attitudes defend one's self image. Third, a person's attitudes can serve a knowledge or informational function by which understanding and meaning are provided to one's life. This provision of "frames of reference" often takes the form of beliefs about characteristics of others, forming stereotypes which are not easily changed unless inconsistencies are perceived. The final function is a value expressive function. These attitudes enable a person to give positive expression to, and reflect his/her central values. The attitudinal measure discussed previously, the Law and Order Attitudinal Test, is an example of value reflective attitudes (Rest, 1979).

There is no expectation that attitudes which serve utilitarian, ego-defensive, or knowledge functions should correlate positively with values. An analysis of the currently used A.T.D.P. and other informational assessments reveal that the attitudes measured are not value reflective, and make no claim to be (Donaldson, 1980, pp. 504-513). Examination of items found in such instruments reveal that the subject is reflecting their "knowledge" of characteristics of the handicapped, as the majority of items ask the subject's agreement with typical stereotypic statements about the handicapped. For example, the following items

are representative of those on the A.T.D.P.:

Most disabled people feel sorry for themselves (Item 4)

Most disabled people worry a great deal (Item 9)

Disabled people are more easily upset than non-disabled people (Item 16)

The attitudes tested by the A.T.D.P. are indicators of the attitude holder's beliefs about the handicapped but not necessarily about the rights of the handicapped. Numerous experiments inducing changes in attitudes on the A.T.D.P. through creation of ambiguity in current knowledge to change stereotypes toward handicapped further supports the contention that attitudes measured by the A.T.D.P. serve a knowledge function (Donaldson, 1980). As discussed previously, attitudes serving a knowledge function are changed through creation of dissatisfaction with current knowledge. For example, in a study by Higgs (1971), subjects who were presented with the most factual information by a credible source about physical impairments scored higher on the A.T.D.P. than subjects provided with irrelevant information.

In summary, value reflective attitudinal measures can be developed. Measures of attitudes toward law and order, authority, ethnic minority groups, and cooperation have been developed which correlate positively with measures of socio-moral values. In each of these, the attitudinal measure was deliberately constructed to serve a value

reflective function rather than a utilitarian, ego-defensive, or knowledge function. Attitudinal measures which serve a function other than value reflective do not, and are not expected to correlate with a measure of socio-moral values. The currently used measures of attitudes toward handicapped have not been developed to reflect the attitude holder's underlying socio-moral development. Thus, there is currently no evidence of an instrument available to measure students' attitudes toward handicapped which would reflect their level of reasoning on principled socio-moral values esteemed by our society and said to be fostered by an integrated education setting.

Statement of the Problem

Literature suggests that integration both reflects and nurtures development of principled socio-moral values esteemed in our society. However, support for this contention is based on opinion and qualitative case study reports of mainstreaming. Empirical data are needed to provide further support. Such research would support the concept of mainstreaming in terms of its effect on the handicapped.

To date, research on the effect of integration on nonhandicapped students is limited to attitudinal measures which do not reflect underlying values. Evidence exists that attitudinal measures can be developed to reflect

underlying socio-moral reasoning if the attitudinal items are developed to serve a value expressive function. Such an instrument is needed if the contention that mainstreaming facilitates socio-moral development of nonhandicapped persons is to be empirically researched.

Purpose of Research

The purpose of this research is to develop and field test an instrument to measure nonhandicapped persons' value reflective socio-moral action choices toward the handicapped. The instrument is called Action Choices Toward Handicapped (A.C.T.H.). Research questions will be directed toward determining whether the instrument is valid and reliable, and identification of variables affecting A.C.T.H. scores.

Rationale for the Research

Much of the literature supports integration of handicapped and nonhandicapped based on potential social and academic development of the handicapped students. However, educational practices should provide optimum opportunity for development of all students. Mainstreaming would be further supported if research substantiated literature contending that integration facilitates the socio-moral development of the nonhandicapped students. To date only expert

opinion and case study research have been used to support this theory. Empirical data have not accumulated because the attitudinal measurement instruments currently in use are not reflective of socio-moral values. If an instrument was developed to measure students' value reflective attitudes, quantitative research could be conducted as to the effect of integration on nonhandicapped students' socio-moral development. This research undertakes the necessary first step: development of a value reflective action choice attitudinal measurement instrument. Following development of a value reflective instrument, experimental studies could be conducted to test factors affecting scores on the Action Choices Toward Handicapped. As discussed in the Literature Review, socio-moral reasoning is affected by experiences in situations where moral reasoning is employed. Integration provides numerous naturally occurring moral situations, so future studies of socio-moral development in mainstreamed situations are logical.

Limitations

The major limitation of this study is the sample to be used for instrument validation. Although the instrument developed is intended for eventual use with all school age children, the required concurrent administration of the Defining Issues Test for correlation purposes necessitates use of secondary students due to the eighth grade reading

level on the D.I.T. This study is limited to self-reported hypothetical action choices toward the handicapped. Overt behavior of the nonhandicapped cannot be directly inferred from this information. Even after an action choice is made, further factors influence behavior. Examples of such factors include: ego strength in executing a plan of action; interplay of moral values with other values; amount of pressure in the situation; and the behavior of others in the situation (Kohlberg, 1969; Rest, 1979). Rest (1979) reported on numerous studies conducted in which behavior in moral situations was compared to subjects' moral reasoning. Behaviors included cooperation, political activism, compliance with authority, cheating, keeping promises, etc. The great majority of the studies resulted in a significant predictive relationship of moral reasoning to behavior, but was always less than a perfect correlation due to factors identified previously.

CHAPTER II

REVIEW OF THE LITERATURE

The theoretical rationale for this investigation was presented in the preceding chapter. In this chapter the relationship between value reflective attitudes and socio-moral reasoning is further developed. It is divided into the following areas: attitude definitions, components, functions, measurement, and change agents; current measurement techniques to assess attitudes of nonhandicapped persons toward the handicapped; socio-moral values; and action choice attitudes toward the handicapped reflective of socio-moral reasoning.

Attitudes

Definition and Components of Attitudes

Attitudes are more enduring and inclusive than opinions, and value systems are more basic and central still. Attitudes pertain to single objects, wheras value systems are oriented toward whole classes (Halloran, 1967, p. 20).

Some attitudinal definitions emphasize an affective component, e.g. Thurstone's 1931 definition, "attitude is the affect for or against a psychological object" (Greenwald

et.al. 1969, p. 362). Other definitions stress the predisposition to act in a particular way toward an attitude object, e.g. Sarnoff's 1960 definition, "an attitude is a disposition to act favorably or unfavorably to a class of objects" (Greenwald et.al., 1969, p. 362). Still others stress a cognitive component, e.g. Allport's 1935 definition, "an attitude is a mental and neural state" (Greenwald et.al., 1969 p. 362).

Current attitudinal research recognizes attitudes as being either affective, cognitive, or conative; or having all three of these components (Greenwald, 1969; Halloran, 1967; Krech, 1962; Lemon, 1973). Examples of definitions inclusive of cognitive, affective, and conative components follow:

> Attitude is an enduring system of positive or negative evaluation, emotional feelings, and pro or con tendencies with respect to a social object (Krech, 1962, p. 137).
>
> Attitude is a predisposition of an individual to evaluate some symbol or object or aspect of his world in a favorable or unfavorable manner (Katz, as reported in Halloran, 1967, p.20).

The cognitive component of attitudes refers to the way in which the attitude object is perceived and conceptualized (Lemon, 1973, p. 16-20). This component has been referred to as the individual's opinions or beliefs.

Some attitudinal statements reflect only the cognitive component, e.g. "I believe handicapped people have a shorter life span than nonhandicapped people."

The affective component is concerned with the emotional underpinnings of attitudes, i.e. the positive or negative feelings toward the attitude object (Lemon, 1973, p. 16-21). This component has to do with the likes and dislikes of the attitude holder, an emotional evaluation or response to an object or person (Simonson, 1979). An attitudinal statement such as "I can't stand being around handicapped people" reflects an affective attitude.

The third component, conation, refers to the attitude holder's intention to act in a particular way toward the attitude object. Conation does not assure an actual overt behavior however, as many factors other than intention influence overt behavior. Conation is a consequence of, as well as a corollary to the cognitive and affective attitudinal components (Lemon, 1973, pp. 16-21). In other words, action choices incorporate affect and cognition. For example, an action choice attitudinal statement such as "whenever I see a blind person crossing the street, I offer to help," incorporates both the attitude holder's belief that blind people need assistance and the emotional response to that perceived need that prompts the person to offer assistance. In contrast, an attitude reflecting only the cognitive component may be "handicapped people

are less independent," and an affective component attitude may be "I feel sorry for handicapped people."

Attitudinal Functions

Numerous authors have enumerated the functions of attitudes (Bruner and White, 1956; Katz, 1960; Kelman, 1958; Pettigrew, 1958; Sarnoff, 1960; Sherif et.al.,1965; Smith, et.al., 1956 as reported in Lemon, 1973 pp. 20-23 and as reported in Halloran, 1967, pp. 55-87). Four functions of attitudes have been detailed by these researchers: utilitarian, ego-defensive, knowledge, and value reflective.

The first is the utilitarian function in which favorable attitudes are developed toward social objects which may potentially fulfill an individual's needs, and unfavorable attitudes toward objects which frustrate fulfillment. This function assumes that people try to maximize rewards and minimize penalties, thus develop pro or con attitudes based on association of an attitudinal object with satisfaction or dissatisfaction. An example might be the instrumentality of attitudes for satisfaction of a need to be associated with particular groups, i.e. the person will hold positive attitudes toward a group or class of people she/he seeks as a reference group. Affective, cognitive, or conative attitudes may serve a utilitarian function. For example, a handicapped person may profess to believe "regular" people are smarter (cognitive component), she/he likes nonhandicapped people

(affective component); or she/he would pick a nonhandicapped person to work with on a project (conative component). Each of these attitudes could serve a utilitarian function of association with a desired reference group.

A second function of attitudes is that of ego-defensiveness. The psychoanalytical theory is most often used to explain this function, i.e. attitudes serving as ego-defensive do not proceed from accurate beliefs about the objects, but from the individual's inner conflicts. For example, if a person denies aggressive needs, she/he may profess a favorable attitude toward pacificism to protect himself/herself from acknowledging unacceptable truths. Again, cognitive, affective, or conative attitudes may serve an ego-defensive function.

Third, attitudes can serve a knowledge function whereby attitudes provide "frames of reference" for understanding the environment. Such attitudes are often regarded as a set of categories for organizing a stimulus domain. This set of categories often takes the form of stereotypes about classes of objects, i.e. the person develops "beliefs" about attitude objects which help him/her understand the object. Attitudes which represent the unidimensional cognitive component serve a knowledge function.

Finally, attitudes can serve a value expressive function, allowing a person to give expression to and reflect his/her central values. Such attitudes can be

viewed as superficial or surface indicators of underlying moral values (Halloran, 1967; Matefy and Acksen, 1976). A person can make action choices reflecting positive cognition and affect toward something that confirms a value they have (Rokeach, as reported in Hollen, 1972, p. 16). For example, Hallorar (1967) described attitudes which reflect conventional socio-moral values: uncritical toward authority figures; hostility toward those who violate social norms; belief in mystical determination of fate; and positive feelings for strong, powerful, and tough individuals (p. 50). Another example would be that having a positive attitude toward having blacks and whites live in close proximity could reflect the socio-moral value of equality of opportunity (Lemon, 1973, p. 24). Action choices, or the conative attitudinal component most often serve a value expressive function. As described in the Moral Value section of this literature review, moral judgment is composed of both action choices in moral situations, moral content; and the underlying reasoning for making particular choices, the structure of moral judgment.

Attitude Change

Attitude change theories have been based on characteristics of 1) the attitude holder, 2) the change agent, and 3) the attitudinal function (Halloran, 1967; Krech, 1962). Personality characteristics of the attitude holder

considered in change theory include general susceptibility, intelligence, cognitive styles, self esteem, and readiness to change (Greenwald, 1968, pp. 171-196; Halloran, 1967, p. 60). Change agents considered in change theory include timing, manner of presentation, circumstances of delivery, and affiliation with the attitude holder (Halloran, 1967, p. 61).

This literature review will explore the relationship of attitudinal function to change due to its relevance to this research. The emphasis in this approach to change theory, adapted by Katz and Kelman is on knowing the motivational base and the attitudinal function in order to know how to change an attitude (Halloran, 1967, pp. 86-91).

Attitude Change Contingent on Attitude Function

The fourfold functional model (utilitarian, ego-defensive, knowledge, value expressive) is utilized with this approach. Central to the theory is knowledge of the motivational basis for attitudes and the assumption that change is likely to take place when the old function ceases to fulfill its function and, therefore, no longer gives satisfaction to the related need state (Katz, as reported in Halloran, 1967, p. 86).

As discussed previously, the utilitarian function is based on the motivation to maximize rewards and minimize punishments. Attitude objects are viewed positively if they are perceived as instrumental to need satisfaction.

Katz suggests that change can occur if 1) the person's aspiration level is changed, 2) new needs are developed, 3) rewards are shifted, or 4) new and better paths to need satisfaction are found. Information and persuasion are two techniques used to meet these conditions (Donaldson, 1980; Gottlieb, 1980; Halloran, 1967). Reference groups may be very effective in changing a person's attitude as the person seeks to be more like his/her positive attitude object.

Ego-defensive attitudes are motivated by protection against internal conflicts, and are changed by 1) removal of threats, 2) catharsis, or 3) development of self insight (Katz, in Halloran, 1967, p. 87). Again, information and pursuasion may be effective change agents, as well as self analysis techniques and group activities (Donaldson, 1980).

Knowledge serving attitudes are motivated by the need to understand and provide organization, consistency, and clarity to one's cognitions (Katz, in Halloran, 1967, p. 87). Primary change agents are 1) ambiguity created by information from the environment and 2) meaningful new information about attitude objects provided by credible sources. New information or experiences which conflict with previously held stereotypes result in cognitive dissonance, causing the attitude holder to reevaluate their "knowledge" base (Donaldson, 1980). For example, this might occur through role playing the attitude object or

exposure to the attitude object. It has been determined that cognitive dissonance caused by conflicting information is a catalyst in changing attitudes in the direction of reducing inconsistency or ambiguity (Hughs, 1979).

Attitudes which serve a value expressive function are motivated by a need to maintain and express self-identity and self-determination (Katz, in Halloran, 1967, p. 87). Primary change agents are 1) dissatisfaction with self, 2) cognitive dissonance due to perceived inconsistency between an attitude and a value, or 3) control of supports to undermine old values. These can occur as a result of experiences of interaction, cooperation, self-disclosure, etc., which may produce self-insight accompanied by awareness of self-consistency. For example, Krech reports on value reflective attitudinal changes after self-analysis in which subjects recognized the inconsistency of certain attitudes existing in the type of person they professed to be (Krech, 1962, p. 266). In this example, cognitive dissonance was caused by the inconsistency between the person's attitude and values.

In summary, attitude change techniques must be considered in light of the attitudinal function. Change agents need to be appropriate to the attitudinal function in order to be effective. Research on attitudes toward disabled is discussed later in this chapter, providing additional insight into the relationship between attitudinal

function and change.

Attitude Measurement Based on Components and Function

In the selection, study, and development of an attitudinal measure, the researcher must consider both the attitudinal component(s) and attitudinal function manifested by the instrument. For example, an attitudinal instrument in which subjects agree or disagree with characteristics attributed to an attitude object would primarily assess the cognitive component of attitudes serving a knowledge function. On the other hand, a measurement of an individual's degree of satisfaction with actions of a superior would measure the affective component of attitudes serving a utilitarian function, i.e. the person's desire to be associated with their superior. Because this research is concerned with measurement of value reflective attitudes, this section of the literature review will be limited to that area.

Studies have been conducted in which value reflective attitudinal measures were used. A major example is the Law and Order Test which measures conative attitudes toward civil disobedience serving a value reflective function (Rest, 1979, pp. 162-165). Examples of items from the Law and Order Test follow:

1. Under what conditions do you think people should be prevented from speaking their opinion?

   a. those criticizing the president
   _____prevented or punished for speaking
   _____prevented in some cases
   _____not prevented

3. If a person is against a war that his country is engaged in, is it right to do things which disrupt the war effort?

   _____never right
   _____sometimes right
   _____right most of the time
   _____don't know

4. Under what conditions might it be right to break a law?

   when one could break the law without detection or punishment

   _____usually right
   _____sometime right
   _____never right

   when the law puts some people at a disadvantage

   _____usually right
   _____sometimes right
   _____never right

The results of the Law and Order Test consistently correlate positively with the Defining Issues Test, a test of socio-moral reasoning. For example, a subject who responded to the first alternative on 1a and 3, and the last position of both items in 4 tend to receive a high D.I.T. score on "Conventional" reasoning. Conventional reasoning indicates strong valuing of absolute rules, externally imposed standards, majority rules, and individual worth based on a societal "norm" contribution.

Another example of an attitudinal measure specifically designed to measure value reflective action choices was developed by Candee in 1976 (reported in Rest, 1979, p. 164). Action choices were based on the Vietnam incident in which Lt. Calley ordered soldiers to kill village residents during the Vietnam War. For example, one item asked whether American officers should be convicted for war crimes ordered by their superiors. Answers were scored as being either consistent with principled values of human rights or with conventional values. The test correlated .57 with the D.I.T.

A well known study by Adorno in 1950 examined the relationship between attitudes toward minority groups and personal values (Halloran, 1967, pp. 48-51; Krech, 1962, pp. 202-203; Rest, 1979, p. 165). Again, action choices developed to be value reflective correlated positively with values. For example, individuals who rejected minority groups valued authoritarianism and conventional rules while those with low rejection attitudes valued equalitarian interpersonal relations and internalization of social values.

In summary, attitudinal measures can be constructed to measure conative attitudes reflective of socio-moral values. Such instruments must be deliberately constructed to contain items which would be consistent/inconsistent with various levels of socio-moral value development.

Instruments developed to measure unidimensional affective or cognitive attitudinal components and/or attitudes serving a utilitarian, ego-defensive, or knowledge function would not be expected to positively correlate with a measure of socio-moral reasoning.

State of the Art

Measurement of Attitudes toward Handicapped Persons

There exists a plethora of measurement instruments designed to assess the nonhandicapped individual's attitude toward handicapped persons. The designated purpose of conducting such research has generally been to assess the social acceptance of the attitude object, i.e. the handicapped, rather than to reflect underlying reasoning of the attitude holder (Barclay, 1979; Cohen, 1978; Handlers, 1980; Jones, 1980; Markus, 1980; Rapier, 1972; Smith and Larson, 1980). This emphasis on the effect of attitudes on the attitude object rather than the attitude holder is exemplified in the following introduction to a compendium of literature on attitudes toward the handicapped:

> devaluation, based upon uncertain or rejective attitudes toward the impairment, can expand to include negative attributes about. . . other characteristics of a person with an impairment. Such public stereotypes create labels which reduce the individuality of a person who is

> impaired....leading to restriction of their behaviors and opportunities. Individuals may absorb these stereotypes into their self-concepts and reduce their aspirations accordingly....
>
> (Schroedal, 1979, p. 15)

Studies of nonhandicapped individuals' attitudes toward handicapped can be divided into three categories: sociometric assessment; informational assessment; and affective assessment. In none of the research reviewed was any attempt made to identify the manifested attitudinal component(s) or function. However, careful analysis of the purpose, measurement technique, experimental or observed treatment, and results provide insight as to the attitudinal component(s) and function(s) represented by the assessment.

Sociometric measures. Sociometric tests generally rely on socio-grams (Ingwell, 1973, Lott and Lott, 1960; Markus, 1980), or social distance questionnaires (Asher, 1973; Byrne, 1969). Socio-grams require students to choose classmates for various activities, e.g. to work with on a project, invite home for dinner, etc. This allow teachers to "map" the classroom social structure, e.g. identifying loners, mutual friendships, and popular students for the purposes of assessment and intervention. Students are making action choices, i.e. manifesting the conative

component of attitudes which measures their predisposition toward the attitude object, other students. As discussed previously, conations incorporate both affective feelings and cognitive beliefs about the attitude object.

Social Distance Questionnaires also involve action choices through assessment of subjects' responses to proposed social interactions involving varying degrees of proximity to handicapped. Action choices toward handicapped in social situations are assessed by altering either the characteristics of the social situation or the handicapped confederate (Asher, 1973; Schroedel, 1973).

Both sociometric measures determine whom students want to be identified with. This is a utilitarian function of attitudes, i.e. identification with reference groups. Support for this contention is provided by an analysis of Asher's 1973 study in which experimental groups were given artifically completed forms appraising them of a stranger's attitudinal sameness on a variety of subjects. The treatment group subsequently were more attracted to strangers perceived as having similar attitudes to their own than those with differing attitudes regardless of their being able-bodied or handicapped (Asher, 1973). This suggests that subjects identified with others who perceived similar to themselves, a utilitarian attitudinal function (Lemon, 1973, pp. 20-23).

Informational attitude assessment The vast majority of studies on nonhandicapped individuals' attitudes toward handicapped persons rely on informational assessments. Examples of such measures include: agreement with personality descriptions (Altrocchi, 1961); true/false informational items (Alese, 1973 and Linsky, 1963); the Opinions About Mental Illness Scale (Costin and Kerr, 1962; Goderjohn, 1975); the Epilepsey Information Examination (Stude, 1973); semantic differential using adjectives to describe handicapped persons (Comer, 1975; Golin, 1970; Goldstein and Blackman, 1975; Sadlick, 1975; Wheeless, 1974); and the frequently used Attitude Toward Disabled Persons Scale (Anthony, 1970; Higgs, 1971; Kleck, 1968; Palmertown, 1969; Smith and Larson, 1980). Each of these measures attempted to evaluate the attitude holder's "beliefs" about handicapped people, i.e. whether they could accurately describe personality, cognitive, and physical characteristics of the handicapped.

The attitude holders' accuracy and/or affirmation of positive characteristics attributed to the handicapped was typically interpreted as being "stereotypic/non-stereotypic, positive/negative, or favorable/unfavorable attitudes" (Altrocchi, 1961; Comer and Piliavin, 1975; Golin, 1970; Higgs, 1971; Stude, 1973). Informational based measures confuse the issue of whether affect and/or cognition is

being assessed. For example, concluding that subjects who incorrectly identify characteristics of handicapped have "negative" attitudes confounds cognitions and emotions. It may be possible that an unidimensional cognitive component of attitude was often measured. A case in point is found in the Attitude Toward Disabled Person's Scale, Item 22, Form A, "Most disabled persons can take care of themselves" (Yuker, Block and Young 1966). The subject who disagrees with such items is summarily assessed as having a "negative" attitude toward handicapped, when the subject may very well answer such questions on the basis of his/her cognition, e.g. the number of handicapped she/he knows who live independently rather than according to his/her emotional feelings about the handicapped.

Informational assessments which determine the attitude holders' beliefs about characteristics attributed to handicapped people serve a knowledge function. Such attitudes enable the holder to develop a frame of reference about the handicapped. Support for this contention is provided by a comparison of change agents used in studies relying on informational assessments and agents prescribed for changing knowledge function attitudes (Katz, in Halloran, 1967). As discussed previously, such attitudes are changed by providing new information which conflicts with previously held stereotypes, or new information which supplies previously unknown data.

Donaldson (1980) summarized four experimental studies involving a positive change on informational attitudes toward handicapped following exposure to handicapped people who did not act in a stereotypic manner, i.e. causing awareness of a discrepancy between previous beliefs about the handicapped and observed characteristics. Donaldson (1980) also reported on two experiments in which scores on the A.T.D.P. became more positive following simulations of handicapping conditions. Role-playing could both illuminate inaccurate perceptions and provide new information. Donaldson summarized numerous experiments in which attitudes became more positive when presently held stereotypes were changed by either 1) significantly reducing discomfort, uneasiness, or uncertainty on the part of the nonhandicapped and/or 2) presenting enough information to contradict the presently held stereotype (1980, p. 510). Gottlieb (1980) conducted an experimental study which demonstrated the effectiveness of group discussion on polarization of attitudes toward the handicapped as measured by the A.T.D.P. "Knowledge" based stereotypes become more extreme following group discussions, according to the "group think" theory discussed in Szilagyi et.al (1980, Chapter 12).

Each of these studies thus used attitude change agents described by Katz as those affecting knowledge function attitudes, i.e. provision of conflicting and/or

new information (Halloran, 1967).

Affective attitude assessment The third technique of assessing nonhandicapped individual's attitudes toward the handicapped measures the attitude holder's emotional feelings about handicapped people and/or handicaps. Measures of the emotional component of attitudes are not as frequently used as the conative and cognitive component measures discussed previously.

An example of an affective study was done by Kleck (1968) in which subjects were given an open ended questionnaire asking them to describe on a 7-point scale how "emotionally comfortable" they felt during interaction with handicapped people. In 1974 Kleck conducted another open-ended interview study with nonhandicapped children to determine how well they liked physically handicapped classmates. A more objective approach to measuring the emotional response of nonhandicapped to handicapped persons was undertaken by Vander (1976) in which voice modulations were measured during subjects' interaction with a handicapped person. This "Psychological Stress Evaluator" (Vander, 1976) was assumed to measure the subjects' emotional stress as reflected in voice changes.

While it is obvious that these studies attempted to measure the affective component of attitudes toward the handicapped, it is more difficult to assess the

attitudinal function manifested. In most cases, an ego-defensive function was probably manifested. For example, a person who denies feeling a strong avoidance reaction to the physically impaired may "profess" to like handicapped as an ego-defensive attitude. Objective measures such as the voice modulation instrument would be more difficult to "fake," but more research is needed in that area to better assess the attitudinal function represented.

Summary. In summary, researchers on attitudes toward handicapped have professed to study such attitudes because of their effect on the handicapped. However, attitudes do provide information about the attitude holder. As discussed, attitudes may reflect cognitions, emotions, and conations of the attitude holder, and are utilized by the holder for various functions.

Action choice, or conative attitudes toward the handicapped serving a utilitarian function; informational cognitive attitudes serving a knowledge function; and emotional attitudinal measures have been developed and utilized. A value reflective measure of action choices toward handicapped has not yet been developed.

However, attitudinal measures of action choices toward other objects, e.g. law and order, were described which represented a value reflective function. Thus it has been demonstrated that it is possible to develop an action choice attitudinal measure which would correlate positively

with a measure of socio-moral value development. If the contention that integration is justified on the basis of, and facilitates development of socio-moral values in non-handicapped is to be supported through research, a value reflective action choice toward handicapped assessment device is needed.

Socio-moral Values

Historical Perspective

Humans have recognized and acted in accordance with the necessity of social collaboration and cooperation since recorded history. Whether cooperation was for the purpose of obtaining food and shelter, or for satisfaction of emotional needs, mankind has established cultural rules for social interaction. Morality is the central category for defining these social relationships (Roe, 1971, p. 303). In fact, for many generations, the social sciences were termed the "moral sciences" (Kohlberg, 1964; Roe, 1971).

Morality is concerned with concepts of fairness, cooperation, justice, reciprocity, and equality in human interactions. Morality provides a plan for distributing the benefits and burdens of socialization. Moral rules and principles regulate the basic relationships among people in terms of rights and responsibilities; regulate which social arrangements, practices, and institutions are permissible; what rights and responsibilities are particular

to certain roles, and which are common to all members (Rest, 1979, pp. 18-19).

Techniques to measure and enhance morality have long been of interest to philosophers and scientists. Various approaches to describing and measuring morality have been advocated during the past century.

In 1894, Osborne utilized an open-ended questionnaire to ask children to describe acts one does to be good or bad as a way of "discovering the ethical content" of the child's mind (Pittel, 1966, p. 22). Results showed that specific categories of acts were less important to children as evaluative dimensions than was the criterion of conformity to rules. This finding supported later work of Piaget and Kohlberg on primitive morality characterized by conformity to external rules.

During the early 1900's, morality researchers attempted to differentiate the normal child from one with criminal tendencies. In 1912 Fernald developed a test which described ten situations involving legal violations which children were to agree or disagree with and rank according to the seriousness of the violation (Pittel, 1966). Correct answers were determined by a panel of adult judges. The rationale for this test, and others of the same period such as the "Character Education Inquiry" and "Good Citizenship Test" was based on a concept of morality as conformity to society's rules. The prevailing belief was that

criminals are immoral due to their violation of conventional standards (Pittel, 1966). In actuality, it was determined that the tests correlated more highly with measures of intelligence than with behavioral measures of delinquent behavior (Pittel, 1966, p. 25). During this same period, Baldwin emphasized development of an "ideal self" through imitation of authority figures, stressing absolute moral laws (Rosen, 1980, p. 29). Confining the definition of morality to conformance with societal norms did not recognize individual internalization of basic ideals of cooperation (Roe, 1971, p. 303). This definition of morality lost credence during the 1900's, with especially convincing evidence provided by the immoral, but socially conforming barbarities displayed by members of the Nazi regime during World War II. This supported the modern notion that adjustment to external group norms does not assure morality.

Piaget's publication of Moral Judgment of the Child in 1932 marked the beginning of an emphasis on individual internalization of socio-moral principles (Pittel, 1966, p. 26-27). Piaget provided a holistic view of man in which biological maturation, cognitive development, and moral development were all interrelated (Stonehouse, 1979). Piaget emphasized the developmental aspect of morality, classifying children by the maturity of their moral judgment rather than as being more or less moral (Piaget,

1962).

Piaget identified an early stage of moral development as one in which children made morally realistic responses, viewing rules as absolute and immutable, the violation of which brings about imminent justice. This stage conformed to the earlier view of morality as conformance to societal standards. At this stage, rules are not understood or internalized, but are dependent on external enforcement. Piaget identified more mature moral judgment as that which took into account extenuating circumstances, so that acts are judged according to their motives as well as their consequences. At this stage, there is an attempt to have equitable justice and mutual consent in interactions (Piaget, 1962). Piaget stressed that egocentricism and perspectivism develop in inverse proportion; and that ability to see things from another's perspective is critical to moral maturity (Piaget, 1962). Piaget's work provided the major framework for the more recent work of the cognitive developmentalist school of moral development, which expanded on the concept of stages of development (Redl, 1959).

Modern Theories of Moral Development

In addition to the modern approach based on Piaget's work which stressed cognitive developmental morality, there are three other major theories of morality.

Psychoanalytical theory views morality as tied to the

development of the superego. In this approach, conscience strength is seen as being related to 1) early experiences of restraint or gratification of oral, anal, and sexual drives; 2) amount and method of external discipline; and 3) parental attitudes and power structures (Kohlberg, 1969, p. 362).

The behaviorist theory is based on the belief that conditions of punishment and reward lead to learning society's standards. Both the psychoanalytical and behaviorist approach focus on guilt as the motive for moral behavior (Roe, 1971, p. 304).

The ethical relativists, a third theory, view morality as emotional and irrational. This theory assumes that different cultures or groups hold different values that cannot be judged as more or less moral, thus the relativistic position defines what is, not what ought to be (Roe, 1971, p. 303).

The cognitive developmentalists refute these theories on the basis that neither early parental handling of basic drives nor amount of various types of discipline have been found to directly correlate with moral judgment or behavior (Kohlberg, 1969, p. 363). Cognitive developmentalists put priority on trying to understand how the subject sees the world, in contrast to behavioristic approaches which attempt to discover regularities in human behavior from an external point of view (Rest, 1979, p. 6). The cognitive

developmentalists also question the assumption of relativity of values, and believe that ethical principles are distinguishable from arbitrary conventional rules (Roe, 1971, p. 304).

Cognitive Developmental Theory of Moral Development

The fundamental assumption of the cognitive developmentalists is that "a person's moral judgment reflects an underlying organization of thinking, and that organization develops through a definite succession of transformations" (Rest, 1979, p. 17). Moral judgment deals with what a subject thinks "ought to be," i.e. perceptions of rights and duties (Rosen, 1980, p. 66). Cognitive developmentalists are concerned with understanding individual reasoning in contrast to behaviorists' study of only observable behavior. For example, Kohlberg maintained that action choices in moral situations have an underlying structure, or reasoning; that moral judgment is not merely an aggregation of disconnected responses triggered by external stimuli (Rest, 1979, p. 7). Kohlberg and Rest expanded on Piaget's theory that moral judgment is developmental and has content and structure. They contended that the major sources of variation in moral judgment are a function of age, cognitive development, and amount and complexity of experience. They further contend that while cognitive processes are involved in making moral judgments, such judgment is not merely application of

intelligence to moral situations. Measures of moral judgment correlate with measures of behavior to an extent not accounted for by IQ alone. Intelligence and moral judgment correlate moderately, average .31 on most studies (Kohlberg, 1964, p. 404). Intelligence is a prerequisite for, but not a sufficient factor in moral development (Kohlberg, 1969; Rest, 1979; Roe, 1971).

Development through levels of moral judgment involve increased differentiation and internalization. An individual's valuing of others becomes increasingly independent of the factual properties of that person. The highest level, principled moral judgment, involves socio-moral values of reciprocity and equality of human rights, respect for the dignity of human beings as individuals, and respect for personal values and opinions (Porter, 1972, p. 2). These values are defined as socio-moral values as they are based on reciprocity and cooperation.

Stages of moral development appear to be culturally universal, as evidenced by studies of Asian, European, and South American children showing the same developmental pattern (Roe, 1971, p. 311). Studies have also shown that development of moral judgment is not dependent on a particular religion, or any religion, as evidenced by the lack of significant differences in moral development between Catholics, Protestants, Jews, Buddhists, Moslems,

and atheists (Roe, 1971, p. 311). Both of these results further refuted the theory of cultural relativism.

Levels of development are identified by cognitive developmentalists as preconventional, conventional, and principled. Each of these three levels are further divided into two stages, for a total of six stages. The levels and stages can be described by characteristic judgment and reasoning on: defining right and wrong; justice; the value of humans; perspective taking; reciprocity; and criterion for morality. The characteristic moral judgment content and structure in these levels and stages are summarized in Table 1.

At the preconventional level, the child responds to a caretaker's socio-moral rules, but is unable to interpret them, and feels no vested interest in maintaining rules other than for the purpose of avoiding punishment. His is a concrete individual perspective primarily interested in himself. She/he does not comprehend the purpose for the caretaker's rules nor any interrelatedness among them. This level is divided into Stage 1 and 2. At stage 1, being right is being obedient to power holders. This stage is characteristic of children at the preoperational thought level as the child's concentration is upon only one aspect of any given situation (Rosen, 1980, p. 75). For example, the child would not consider various points of view, mediating factors, or intentions of acts in a

TABLE 1

Summary of Characteristic Moral Judgment Content and Structure

	Definition of Right and Wrong	Authority Source, Justice	Value of Individuals	Perspective Taking	Reciprocity	Criterion for Morality
1 Preconventional	Right is what the caretaker demands or brings freedom from punishment.	Self-interest, What adults command	Value based on a person's material worth and importance.	Obsessed with self-interest Understands own feelings and others in the same situation.	Will do what brings freedom from punishment.	Morality of Obedience to known authority figure.
2	Right is what brings rewards, wrong is what I'm punished for.	Caretaker, "Eye for an eye" Punishment fits the crime.	Value based on what a person can do for me.		Will cooperate if both parties gain equally by the "deal."	Morality of "let's make a deal."
3 Conventional	Right is what the good, nice person does or what rules/ laws say is good. Wrong is what good people don't do and what breaks the law.	External Standards Justice defined by one's society. Vengence is the right of the majority. Benefits only to those who fulfill obligations.	Value based on a person's relationship to me, i.e. close relatives valued.	Understands perspective of close relations	Will cooperate for the welfare of those in close relationship.	Morality of interpersonal concordance.
4	The majority will prevail, regardless of the minority. Benefits to minority are charitable.		Value based on relationship to me and their societal contribution.		Each person follows the law and assumes others will also. Society defined cooperation, exchange reward for effort.	Morality of law and order, majority concensus.
5 Principled	Right is what is just for all concerned, what rationale people would accept.	Internal Principles, Equal Consideration for all. Extenuating factors considered. Habilitation more important than punishment.	Each person is equally valued.	Understands perspective of wide range of people, including minority groups.	Each person should participate in decision making. Each person's interests should be maximized.	Morality of the concensus of rational people.
6	Wrong is violating a moral principle.		All human life is sacred.		Cooperation which negates artitrary distribution of rights and responsibilities. No one receives benefits at expense of others.	Morality of non-arbitrary social cooperation.

(Summarized from Rest, 1979; Roe, 1971; Rosen, 1980; Stonehouse, 1979)

moral situation. The value of a person is not differentiated from his/her material possessions. Stage 2 is characterized by basing social interaction on simple exchange. The child is aware that others have, and pursue their own interests, but is not concerned with advancing those interests. Two people will choose to cooperate if by doing so they each serve their own interests, thus it is "right" to do something for someone if you will gain from it. Reciprocity is, therefore, pragmatic.

At the conventional level an individual actively seeks to conform to, and maintain expectations of the family and other social groups one is a member of. At stage 3, the individual seeks approval from others by trying to be a "good person" as defined by the group. Intention becomes important, i.e. one should "try" to be good. Maintaining relationships within the group is important and provides motivation to observe the group rules. Stage 4 encompasses a desire to conform to the network of the complete society, beyond close friends and relatives. There is a sense of obligation to obey laws and perform duties beyond the scope of family and friends. Majority rules and interests are accepted as binding guidelines for all. Equity is based on merit, and assistance for people who do not "pull their own weight" is not favored. The majority of adults are at this stage.

The principled level of morality involves increased awareness of the relativity of positions held by people in social situations. An individual at this stage can recognize that an act that breaks a legal law can sometimes be morally justified while still being legally wrong. There is potential to undermine an individual desire in favor of the general welfare. People at stage 5 uphold principles of welfare maximization and individual rights existing prior to society, and do not support unequal arbitrary distribution of benefits and burdens. A stage 5 person attempts to envision a hypothetical rational person and to justify cooperation on that basis. The person at this level feels that the law-making process should reflect the general will of the people and should guarantee minimal safeguards of individual welfare for everyone. To a person at stage 6, an unjust law constitutes reason for civil disobedience, and conscience dictates whether rules are ethically defensible. At stage 6, a person believes that societal concensus alone does not assure morality, but rather what rational, equal, impartial people would choose as governing terms of their cooperative interaction.

Correlates to Development of Moral Judgment

Age and Education

Rest (1979) reported on numerous studies showing

significant age and education trends (pp. 107-110). The summary of results of over fifty studies determining the percentage of principled reasoners at various education levels is displayed in Table 2 .

TABLE 2

Percentage of Principled Reasoners at Various Education Levels

Group	n	Percentage Principled Reasoners
Junior High	1,322	21.9
Senior High	581	31.8
College	2,479	42.3
Graduates	183	53.3

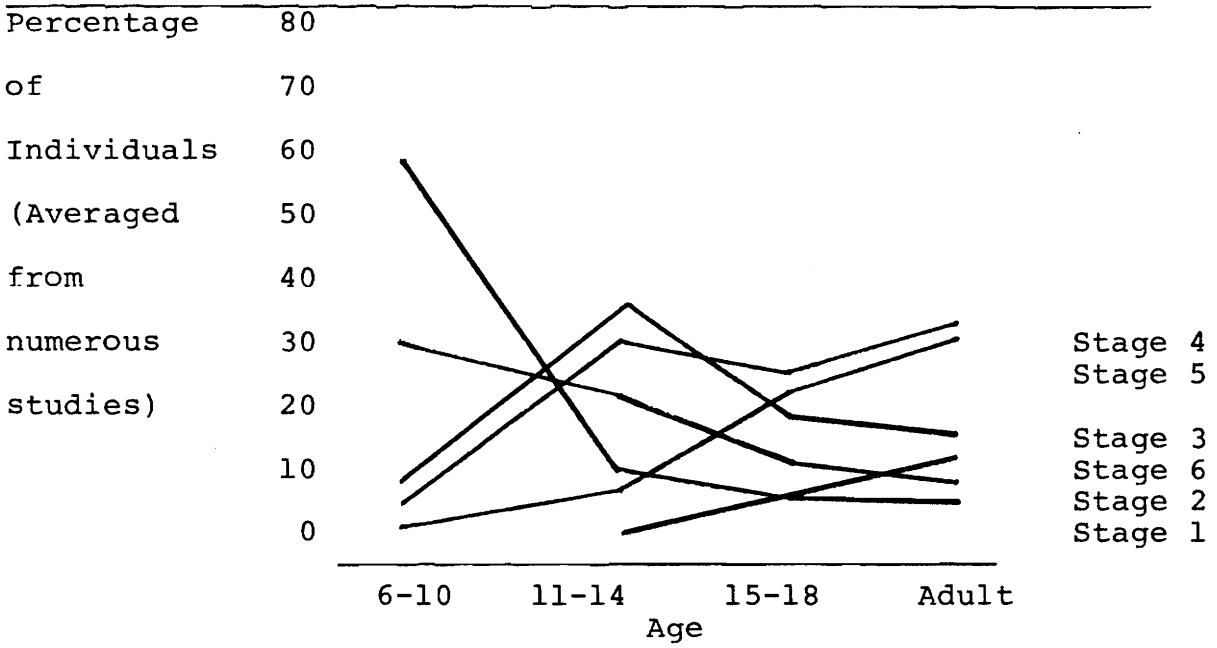
(Rest, 1979, p. 110)

Most of the student samples were collected in intact classrooms, which are more alike in grade level, I.Q. S.E.S., and geographical regions than heterogeneous grouping into educational levels (Rest, 1979). There is consistent evidence that students at different age/education levels show discriminate D.I.T. scores, but age/education are inevitably confounded by the variable of cummulative experience. Age and education are by no means sufficient for moral development, as there is evidence that variance exists at any given age or level of development. A summary of data presented by Kohlberg (1964, 1969) and Rest

(1979) regarding the average percentage of individuals at various levels of moral judgment at ages six through adulthood is displayed in Table 3.

TABLE 3

Percentage of Individuals at Given Levels of Moral Development



(Kohlberg, 1969, 1964; Rest, 1979)

Intelligence A certain level of cognitive development is a necessary, but not sufficient condition for moral development. This is supported by numerous studies showing average correlations of approximately .31 between IQ and measures of moral judgment (Kohlberg, 1969; Rest, 1979; Roe, 1971; Rosen, 1980; Tracy, 1973; Walker, 1980). The moderate correlation indicates that moral maturity has

a cognitive base, but is not simply general verbal intelligence applied to moral problems (Kohlberg, 1969). Composite IQ indices have been consistently more highly correlated to the D.I.T. than just the verbal subtests alone, suggesting that moral reasoning is not simply verbal fluency (Rest, 1979).

Geographical region. Studies which have resulted in the lowest number of principled moral reasoners at a given age and education were studies in which subjects were from the southern states (Rest, 1979, p. 115). Other studies found that subjects matched on correlates other than country displayed variance in morality by country (Rest, 1979, p. 115). These results were attributed to the effects of conservative intellectual millieu in the regions and countries studied. For example, a society which emphasized unconditional conformity to rules would most likely have a higher percentage of conventional reasoners than principled.

Religion. Studies using the D.I.T. have shown significant differences within religious groups, but not between. For example, significant differences have been found between liberal and conservative congregations of a denomination, and within congregations depending on the authoritarian nature of the church and individuals' participation in church governance (Rest, 1979, p. 115). Liberal congregations within denominations had

significantly higher numbers of principled reasoners than random samples from the same denomination. Lay leaders in congregations showed either higher or lower number of principled scores depending on the congregation, i.e. lay leaders were even more extreme than congregational members (Rest, 1979, p. 115). Some religious groups require unconditional adherence to codified beliefs as a condition of membership. In 1978 Lawrence studied radically fundamentalist seminarians living in an autocratic community and found extremely high conventional reasoning scores and low principled reasoning scores (Rest,1979).

Other correlates. There are data which indicate a slight tendency for higher socio-economic status groups to have a higher D.I.T. score (Rest, 1979, p. 120). A thorough study has not been completed however, and data accumulated have not shown a consistent or strong correlation.

There is no clear pattern of a relationship between moral judgment and college major. In a study by Gallia in 1976, humanities undergraduates were more advanced than science majors, but opposite results were obtained in a 1975 study by Schomberg in which engineer majors scored higher than liberal arts majors (Rest, 1979, p. 124-125).

Sex has a consistent nonsignificant relationship with the D.I.T. (Kohlberg, 1964; Rest, 1979). In two of twenty two studies reported by Rest (1979), significant sex

differences were found, but accounted for only about 6% of the variance.

In summary, there is supportive evidence that intelligence is a necessary but not sufficient antecedent to moral development. Age and education correlate positively, but are difficult to factor out from experience and general cognitive development. Region of the United States, and country of residence are associated with moral development. Religious membership assessed at the individual congregational level, not denominational level, is associated with the level of moral development. Sex, Socioeconomic status, and college major have nonsignificant correlations with moral judgment.

Inducing Change in Moral Judgment

Moral judgment develops due to interaction with environment. Situations which encourage people to compare, categorize, hypothesize, and make judgments increase the probability that they will acquire an understanding of the objects and events surrounding them (Biskin and Hoskisson, 1974). Kohlberg (1964) stated that it "seems obvious that moral development must primarily be the product of the child's interaction with others, rather than the direct unfolding of biological or neurological structures"(p. 395).

Rosen contended that cognitive dissonance is critical for moral development, stating "central to moving from one stage to the next is the experience of conflict induced

by encountering events that one's present stage of development cannot adequately encompass or resolve" (1980, p. 116). Hartoonian (1973) reinforced the necessity of cognitive dissonance, proposing that the first step in teaching virtues is the Socratic step of creating dissatisfaction about present knowledge of good by exposure to moral conflict situations for which present principles have no ready solution (p. 15). Conflict induces disequilibrium which sets in motion an equilibrating process. In order for conflict to be a prime mover in stage change, the resolution of a moral dilemma must be important to the individual. Based on this premise, Crockenberg and Nicolayev (1979) recommended that children be exposed to naturally occuring moral dilemmas in their environment.

Numerous authors have also emphasized the importance of perspective-taking in moral development. Stonehouse (1979) described the importance of "putting oneself in another's shoes" in order to broaden perspectives and be better able to make moral judgments"(p. 7). To this end, she stressed the importance of exposing children to others of diverse backgrounds and characteristics (Stonehouse, 1979). A study by Matefy and Acksen (1976) was conducted in which a significant increase in scores on Kohlberg's Moral Judgment Interview was experimentally induced by having subjects role-play discrepant positions in moral dilemmas. Kohlberg (1969) stated that principles of

justice were essentially principles of role-taking. The child integrates discrepancies and conflicts between his own actions and those of others, so that perspective taking becomes the primary source of engendering both the realization and resolution of such discrepancy and conflict.

Closely related to perspective taking are experimental studies resulting in a positive correlation between level of moral judgment and level of social cooperation engaged in by subjects (Freeman and Giebink, 1979; Kohlberg, 1964; Roe, 1971). According to Roe (1971), social cooperation results in the development of empathy and concern for the welfare of others, enables one to observe the effects of individual actions on others, and enhances reciprocity and equality in human relations (p. 316). Piaget (1962) stated that "It is cooperation which leads to the primacy of intentionality by forcing the individual to be constantly occupied with the point of view of other people so as to compare it with his own "(p. 189-190).

Kohlberg (1964) found that persons do not reach the highest levels of moral judgment until they have had the experience of carrying major responsibility for the welfare of others. Stonehouse (1979) reinforced and further explained this by stating that "carrying responsibility in a group and making decisions for a group enhances moral development because it calls for consideration and

incorporation of the needs and feelings of others" (p.7). She furthermore emphasized that moral development can be enhanced in classrooms by stressing mutual respect where all students are treated as equally worthwhile and given equal consideration (Stonehouse, 1979).

In summary, research has determined that catalysts to moral development are: cognitive disequilibrium which causes individuals to reanalyze their current moral principles; perspective taking; social cooperation; and social responsibility.

Measurement of Moral Judgment

The earliest reported attempt at measurement of moral values was Osborn's use of an open-ended questionnaire during the 1890's, as discussed previously in this chapter (Pittel, 1966). Osborne made no attempt to develop a hierarchy of responses, but attempted to identify morally "good" and "bad" children.

During the early 1900's paper-pencil tests in which subjects agreed or disagreed with the rightness of described legal violations were frequently used (Pittel, 1971). Both of these measurement techniques reflect the view of morality as being "conformity to the prevailing legal order" (Roe, 1971, p. 303).

During the 1930's Piaget developed an interview approach to determine the content and structure of childrens' moral judgments. Content was determined by the

action choice the child made in a moral situation, and structure by the reasoning employed to justify the action choice (Piaget, 1962). The major change from previous measurement attempts was that Piaget classified responses in terms of the developmental maturity of the child's moral judgment, not as more or less moral (Piaget, 1962; Pittel, 1966, pp. 26-27). Piaget's basic method of scoring responses into levels of development continues to be used today.

Cognitive developmentalists make the assumption that because moral judgment is the fundamental structure by which people perceive and make decisions about their rights and responsibilities, it should be manifested in many ways (Rest, 1979). Thus, current measures may assess the content, the structure, or both content and structure of moral judgment. A major decision to be made in selection of a measurement technique is whether the content, structure, or both is to be measured.

Within the cognitive development theory of morality, there are five major techniques used to measure an individual's level of moral development (Rest, 1979, pp. 76-86).

First, moral values can be measured by abstract direct questioning, e.g. asking someone how they decide what's right and wrong. While this approach has the advantage of being direct, it is open to numerous interpretations by the

interviewee. Subjects may interpret such questions as structure, or content related, e.g. some may describe acts they feel are right while others describe how they decide what acts are right. To some, morality is inaccurately narrowly defined in regard to sexual behavior rather than social contracts.

A second technique is to present moral dilemma to the subject and ask them to provide and justify solutions. This is the technique used by Piaget and Kohlberg, and represents an attempt to measure both the structure and content of the subject's moral judgment. This method has the advantage of being open ended enough to permit the subject's structuring to be exhibited freely, and is particularly useful for developmental analysis. The major disadvantage is in the scoring, i.e. very few people have developed the expertise to interpret subject's responses. Often subject's responses do not fall into explicit levels and the interviewer must infer what the subject meant. Individual differences in verbal expressiveness, interviewer receptiveness, etc. may seriously confound the scores assigned to subjects.

A third technique is to have subjects compare the morality of acts and actors in stories. For example, a story might involve two children engaged in stealing, one who steals food for a hungary friend, and one who steals something for his/her own pleasure. By systematically varying the elements of the story, the researcher can

discover the content of the subject's moral judgment. This technique, also used by Piaget, has also been used to determine the subject's moral content, or action choice in regard to events in the story. While this method is more focused than the first two, the interpreter must still be skilled in scoring subjects' responses.

As a fourth technique, the researcher presents stage prototypic moral action statments and asks the subject to rank them in terms of preference. Statements are then scored in terms of the level of moral judgment represented by those selected. An advantage of this approach is that the researcher can present higher as well as lower stage concepts for selection. This technique allows for assessing moral content in an objective manner.

A final way to assess moral judgment is by having the subject define and judge critical issues in moral dilemmas presented to him/her. Determination of critical issues in moral dilemmas is related to the action choices described in the fourth technique, however, this approach goes beyond content to assess the underlying reasoning for the action choices, i.e. the moral judgment structure. The Defining Issues Test (D.I.T.) by Rest utilizes this technique. The D.I.T. presents a moral dilemma to the subject, then provides a number of issues which the subject is to rate and rank in terms of the importance of each as a consideration in making an action choice in the dilemma.

Multiple choice responses were developed through extensive interviewing described in the second technique, as used by Kohlberg. Prototypic statements exemplifying stages of moral development were thus obtained, resulting in a measurement of moral structure which is objectively scored. The Defining Issues Test is located in Appendix D.

In summary, there are various moral development measurement techniques from which to choose. The expertise of the researcher, and purpose of the research should be primary considerations in instrument selection. Whether one intends to measure the content or the structure of the subject's moral judgment should also direct the selection of the measurement device. The Defining Issues Test was selected for this research because it is an objectively scored measure of moral reasoning. If the D.I.T. correlated positively with the developed Action Choices Toward Handicapped instrument, the validity of the instrument being reflective of underlying moral structure would be supported.

Action Choices toward Handicapped Reflective of Socio-moral Reasoning

Moral judgment, as discussed previously, consists of content and structure. Action choice attitudes serving a value reflective function compose the content of moral judgment, while the rationale, or reasoning underlying the action choice forms the structure. Studies have been cited which demonstrate the relationship between content and

structure of moral judgment. For example, the Law and Order Test of value reflective action choices consistently correlated positively with a measure of general socio-moral reasoning, the Defining Issues Test (Rest, 1979). Other studies also were discussed which resulted in a positive correlation between value reflective action choices in such areas as following orders of superiors, attitudes toward ethnic minority groups, cooperation, and measures of socio-moral reasoning (Halloran, 1967; Krech, 1962; Rest, 1979). It has thus been established that attitudes can be reflective of underlying socio-moral values. None of the literature reviewed however, studied value reflective attitudes toward the handicapped. The feasibility of developing such an instrument is supported by the demonstrated existence of other value reflective attitudinal measures. Additionally, a comparison of change agents common to value reflective attitudes and socio-moral reasoning further supports the potential relationship.

Change agents common to value reflective attitudes and socio-moral reasoning Change agents to modify value expressive attitudes have been discussed in the previous section on attitudinal change agents. If attitudes can reflect underlying values, the attitudinal change agents should be consistent with those of the values. Applying this concept to value expressive attitudes toward the handicapped: if attitudes toward the handicapped, (moral judgment

content) can reflect underlying socio-moral reasoning, (moral judgment structures) a comparision of potential change agents should result in a commonality with socio-moral change agents.

Research on value expressive attitudes and socio-moral values each concluded that cognitive dissonance is an effective stimulus for development of both (Biskin and Hoskisson, 1974; Cohen, 1980; Crockenberg and Nicolayev, 1979; Enright, 1979; Evans, 1976; Gottlieb, 1980; Kohlberg, 1972). Cohen (1980) described how attitudes toward handicaped could be affected by cognitive dissonance due to initial wariness of handicapped changing through a violation of the expected, i.e. attitudes change when handicapped people do not confirm previously held attitudes. Cognitive dissonance may also be experienced when the attitude holder perceives inconsistency in self-professed valuing of equality and attitudes inconsistent with that value, e.g. an attitude that handicapped do not have equal rights. The attitude holder changes his/her attitude in the direction of reducing inconsistency (Hugh, 1979).

Another change agent common to value expressive attitudes and socio-moral values is that of perspective taking. Donaldson (1980) and Jones et.al. (1980) summarized numerous experimental studies that resulted in an increase in positive attitudes toward handicapped following simulation of handicaps and the vicarious experience of

observing other role takers. The treatment allowed the attitude holder to increase their empathy for the handicapped by experiencing reactions of the nonhandicapped (Donaldson, 1980). While the measures used in these studies were informational attitudinal assessments, it is likely a value expressive measure would have also revealed change as perspective taking is essential in socio-moral development (Kohlberg, 1969, p. 398). Kohlberg stated that role-taking involves the cognitive capacity to define situations in terms of rights and duties, reciprocity, and the perspective of other selves (1969, p. 395). Piaget contended that role-taking in a peer group transforms perceptions of rules from external authoritarian commands to internal principles...a sense of concern develops for reciprocity and equality between individuals (1962, p. 189-190). A study by Tracy and Cross (1973) found that subjects assigned to treatment involving role-playing actors in moral dilemmas increased their level of moral reasoning more than a group with no treatment.

A third common change agent in development of value reflective attitudes toward handicapped and socio-moral values is that of taking active responsibility for another person. Kohlberg (1969) and Stonehouse (1979) contended that persons do not reach the highest levels of socio-moral judgment until they have had the experience of carrying major responsibility for the welfare of others.

Moser (1977) also emphasized that moral development is enhanced by "action on behalf of chosen social and moral goals" (p. 85). A case study report of ten year old verbally and physicially abusive children assigned to tutor first grade slow learners resulted in dramatic changes in the ten year old students' socialization, according to the observers (Mastroianni and Dinkmeyer, 1980). In another case study report on a mainstreaming situation in which nonhandicapped students were assigned to tutor handicapped students, both tutors and their teachers reported improved attitudes toward the capabilities of all students (Grunwald , 1981). While neither of these studies utilized a measure of value reflective attitudes, narrative results support the contention that the changes in nonhandicapped involved development of socio-moral attitudes toward reciprocity, cooperation, and respect for differences in people.

A final common change agent is that of involvement in a cooperative learning environment (Freeman and Giebink, 1979; Krech, 1962; Piaget, 1962; Roe, 1971). Johnson and Johnson (1978) reported the results of two large scale surveys which found that the more favorable students' attitudes were toward cooperative educational experiences, the more positive were their attitudes toward peers who were both more and less able than themselves. Students' attitudes toward cooperation in grades two through twelve

were positively correlated to valuing other students regardless of their achievement levels (Johnson and Johnson, 1978). Johnson and Johnson also reported on a study by Armstrong et.al. in 1978 which compared fifth and sixth grade students in cooperative and individualized mainstreamed language art classes during a four week period. They found that regular students in the cooperative group evaluated learning disabled peers as more valuable than regular students did in the group receiving individualized instruction. Additionally, they found that students in the cooperative environment chose less able peers as group members after they had cooperated with them in class (Johnson and Johnson, 1978). Redl (1959) maintained that education in a competitive environment in which teachers employ comparisons between children leads to maintenance of a concept of rigid justice in which moral decisions are imposed on individuals, but when teachers respect differences and foster cooperation normal children see the fairness and justice of treating group members in accordance with their needs.

In summary, the hypothesis that attitudes toward handicapped can serve a value reflective function is supported by research relating the two constructs by common change agents. These common change agents are creation of cognitive dissonance, perspective taking, social action, and social cooperation.

Summary

Attitudes are composed of cognitions, emotion, and action choices. The action choice, or conative component, incorporates cognitive beliefs and affective feeling about the attitude object.

Attitudes can serve a utilitarian, ego-defensive, knowledge, or value reflective function. Action choice attitudes can serve a value reflective function, i.e. express the attitude holder's underlying values. Value reflective action choice attitudes can be measured.

Measures of nonhandicapped individuals' attitudes toward handicapped have assessed attitudes serving utilitarian, ego-defensive, and knowledge functions. An instrument has not been developed to measure action choices toward handicapped reflective of socio-moral values.

Moral judgment embodies the content and structure of socio-moral values. Socio-moral values pertain to concepts of reciprocity, respect for equal rights, human worth, equality, and cooperation. The content of moral judgment is evidenced by the action choices an individual makes in a moral situation. The structure involves underlying reasoning for the action choice. Value reflective action choices represent the content of moral judgment.

Moral judgment develops from a preconventional stage characterized by self-interest and reliance on external norms to principled judgment characterized by

internalization of an ideal system of cooperation.

Socio-moral action choices can be constructed so as to correlate with a measure of socio-moral reasoning, i.e. the structure of moral judgment. Such action choices must be constructed to be consistent with characteristic choices of individuals' functioning at the level(s) of socio-moral reasoning represented.

CHAPTER III

METHODOLOGY

The major purpose of this study was to develop and field test an instrument to measure nonhandicapped individuals' value reflective action choices toward the handicapped. Data analysis procedures were used to determine instrument validity and reliability, and tentative variables affecting Action Choices Toward Handicapped (A.C.T.H.) scores.

Two field tests were conducted which produced sets of data used to determine instrument validity and reliability; allowed for revision of the instrument; and provided tentative data on variables affecting scores on the value reflective Action Choices Toward Handicapped Instrument. Data collection and analysis procedures were selected to answer the research questions.

Research Questions

Fourteen research questions were studied. These questions were divided into three areas. The first set of research questions were asked to provide data regarding the validity of the Action Choices Toward Handicapped Instrument. Validity involved the content of the A.C.T.H.,

its relationship to a measure of general moral reasoning, and its discriminant ability.

1. Was there a significant positive relationship between scores on the A.C.T.H. and the D.I.T.?
2. Was there a significant correlation between scores on the Attitude Toward Disabled Persons (A.T.D.P.) and the D.I.T.?
3. Was there a significant correlation between scores on the A.C.T.H. and the A.T.D.P.?
4. Was there agreement by the panel of judges that A.C.T.H. items sampled characteristic moral judgment, were comprehensive, and were representative of integration issues?
5. Was the A.C.T.H. comprehensible by subjects, and were items interpreted as intended?
6. Did the mean A.C.T.H. scores of subjects instructed to answer in the most socially acceptable manner differ significantly from those instructed to answer according to their own opinion?
7. Did the mean A.C.T.H. scores of subjects completing the A.C.T.H. or D.I.T. first differ significantly?
8. Did the mean A.C.T.H. scores of subjects reporting a high grade on an examination of knowledge of legal rights of handicapped and subjects reporting a lower grade differ significantly?
9. Did the mean A.C.T.H. scores of males and females

differ significantly?

Instrument development requires attention to the internal consistency and reliability of the instrument. Individual item scores should be consistent with total scores, and the test should consistently measure the construct it was designed to measure. The following research questions related to these issues.

10. Was the internal consistency of the A.C.T.H. supported by a positive correlation between individual A.C.T.H. items and total scores?

11. What was the reliability coefficient of the A.C.T.H.?

Tentative data on variables affecting scores on the developed A.C.T.H. instrument were collected. The variables of: effect of social desirability; order of instruments; legal rights knowledge; and sex are factors whose effect on A.C.T.H. scores provided both evidence of discriminant validity and potential independent variables affecting scores. Additionally, the following variables were analyzed as to their relationship to A.C.T.H scores.

12. Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of the subjects who reported having a member of their immediate family who is handicapped differ significantly from subjects reporting no immediate family member being handicapped?

13. Did the mean A.C.T.H., D.I.T., and A.T D.P. scores

of subjects who reported having or not having handicapped close friends differ significantly?

14. Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having or not having integrated educational experience differ significantly?

A description of the moral reasoning instrument, attitude toward disabled instrument, and the developed Action Choices Toward Handicapped instrument follows. The Instrument section is followed by a detailed description of the field test subjects, data collection, and data analysis procedures.

Instruments

Defining Issues Test

The instrument used to determine whether the Action Choices Toward Handicapped instrument correlated with a measure of general socio-moral reasoning was the Defining Issues Test. The D.I.T. assesses moral reasoning at preconventional, conventional, and principled levels of moral development. The "P" score, representing the percentage of principled responses selected by the subject, was determined for each subject participating in this study. Rest (1979a) recommended use of the "P" score for correlation studies (p. 5.2). Construct and predictive validity of the DIT are based on the content of the instrument; correlations with

measures of moral behavior and other measures of moral judgment; the significant age trend results of a composite study of 4,565 subjects; and three longitudinal studies in which 66% of the subjects moved upwards and 7% downwards (Rest, 1979; 1979a). The D.I.T. correlated in the .60's and .70's in several studies with Kohlberg's Test involving Moral Judgment interviews. With directions to try to obtain a high score, subjects' scores have not been shown to increase. The scoring is objective and contains an internal consistency check. Test-retest over several weeks resulted in a reliability coefficient of .78 (Bode and Page, 1978; Martin et. al., 1978; Rest, 1979). The D.I.T. is set forth in Appendix D.

Attitude Toward Disabled Persons Scale

The Attitude Toward Disabled Persons Scale (A.T.D.P.) was administered to a subsample of the second field test sample concurrently with the D.I.T. and developed A.C.T.H. The A.T.D.P. uses a Likert type scale which assesses subjects degree of agreement or disagreement with statements describing disabled persons. Directions and scoring are standardized, resulting in a raw score reflective of the number of responses at each level of agreement. Split-half and test-retest reliability coefficients range from .66 to .83 on studies reported by the authors (Yuker, Block, and Young, 1966). Evidence of criterion validity is based largely on positive correlations found between the A.T.D.P. and other similar

measures of agreement-disagreement with traits associated with disabled persons (Yuker, Block, and Young, 1966). The A.T.D.P. is set forth in Appendix E.

Action Choices toward Handicapped Persons

The instrument developed for this research is titled "Action Choices Toward Handicapped." The title was selected to indicate that the conative component of attitudes is manifested by the instrument. The action choice items were constructed to serve a value reflective function, i.e. moral judgment content. The original instrument and a rationale for each item's multiple choice response format is found in Appendix A. The first and second field test instruments are set forth in Appendix B and C respectively.

Each A.C.T.H. item has three multiple choice responses characteristic of moral judgment at the preconventional, conventional, and principled levels of development. The subject is directed to select the one response that most closely represents his/her preferred action choice. The scoring is objective, with three points given for each response representative of principled judgment, two points for each conventional choice, and one point for each pre-conventional choice. Scores may be based on the total summated socre or the percentage of responses at any of the three levels. For this study, a "P" score based on the percentage of principled responses was calculated for each subject. This scoring technique was selected to be

consistent with the scoring technique used for the D.I.T.

Subjects

First field test. The first field sample was comprised of 138 subjects. These subjects completed the Action Choices Toward Handicapped (A.C.T.H.) Instrument, developed by the author, and the Defining Issues Test (D.I.T.) of general moral reasoning (Rest, 1979). Three intact General Psychology classes and two intact Mainstreaming classes from the University of Wisconsin Stout were selected. Additionally, 17 regular educators and administrators from Salem High School, Salem, Virginia, were included in the sample. Subjects represented a range of college majors, years of education, socio-economic status, age, and geographic area. The subjects were selected to provide heterogeneity on these variables.

Second field test. An additional 138 subjects participated in the second field testing. The remaining three intact Mainstreaming, and two intact General Psychology classes not participating in the first test from the University of Wisconsin Stout; one randomly selected intact homeroom comprised of juniors and seniors at Salem High School; and one intact graduate class of Special Education Administration doctoral students from Virginia Tech University were selected as the sample. All subjects were administered both the A.C.T.H. and D.I.T. Of these, 57 subjects also were administered the Attitudes

Toward Disabled Persons (A.T.D.P.) Test. The second field test sample was selected to provide heterogeneity of subjects on age, sex, socio-economic status, geographic area, and educational major.

Data Collection Procedures

Development of the A.C.T.H. instrument. The draft A.C.T.H. consisted of 33 items. Each item had three multiple choice responses, one each characteristic of moral judgment at the preconventional, conventional, and principled levels of moral development. The draft instrument and rationale for each item was submitted to a panel of judges who had expertise in moral development theory and special education. The first set of judges was composed of three Virginia Tech faculty who have conducted research in cognitive developmental moral judgment, and 14 graduate students in a class which had studied moral development theory. These judges were requested to critique the A.C.T.H. instrument in terms of the 1) levels of moral judgment represented, 2) consistency of responses with characteristic levels of moral judgment each was constructed to represent, 3) the ability to "fake good," or deliberately choose the principled responses, and 4) ambiguity on any item due to wording, length, etc. The judges also were invited to make recommendations about the scoring and data analysis procedures. The second set of judges consisted of experts in the field of special education. The Virginia

Tech Special Education Administration Program Director, and a National Council for Exceptional Children staff member critiqued the instrument in terms of the relevance and comprehensiveness of the issues covered by the A.C.T.H. The reader is referred to Appendix A for a description of the characteristic moral judgment intended to be represented by each item.

First field test. During March, 1982, the A.C.T.H. and D.I.T. were administered to the first field sample. Subjects were instructed to follow the directions given on each instrument.

Fifty-eight General Psychology and Mainstreaming Class students completed A.C.T.H. and D.I.T. instruments manipulated for test taking set and order of instrument analysis. Half of the A.C.T.H. instruments contained directions instructing the subject to respond according to his/her own choice, and half contained the following modified directions: "Select the one response that you feel is the most socially acceptable response." The response selected may or may not have been one that represented subjects' own opinions. The instruments containing the modified direction sets were randomly dispersed among the instruments. The purpose of this procedure was to determine the "fakeability" of the A.C.T.H.

One each of the A.C.T.H. and D.I.T. instruments were stapled together for each subject. Half of these "packets"

had the A.C.T.H. first, and half had the D.I.T. first. The packets were randomly distributed to the subjects. The purpose of this procedure was to determine if the order of testing influenced the results.

Fifty-five subjects from the Mainstreaming classes reported their grade on the midterm exam they had completed which measured their knowledge of legislation and regulations pertaining to the handicapped. The reported grades were compared to the instructors' grade roster to determine accuracy of the reports. The purpose of this procedure was to determine whether knowledge of handicapped law affected A.C.T.H. scores.

After completion of the two instruments, subjects were asked to volunteer for a one-one interview to discuss the A.C.T.H. instrument. The six subjects who volunteered were interviewed in a private office. Names were not requested. During the interview, subjects were asked by the test developer 1) to restate A.C.T.H. items in their own words, 2) whether there were any ambiguous items, 3) to explain their rationale for responses selected, and 4) which items they chose as most socially desirable and why. The purpose of this procedure was to determine if items were interpreted correctly, determine whether terminology needed modification, compare subjects' reasoning to levels of reasoning intended to be represented by responses, and provide an additional check of the "fakeability" of the

instrument.

Following data analysis of the first field test, the A.C.T.H. was modified to 21 items (see Appendix C). The instrument was modified on the basis of length, item analysis, and one-one interview results. The instrument was revised to 21 items so subjects could complete it in approximately 15 minutes. The D.I.T. requires approximately 35 minutes to complete, so both instruments could be administered during a class period. Only items with a significant positive correlation with the total test were retained. Items misinterpreted by first field test interviewees were revised for the second field test.

Second field test. Following revision of the A.C.T.H., based on first field test results, the revised A.C.T.H. instrument and the D.I.T. were administered to 138 subjects during May, 1982. Forty-six of these subjects also completed the A.T.D.P. Due to the length of time required to complete all three instruments (approximately 80 minutes), only subjects enrolled in a three hour Main-streaming class completed all three instruments.

The directions for each instrument were read orally to the subjects, with time allowed for completing the sample D.I.T. item and questions about the directions. This was done after analysis of first field test results revealed a high rejection rate due to incorrectly completed instruments. The reader will remember that first field

test subjects were instructed to follow the written directions.

Subjects were asked to respond to three questions printed on their D.I.T. instrument as follows:

1. Is there a member of your immediate family (parent, child, sibling) who is handicapped?
2. Do you have any close friends who are handicapped?
3. Have you ever taken any classes in which a handicapped person was enrolled?

The purpose of concurrently administering the D.I.T., A.C.T.H., and A.T.D.P. instruments was to further determine the relationships between the instruments. The purpose of asking the three questions relating to exposure to handicapped people was to provide tentative data regarding independent variables affecting A.C.T.H. scores and provide additional data regarding instrument comparisons.

Subjects participating in both the first and second field tests were assigned arbitrary numbers to assure anonymity. Subjects were told that their participation was voluntary. None of the potential subjects refused to participate.

Data Analysis

Data collected as indicated above were used in the analysis to answer the fourteen research questions. Unless otherwise indicated, data analysis procedures used are described in Applied Statistics for the Behavioral Sciences

(Hinkle, Jurs, and Wiersma, 1979). Due to the experimental nature of this research, the .05 level of significance was selected for all statistical procedures. Methodology used in data analysis for each research question follows.

1. Was there a significant positive relationship between scores on the A.C.T.H. and D.I.T.?

A Pearson product-moment (r) correlation coefficient was computed to determine the correlation between the A.C.T.H. and D.I.T. scores. Pearson r was computed for both the first and second field test administrations of both instruments. A table of significant correlations (Schuessler, 1971, p. 40) was used to test for significance.

Additionally, a test of significant differences on A.C.T.H. scores between high and low D.I.T. scorers was computed from first field test data. This method was recommended by Rest (1979, 1979a) as a technique to determine relationships between the D.I.T. and other measures. The high and low quartiles according to subjects' D.I.T. scores were determined, with 27 high and 27 low scorers identified. A t-test was used to determine whether there was a significant difference on A.C.T.H. scores between the two groups.

2. Was there a significant correlation between scores on the A.T.D.P. and the D.I.T.?

3. Was there a significant correlation between scores on the A.C.T.H. and the A.T.D.P.?

Forty-six subjects completed the three instruments.

during the second field testing. The Pearson correlation coefficient between the A.C.T.H. and D.I.T., A.T.D.P. and D.I.T., and A.C.T.H. and A.T.D.P. was computed for these subjects to determine the relationships between the scores. A table of significant correlations (Schuessler, 1971, p. 40) was used to test for significance.

4. Was there agreement by the panel of judges that A.C.T.H. items sampled characteristic moral judgment, were comprehensive, and were representative of integration issues?

Written and verbal reactions to the draft A.C.T.H. instrument from each of the judges were collected and compared by the instrument developer. Acceptance of an item by all judges resulted in inclusion of the item in the first field test without modification. Recommendations for modifications were incorporated prior to the first field test. Rejection of any item by all judges resulted in omission of the item from the A.C.T.H.

The moral judgment representativeness of the items was judged by the moral judgment researchers and graduate class. The representativeness and comprehensiveness of items as they related to integration issues was judged by the special education experts.

5. Was the A.C.T.H. comprehensible by subjects, and were items interpreted as intended?

Six subjects were interviewed following the first

field test to determine whether they were able to restate items in their own words, and if there were any terms they did not understand. Analysis of their responses was used for instrument modification prior to the second field test.

6. Did the mean A.C.T.H. scores of subjects instructed to answer in the most socially acceptable manner differ significantly from those instructed to answer according to their own opinion?
7. Did the mean A.C.T.H. scores of subjects completing the A.C.T.H. or D.I.T. first differ significantly?

The mean A.C.T.H. scores of the 58 subjects from the first field test completing instruments manipulated for test taking set and order of instruments were analyzed in a 2 x 2 (set by order) factorial design. A two-way analysis of variance was used to test for significant set, order, and interaction effect. This technique was consistent with validation studies with the D.I.T. (Rest, 1979).

Additionally, subjects interviewed following the first field test were asked to select and provide a rationale for responses they felt were the most socially acceptable. Responses were analyzed for characteristic reasoning of subjects.

8. Did the mean A.C.T.H. scores of subjects reporting a high grade on an examination of knowledge of

legal rights of handicapped and subjects reporting a lower grade differ significantly?

Fifty-five college students enrolled in the Mainstreaming course reported their midterm exam grade during the first field test. The exam covered federal and state laws and regulations pertaining to the handicapped. A check of whether grades were accurately reported was done by comparing the range and frequency of reported grades to the instructors' grade rosters.

Subjects were divided into two groups for analysis: those reporting a test grade of "A" and those reporting a grade lower than "A." There were 35 and 20 subjects respectively in the groups. A t-test adjusted for groups with unequal n's was used to test for significantly different mean A.C.T.H. scores.

9. Did the mean A.C.T.H. scores of males and females differ significantly?

The mean A.C.T.H. scores of males and females were determined following the second field test. A t-test of the difference between the mean A.C.T.H. scores of the 83 males and 45 females was used to determine whether the difference was significant. The same procedure was used for determining sex differences of scores on the D.I.T. and A.T.D.P. to compare with results on the A.C.T.H.

10. Was the internal consistency of the A.C.T.H. supported by a positive correlation between

individual A.C.T.H. items and total scores?

Item analysis techniques were used to determine whether the A.C.T.H. items discriminated between high and low scorers. If a score on an individual item was consistent with the total score, a subject with a high total score would score higher on that item than a subject with a lower total score.

First, items were analyzed to determine if a larger percentage of high scorers chose the principled response, and a larger percentage of low scorers chose the pre-conventional response on each item. The "high" and "low" scoring groups were determined so as to "minimize the total number of subjects in the low group above the cut-off line and the number of subjects in the high group below the dividing line," a procedure described by Edwards (1957, pp. 212-213). Using this technique, the high group consisted of the top 53 scorers, and the low group consisted of the 60 subjects who scored lower than the high group. The percentage of respondents in each group selecting responses at each level was determined for each A.C.T.H. item.

The second item analysis technique established a statistical criterion for determination of item discrimination. A Pearson r correlation coefficient was computed to determine the relationship of each item to the whole test. The correlation between selection of the principled response for each item and the total score was

determined by using the top and low quartile of total A.C.T.H. scorers for comparison. Both the first and second item analysis techniques were used following the first field test.

11. What was the reliability coefficient of the A.C.T.H.?

Following the second testing, the A.C.T.H. reliability coefficient was calculated. The Alpha Coefficient formula was used as described by Brown (1976, pp. 86-88).

12. Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having a member of their immediate family who is handicapped differ significantly from subjects reporting no immediate family member being handicapped?

All second field test subjects responded to the question regarding a handicapped family member. Fifteen subjects reported that they did have an immediate family member who was handicapped. Fourteen, ten, and six respectively had usable D.I.T., A.C.T.H., and A.T.D.P. scores. An equal number of subjects reporting no handicapped family members were randomly selected for use in t-tests to determine whether there were significantly different mean scores between the groups for each instrument.

13. Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having or not having handicapped

close friends differ significantly?

Fifty-four second field test subjects reported that they had handicapped close friends. Of these, 47, 48, and 30 respectively had usable D.I.T., A.C.T.H., and A.T.D.P. scores. Several t-tests adjusted for unequal n's were used to determine whether there was a significant difference between the groups on each instrument.

14. Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having or not having integrated educational experience differ significantly?

Eighty-nine second field test subjects reported that they had been in integrated classes during their educational experiences. Of these, 70, 80, and 42 had usable D.I.T., A.C.T.H., and A.T.D.P. scores respectively. Several t-tests adjusted for unequal n's were used to determine whether there was a significant difference between the groups on each instrument.

In summary, data collection and analysis procedures were selected to answer the fourteen research questions. A summary of the questions, purpose, data collection, and data analysis is displayed on Table 4.

TABLE 4

Summary of Research Questions,

Data Collection, and Data Analysis

Research Question Topic	Purpose	Data Collection	Data Analysis
1. Relationship of the A.T.C.H. and D.I.T.	Construct Validation If the two instruments measure moral judgment, there should be a significant positive relationship.	Determine the relationship of the two instruments following both field tests.	Pearson r correlation t-test of difference in mean ACTH scores between high and low DIT scorers.
2. Relationship of the A.T.D.P. and D.I.T.	Construct Validation of the A.C.T.H .	Determine the relationships following the second field test	Pearson r correlation
3. Relationship of the A.T.D.P. and A.C.T.H.	If the ACTH measures a different construct than the A.T.D.P. these relationships should be nonsignificant		
4. A.C.T.H. representativeness of characteristic moral judgment at levels intended.	Content and Construct Validation of A.C.T.H. If the instrument is valid, it should measure what it is intended to measure.	Establish theory base for development of instrument. Submit instrument to panel of judges. Modify and revise as recommended by panel	Acceptance by Committee. Acceptance by Panel
5. Comprehensibility of the A.C.T.H.	Content Validation of A.C.T.H. If the instrument accurately measures moral judgment, it should be interpreted correctly by subjects and should be comprehensible by subjects.	Conduct one-one interviews to seek subjects' responses and interpretation of items.	Concensus of interviewees as to meaning of items, consistent with intended meaning of items.

Research Question Topic	Purpose	Data Collection	Data Analysis
6. Effect of test-taking set on A.C.T.H. scores 7. Effect of order of instruments on A.C.T.H. scores. 8. Effect of knowledge of legal rights of handicapped on A.C.T.H. scores. 9. Effect of sex on	Discriminent Validity of A.C.T.H. instrument If test has construct validity, high scores are not merely a function of deliberate attempts to get a high score, sensitization due to completion of another test, of law, or sex.	Manipulate test-taking set and order of tests completed during the first field test. Determine subjects' scores on test of knowledge of handicapped law during first field test. Determine effect of sex of subject on scores on the A.C.T.H.	t-test between test-taking sets, order, test scores, and sex groups on mean A.C.T.H. scores. Compare to t-tests for same groups on mean A.C.T.H. scores.
10. Internal consistency of A.C.T.H.	Internal Consistency Individual item scores should be consistent with total scores.	Item Analysis following first field test.	Determine percentage of high and low scorers choosing responses of each test item. Pearson Correlation Coefficient on individual items to total scores
11. Reliability of the A.C.T.H.	Reliability. The test should consistently measure the construct it was developed to measure	Determine the reliability coefficient following second field test.	Coefficient Alpha Reliability Coefficient.
12. Effect of having a handicapped family member on A.C.T.H. scores. 13 Effect of having a handicapped close friend on scores. 14. Effect of having integrated educational experience on A.C.T.H. scores.	Identify tentative variables affecting scores. Construct Validation. If scores measure moral judgment, variables affecting scores should affect scores similarly.	Determine subjects responses to whether they have or have not experienced these variables.	t-tests between have and have not groups on mean scores of each instrument.

CHAPTER IV

RESULTS

This chapter is devoted to an analysis of the results of the two field testings of the A.C.T.H. Instrument. First, descriptive data about the characteristics of respondents and test results are reviewed. Second, findings related to the fourteen research questions are presented.

Characteristics of the Sample

First Field Test

The ages of subjects participating in the first field test ranged from 18 to 54, with a mean age of 21.4. The grouping of subjects by age categories is displayed in Table 5.

TABLE 5

Ages of First Field Test Subjects

Ages	% of Participants
18	17
19-22	49
23-30	24
31 plus	10

Males constituted 56% of the sample, and females 44%.

College majors were not identified, but a wide range of majors was represented by the college students as the General Psychology classes in which they were enrolled is required of all college majors. The Mainstreaming course in which other participants were enrolled is required of all non-special education majors.

Second Field Test

As set forth in Table 6, the age of subjects ranged from 15 to 45, with a mean age of 22.4.

TABLE 6

Ages of Second Field Test Subjects

Ages	% of Participants
15-18	24
19-22	46
23-30	20
31 plus	10

Males constituted 66% of the sample and females 34%. College subjects were requested to identify their educational major. Eighteen different majors were reported. No single major accounted for more than 30% of those reported. The range of majors is displayed in Table 7.

TABLE 7

Educational Majors of Second Field Test Subjects

Major	% of Participants
High School (no major)	18
Industrial Education	30
Home Economics Area	11
Business Area	14
Technology Area	6
Special Education Administration	6
Other Education Major	5
Other Human Service Major	5
Liberal Studies, General	5

Test results were not compared by age groups. Age is a significant indicator of moral development, as it is an indicator of cognitive and physiological growth. It is not, however, singularly accountable for moral development (Kohlberg, 1969; Piaget, 1962).

Test results also were not compared by educational majors. Rest (1979) reported on numerous studies concluding that moral development was not significantly affected by college major. This information was obtained to display subjects' heterogeneity on educational major and age.

Descriptive Test Data

First Field Test

A "P" score, the percentage of principled responses subject selected, was computed for both the A.C.T.H. and D.I.T. instruments completed. Additionally, an "M" score (percentage of meaningless responses selected) and Consistency Score (consistency in rating/ranking response) were calculated for each subject competing the D.I.T. Too high of either an "M" or Consistency Score according to the D.I.T. Manual resulted in rejection of that subject's score (Rest, 1979a). The highest score which could be obtained on the D.I.T. was a "P" score of 95% due to the fact that each item does not contain potential principled responses. A "P" score of 100% was possible on the A.C.T.H.

The 138 subjects were divided as follows for the various data analyses reported in this study.

-58 General Psychology students completed the manipulated A.C.T.H. for the Set X Order ANOVA on mean A.C.T.H. scores.

-55 Mainstreaming students reported midterm exam grades for calculation of the t-test on the effect of grade on A.C.T.H. scores.

-113 University of Wisconsin Stout students completed the A.C.T.H. for calculation of item analysis. Eight of the total 121 Stout students did not complete the A.C.T.H. The item analysis was computed prior to

administration of the instruments to the Salem, Virginia teachers and administrators.

-91 subjects completed both the A.C.T.H. and D.I.T. for calculation of the relationship between the two instruments. Of the 138 subjects, 39 (27%) evenly distributed throughout the sample, had unusable D.I.T. scores due to inconsistent rating/ranking scores. This was higher than the predicted 15% rejection rate (Rest, 1979a). A possible explanation for this was that subjects had difficulty with the written directions. More specific oral instructions were given on the second field test.

-54 subjects, 27 in both the high and low quartiles of D.I.T. scorers provided data for calculation of the t-test of differences between the two groups on mean A.C.T.H. scores.

-6 subjects from University of Wisconsin Stout for the one-one interview.

The mean "P" score for all subjects completing the A.C.T.H. was 73.55, with a standard deviation of 16.5. The mean D.I.T. "P" score was 35.36, with a standard deviation of 13.85. Rest (1979a) estimated a mean D.I.T. "P" score of 42.3, standard deviation of 13.2 for college age subjects. This difference between tested and estimated means, and the high rejection rate, indicated a need for more specific subject instructions on the second field

testing.

Second Field Test

A "P" score for each subject was again calculated for the A.C.T.H and D.I.T. The "M" and Consistency scores were calculated to determine which D.I.T. scores should be rejected. Subjects who additionally completed the Attitude Toward Disabled Persons Scale (A.T.D.P.) received a summated weighted A.T.D.P. score as recommended by the test authors (Yuker, Block, and Young, 1966).

The 138 subjects were divided as follows for the various data analyses reported in this study.

-103 subjects completed both the D.I.T. and A.C.T.H. for calculation of the relationship between the instruments. Of the total 138 subjects, 25 (18%) were rejected due to inconsistent D.I.T. scores (16), incomplete instruments (5), or for too high of an "M" score (4). This is within the expected range of D.I.T. rejections according to the test author (Rest, 1979a). Ten (7%) A.C.T.H. scores were rejected due to incomplete responses. The rejected scores for both instruments were evenly distributed throughout the high school, college, and graduate student groups. These results suggested that second field test oral directions effected the rejection rate as there were fewer rejections when oral directions were given.

-46 subjects from the Mainstreaming class completed the A.T.D.P. in addition to the A.T.C.H. and D.I.T. for calculation of the relationships between these instruments.

-15 subjects reported having a member of their immediate family being handicapped.

-54 subjects reported having a close friend who was handicapped.

-89 subjects reported having taken classes in which handicapped students were integrated.

The mean A.C.T.H. "P" score for all subjects completing the instrument was 76.3, with a standard deviation of 15.23. The mean D.I.T. "P" score for all subjects completing that instrument was 33.82, with a standard deviation of 14.89. While this is slightly lower than the projected mean for a sample consisting of approximately 25% high school students, 65% college, and 10% graduate students, it is within the range of means reported for similar studies (Rest, 1979a, p. 72). The mean A.T.D.P. score for subjects completing that instrument was 78.82, with a standard deviation of 14.33. The authors of the A.T.D.P. do not provide normative data for mean scores of various age groups, but do report typical mean scores of 72.8 and 75.42 for females and males respectively. An analysis of the female and male A.T.D.P. scores in this study resulted in means of 82.78 and 77.6 respectively. While the female mean score is higher as

predicted by Yuker, Block and Young (1966), it was not significantly higher at the .05 level, $t(36)=1.48$.

Results Related to Research Questions

Research Question 1: Was there a significant positive relationship between scores on the A.C.T.H. and the D.I.T.?

Two techniques were used to determine the relationship between the A.C.T.H. and D.I.T.: 1) a Pearson r correlation coefficient was determined for data from both field tests, and 2) a t-test was used to test for significantly different A.C.T.H. scores between high and low D.I.T. scorers from the first field test.

Analysis of the scores from the first field test resulted in a correlation coefficient of .43, which was significant beyond the .05 level. Analysis of scores from the second field testing resulted in a correlation coefficient of .57, also significant beyond the .05 level. These correlations indicate that there is a significant positive relationship between scores on the A.C.T.H. and D.I.T.

The second method used to determine the relationship was recommended by Rest (1979a) in the D.I.T. manual. The high and low quartiles according to subjects' D.I.T. scores was determined, with 27 high and 27 low scorers identified. A t-test of significant differences between the high and low scorers was used to determine whether there was a

significant difference. The null hypothesis was tested against the alternative hypothesis that the high D.I.T. scorers would have significantly higher A.C.T.H. scores than the low D.I.T. scorers. As may be noted in Table 8, the null hypothesis was rejected in favor of the alternative, t (52) = 3.17, indicating that high D.I.T. scorers do score significantly higher on the A.C.T.H. than do low D.I.T. scorers. This significant difference further supports the positive relationship between the A.C.T.H. and D.I.T.

TABLE 8

Difference in A.C.T.H. Scores between High and Low D.I.T. Scorers

df	t	tcv
52	3.17*	1.677

*significant beyond the.05 level

Research Question 2: Was there a significant correlation between scores on the A.T.D.P. and the D.I.T.?

Research Question 3: Was there a significant correlation between scores on the A.C.T.H. and the A.T.D.P.?

The questions here related to whether there was a

more positive relationship between scores on the A.C.T.H. and D.I.T. than either the relationship between scores on the A.T.D.P. and D.I.T. or the A.C.T.H. and A.T.D.P. If the A.T.D.P. measured a construct other than moral judgment, the correlation would be nonsignificant between it and the two measures of moral judgment, the A.T.C.H. and D.I.T. Pearson r correlation coefficient was again used to determine the relationships. The 46 subjects completing all three instruments during the second field test provided the data for analysis.

Analysis of the relationship between the A.T.D.P. and D.I.T. scores resulted in a nonsignificant correlation coefficient of .26. Analysis of the relationship between the A.T.D.P and A.C.T.H. resulted in a nonsignificant correlation coefficient of .27 level. This indicated that there was no significant relationship between the A.T.D.P. and D.I.T. or the A.T.D.P. and A.C.T.H.

The fewer degrees of freedom in the A.T.D.P.-D.I.T. and A.T.D.P.-A.C.T.H. correlation calculations compared to the A.C.T.H.-D.I.T. calculation (46 and 101 respectively) suggested a rival explanation for the difference in the correlations. Perhaps the limited range of scores represented by the 46 subjects completing all three instruments resulted in the lower correlation found for the A.T.D.P.-D.I.T. and A.T.D.P.-A.C.T.H. calculations than the D.I.T.-A.C.T.H. relationship.

To test this potential explanation, the A.C.T.H.-D.I.T. correlation was computed for only the 46 subjects completing all three instruments. Pearson correlation coefficient was found to equal .51, still significant beyond the .05 level. Therefore, there was a significant positive relationship between the A.C.T.H. and D.I.T. on all calculations.

A summary of the correlation coefficients for the 46 subjects completing the A.C.T.H., D.I.T., and A.T.D.P. is displayed in Table 9.

TABLE 9

Correlation Coefficients for the A.C.T.H., D.I.T., and A.T.D.P.

	A.C.T.H.	D.I.T.	A.T.D.P.
A.C.T.H.	1.00	.51*	.27
D.I.T.		1.00	.26
A.T.D.P.			1.00

*significant beyond the .05 level, 44 df

Analysis of the A.C.T.H. - D.I.T. and A.T.D.P.-D.I.T. correlations resulted in a decision to conduct an additional post-hoc calculation to compare the correlations. The null hypothesis that the A.C.T.H.-D.I.T. correlation was equal to the A.T.D.P.-D.I.T. correlation was tested

against the alternative hypothesis that the A.C.T.H.-D.I.T. correlation was larger than the A.T.D.P.-D.I.T. Fisher's log transformation of r to Zr was applied to allow use of the normal curve as the underlying distribution of the test statistic. The null hypothesis thus became Zr .648 = Zr .266. As set forth in Table 10, the null hypothesis was rejected.

TABLE 10

Relationship of A.C.T.H.-D.I.T. Correlation and A.T.D.P.-D.I.T. Correlation

Zr score	df	Test Statistic	CV
A.C.T.H.-D.I.T.=.648	normal curve	2.12*	1.65
A.T.D.P.-D.I.T.=.266			

*significant beyond the.05 level

The question of whether the A.C.T.H.-D.I.T. correlation was significantly larger than the A.T.D.P.-D.I.T. correlation was not included in the research questions. The results of this post-hoc analysis do, however, provide additional support that the A.C.T.H. scores were a better indicator of moral judgment than A.T.D.P. scores.

Research Question 4: Was there agreement by the panel of judges that A.C.T.H. items sampled characteristic moral judgment, were comprehensive, and were representative of

integration issues?

The original A.C.T.H. instrument containing 33 items and explanations as to the characteristics moral reasoning intended to be represented (see Appendix A) was submitted first to three Virginia Tech faculty and 14 members of a graduate class studying moral development; and second to two Special Education experts. (See Acknowledgment for names of the panel of experts.) Resulting written and oral recommendations were compared and incorporated into instrument revisions prior to the first field test. One of the original items was eliminated due to rejection by all judges as being too ambiguous to subjects. Additional modifications included changes in terminology and revised item responses on nine items.

Research Question 5: Was the A.C.T.H. Comprehensible by subjects, and were items interpreted as intended?

Six subjects were interviewed following the first field test to determine whether they were able to accurately interpret A.C.T.H. items. Each interviewee was asked to restate each item and respond in his/her own words. The test developer judged the responses as to the accuracy of interpretation. None of the interviewees had difficulty interpreting items other than numbers 24 and 26. Three subjects questioned whether the reference to "sports" in item 24 referred to physical education class athletics or competitive athletics. This item was eliminated prior to

the second field test due to this ambiguity and the item analyses results. One subject interpreted item 26, which contains the term "group home" as meaning "an institution or hospital like facility." This item was subsequently revised to " a home in which six nonrelated handicapped adults lived with a caretaker" for the second field test.

Research Question 6: Did the mean A.C.T.H. scores of subjects assigned to answer in the most socially acceptable manner differ significantly from those assigned to answer according to their own opinion?

Research Question 7: Did the mean A.C.T.H. scores of subjects completing the A.C.T.H. or D.I.T. first differ significantly?

Data to answer these questions were collected during the first field test. Data were analyzed to determine whether high scores on the A.C.T.H. were merely a function of subjects being able to select the principled responses as those most socially acceptable, i.e. "fake" high scores; or sensitivity to moral reasoning due to completion of the D.I.T. The null hypothesis that there would be no significant differences due to set, order, or interaction was tested for significance using a two-way ANOVA adjusted for disproportionate cell frequencies. As set forth in Table 11, none of the F ratios were significant, indicating that A.C.T.H. scores were not deliberately raised in an attempt to answer in a socially desirable manner; the

order instruments were completed did not sensitize the person in such a way that A.C.T.H. scores were raised; and there was not an interaction between these two variables affecting A.C.T.H. scores.

TABLE 11

Effect of Set, Order, and Interaction on A.C.T.H. Scores

	$Order_1$ (D.I.T. first)	$Order_2$ (A.C.T.H.)
Set_1 (Socially desirable directions)	$\bar{x}$ n=16 = 72.65	$\bar{x}$ n=14 = 76.11
Set_2 (Own opinion directions)	$\bar{x}$ n=12 = 77.34	$\bar{x}$ n=16 = 82.62

Source	SS	df	MS	F	F_{cv}
Rows	31.36	1	31.36	2.35	4.00
Columms	19.10	1	19.10	1.43	4.00
Interaction	.82	1	.82	.06	4.00
Within		55	12. 90		

Additional data on the ability of subjects to obtain high scores deliberately were collected by asking six interviewees who participated in the first field test to explain their selection of the most socially desirable responses. Four of the six typically selected conventional level responses as the most socially acceptable in their opinion. These represented a "charitable" orientation toward the handicapped rather than the "equal rights" orientation of principled reasoning. Two of the interviewees responded that it was not possible for them to seperate their own responses from those most "socially acceptable," their own responses dominated. A transcript of the interview results is located in Appendix G.

Research Question 8: Did the mean A.C.T.H. scores of subjects reporting a high grade on an examination of knowledge of legal rights of handicapped and subjects reporting a lower grade differ significantly?

Data to answer this question were collected during the first field test. The University of Wisconsin Stout students enrolled in the mainstreaming class reported their midterm grade on their A.C.T.H. instrument. The midterm examination covered legal irghts of the handicapped. Data were analyzed to determine whether high A.C.T.H. scores were merely a function of knowledge of handicapped law, operationally defined as the score on a test of handicapped law. A check of whether the reported grades were accurate was

done by comparing the range and frequency of grades reported to the instructors' grade rosters. All grades reported were accounted for, although four students were absent so there is not absolute certainty of the truthfulness in grade reporting.

The subjects were divided into two groups for analysis, those reporting a test grade of "A," and those reporting a grade lower than an "A." There were 35 and 20 subjects respectively in the groups. A t-test adjusted for unequal n's was used to test the null hypothesis against the alternative hypothesis that the mean A.C.T.H. score of group 1 (high grades) would be significantly higher than the mean A.C.T.H. score of group 2 (low grades). Results showed that group 2 had a higher mean A.C.T.H. score, but it was not significant at the .05 level, t (42) = -1.30. The null hypothesis was retained, indicating that A.C.T.H. scores were not merely a function of applying knowledge of handicapped law. The results are displayed in Table 12.

TABLE 12

Effect of Knowledge of Handicapped Law on A.C.T.H. Scores, A

$\bar{x}$ ACTH Score, High Grades.	$\bar{x}$ ACTH Score, Low Grades.	df	t	t_{cv}
74.11	79.25	42	-1.3	1.68

A limitation of this analysis was the need to dichotomize (A and non-A) grades due to the high percentage of "A" grades. Because of this, there were "B,C,D", and "F" grades included in the "non-A" group. The subjects reporting "B" grades provided little variance from the "A" group. To increase the variance, a t-test was used to test the difference between the students reporting a grade of "D" or "F" and an equal number of randomly selected students from the "A" group on the mean A.C.T.H. scores. The mean A.C.T.H. score of the low group was slightly higher in the analysis, but the difference was again nonsignificant, as displayed in Table 13.

TABLE 13

Effect of Knowledge of Handicapped Law on A.C.T.H. Scores, B

$\bar{x}$ A.C.T.H. Score, High Grades	$\bar{x}$ A.C.T.H. Score, Low Grades	df	t	t_{cv}
75.3	76.17	10	-.11	2.22

Research Question 9: Did the mean A.C.T.H. scores of males and females differ significantly?

Data to answer this question were collected during the second field test. Data were analyzed to determine if high scores on the A.C.T.H. were merely a function of the subjects' sex. Mean scores on all three instruments were calculated for both males and females in order to compare the results across instruments. Several t-tests were used to determine whether there were significant sex differences on any of the instrument scores.

While results showed that mean scores on all instruments were higher for females than males, none of the test statistics were significant at the .05 level, D.I.T. t (97) = 1.14; A.C.T.H. t (110) = 1.61, A.T.D.P. t (36) = 1.48. As shown in Table 14, these results indicated that sex was not a significant indicator of scores on the D.I.T., A.C.T.H., or A.T.D.P., although females did tend to have slightly higher mean scores.

TABLE 14

Effect of Sex on D.I.T., A.C.T.H., and A.T.D.P.

Mean Scores

Instrument	$\bar{x}$ score, Females	$\bar{x}$ score, Males	df	t	t_{cv}
DIT	36.05	32.76	97	1.14	1.99
ACTH	78.71	74.51	110	1.61	1.98
ATDP	82.78	77.60	36	1.48	2.03

Research Question 10: Was the internal consistency of the A.C.T.H. supported by a positive correlation between individual A.C.T.H. items and total scores?

Data to answer this question were analyzed following the first field test. Two techniques of item analysis were used.

The percentage of representation of high and low A.C.T.H. scorers selecting each of the three responses to each item was determined. The high group consisted of the 53 scorers, and the low group of the 60 subjects who scored lower than the high group. The items were analyzed to determine if a larger percentage of high scorers than low chose the principled response, and a larger percentage of low scorers than high chose the preconventional response on each item. Only two items failed to meet the criterion specified. Both of these items were eliminated in the second field testing. The graphic representation of this

item analysis process is displayed in Appendix F.

The second item analysis procedure used was to calculate the correlation coefficient between selection of the principled response for each item and total scores. For this correlation, the top and low quartile of total A.C.T.H. scorers was used. Three items were found to have little or no (less than .08) correlation to total scores. All other items had a correlation of .31 or higher. To improve A.C.T.H. internal consistency, only items with a correlation of .39 or higher were retained without modification for the second field test. The correlation coefficients for each item are displayed in Appendix F.

Research Question 11: What was the reliability coefficient of the A.C.T.H.?

The reliability of the A.C.T.H. instrument was calculated from results of the second field test. The coefficient Alpha reliability formula was applied to the data. The calculation resulted in a .71 reliability coefficient. This is within the same range of reliability reported for both the D.I.T. and A.T.D.P. (Rest, 1979, 1979a; Yuker, Block and Young, 1966).

Research Question 12: Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having a member of their immediate family who is handicapped differ significantly from subjects reporting no immediate family member being handicapped ?

The purpose of asking this question was to tentatively identify an independent variable affecting value reflective action choices toward handicapped, and further determine if a similar pattern of response on the D.I.T. and A.C.T.H. reflected a relationship between the two instruments.

All subjects in the second field test responded to the question "Is there a member of your immediate family who is handicapped?" Of these, 14, 10, and 6 subjects responding "yes" provided usable D.I.T., A.C.T.H, and A.T.D.P. scores respectively. Equal numbers of subjects responding "no" were randomly selected for comparison of mean scores on each instrument. Several t-tests were used to determine whether the groups had significantly different mean scores on any of the instruments. Results showed that mean D.I.T. and A.C.T.H. scores of "yes" respondents were higher than the "no" respondents while the mean A.T.D.P. score of the "no" respondents was higher than the "yes" respondents. None of the differences were significant at the .05 level however. The low number of subjects responding "yes" to this item may have effected these results. The results display a pattern for "yes" respondents receiving a higher D.I.T. and A.C.T.H. score; further reinforced the relationship between the D.I.T. and A.C.T.H.; and suggested that the A.T.D.P. did not measure the same construct as did the D.I.T. and A.C.T.H. The results are displayed in Table 15.

TABLE 15

Effect of Handicapped Family Members on D.I.T., A.C.T.H., and A.T.D.P. Mean Scores

Instrument	$\bar{x}$ Score, "yes"	$\bar{x}$ Score, "no"	df	t	t_{cv}
D.I.T.	39.29	31.19	26	1.50	2.05
A.C.T.H.	81.20	76.30	18	.98	2.10
A.T.D.P.	69.80	77.00	8	-.99	2.22

Research Question 13: Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having or not having handicapped close friends differ significantly?

The purpose of asking this question again was to tentatively identify an independent variable affecting A.C.T.H. scores and further explore the relationship between the three instruments.

All subjects in the second field test responded to the question "Do you have any close friends who are handicapped?" Of these, 47, 48, and 30 subjects responding "yes" provided usable D.I.T., A.C.T.H., and A.T.D.P. scores respectively. The 46, 80, and 27 subjects responding "no" provided usable D.I.T., A.C.T.H. and A.T.D.P. scores respectively. Mean scores were calculated for each group on each instrument and a t-test adjusted for unequal means was used to determine whether the means were significantly different. No pattern emerged on a

comparison of the mean scores for the D.I.T. The mean score of the "yes" respondents was slightly higher on the A.C.T.H. and higher on the A.T.D.P. None of the differences were significant at the .05 level however, as set forth in Table 16.

TABLE 16

Effect of Handicapped Friends on D.I.T., A.C.T.H., and A.T.D.P. Mean Scores

Instrument	$\bar{x}$ score, "yes"	$\bar{x}$ score, "no"	df	t	t_{cv}
D.I.T.	33.60	34.40	109	-.29	1.99
A.C.T.H.	77.71	74.95	116	1.06	1.98
A.T.D.P.	80	74.43	45	1.52	2.01

Research Question 14: Did the mean A.C.T.H., D.I.T., and A.T.D.P. scores of subjects who reported having or not having integrated educational experience differ significantly?

The purpose of asking this question again was to tentatively identify an independent variable affecting value reflective action choices toward handicapped and further explore the relationship between the instruments.

All subjects in the second field test responded to the question "Have you ever taken any classes in which a handicapped person was enrolled?" Of those responding

"yes," 38, 80, and 42 provided usable D.I.T., A.C.T.H. and A.T.D.P. scores respectively. Of the "no" respondents, 43, 48, and 15 provided usable D.I.T., A.C.T.H., and A.T.D.P. scores respectively. The mean scores of both groups were calculated for each of the instruments. The "yes" respondents had higher mean D.I.T. and A.C.T.H. scores than the "no" respondents. The "no" respondents had a higher mean A.T.D.P. score than the "yes" respondents. This is the same pattern which emerged for subjects reporting having and not having handicapped family members. A t-test adjusted for unequal means was used to determine if any of the differences were significant, as displayed in Table 17. Both the mean D.I.T. and A.C.T.H. mean scores for the "yes" respondents were significantly higher than the "no" respondents beyond the .05 level, D.I.T. t (64) = 3.58, A.C.T.H. t (85) = 2.26.

TABLE 17

Effect of Integrated Educational Experience on D.I.T., A.C.T.H., and A.T.D.P. Mean Scores, A

Instrument	$\bar{x}$ Score, "yes"	$\bar{x}$ Score, "No"	df	t	t_{cv}
D.I.T.	38.00	27.71	64	3.58*	2.00
A.C.T.H.	78.30	72.13	85	2.26*	2.01
A.T.D.P.	77.29	78.53	30	-.30	2.04

*significant beyond the .05 level

There is a potential rival explanation for the significantly higher mean D.I.T. and A.C.T.H. scores of "yes" respondents. If the "yes" respondents were older than the "no" respondents, their age might account for a higher level of moral development (Rest, 1979). This rival explanation was tested.

The mean age of the "yes" respondents was calculated, and was found to be 23.5, compared to 19.5 mean age of the "no" respondents. Therefore, to test whether the significantly higher mean D.I.T. and A.C.T.H. mean scores were merely a function of age difference, a subgroup of the "yes" respondents was selected by eliminating the subjects 22 years of age or older. The resultant "yes" subgroup had a mean age of 19.4. The same data analyses were repeated to determine whether the "yes" and "no" respondents had significantly different mean D.I.T., A.C.T.H. and A.T.D.P. scores. As noted in Table 18, the resulting mean D.I.T. and A.C.T.H. scores of the subgroup of "yes" respondents was higher than the entire "yes" group, and again was significant beyond the .05 level. These results suggest that integrated educational experience positively effected principled reasoning of subjects in this study as measured by the D.I.T. and A.C.T.H., and supported the relationship between the D.I.T. and A.C.T.H. As discussed in Chapter 5, future research is recommended to explore integration variables effecting

A.C.T.H. scores.

TABLE 18

Effect of Integrated Educational Experience on D.I.T., A.C.T.H., and A.T.D.P. Mean Scores, B

Instrument	$\bar{x}$ Score, Subgroup "yes"	$\bar{x}$ Score, Subgroup "no"	df	t	t_{cv}
D.I.T.	38.3	27.71	74	3.40*	1.99
A.C.T.H.	81.41	72.13	77	3.02*	1.99
A.T.D.P.	82.86	78.53	28	1.43	2.04

*significant beyond the .05 level

Summary of Results Pertaining to Research Questions

1. The correlation between the A.T.C.T. and D.I.T. was .43 for the first field test; .57 for the second field test; and .51 for a subsample of the second field test completing the A.C.T.H, D.I.T. and A.T.D.P. All correlations were significant beyond the .05 level. A t-test of difference between the mean A.C.T.H. scores of high and low D.I.T. scorers from the first field test was significant beyond the .05 level, t (52) = 3.17. Both the correlations and t-test support the relationship between the A.C.T.H. and D.I.T., i.e. the validity of the A.C.T.H. as a measure of value reflective action choice toward handicapped.

2. The correlation between the A.T.D.P. and D.I.T. was .26, nonsignificant at the .05 level.

3. The correlation between the A.T.D.P. and A.C.T.H. was .27, nonsignificant at the .05 level. Results 2 and 3 indicate that the A.T.D.P. does not measure what the A.C.T.H. and D.I.T. measure. The A.C.T.H. - D.I.T. correlation was significantly higher than the A.T.D.P. - D.I.T. correlation, $\underline{Z} = 2.12$.

4. The original 33 item A.C.T.H. was revised to 32 items for the first field test and 21 items for the second field test based on review by the panel of experts, item analysis, and first field test interview results.

5. The A.C.T.H. was found to be comprehensible by subjects with minor revisions.

6. The mean A.C.T.H. scores of subjects instructed to respond according to their own opinion or respond in the most socially desirable manner were not significantly different. Subjects interviewed following the first field test did not consistently identify principled responses as those being most socially acceptable. These results suggested that high A.C.T.H. scores were not merely a function of the subject deliberately "faking" a high score.

7. The mean A.C.T.H. scores of subjects completing the D.I.T. or A.C.T.H. first were not significantly different, indicating that A.C.T.H. scores were not merely a

function of subject sensitivity due to completion of a measure of general moral reasoning prior to completion of the A.C.T.H.

8. Subjects receiving an "A" grade on a midterm exam of legal rights of the handicapped did not have significantly different mean A.C.T.H. score than subjects reporting grades lower than "A." This nonsignificant difference held when the extreme scores of "A" and "D" or "F" were compared. These results indicated that high A.C.T.H. scores were not merely a function of application of knowledge of handicapped law. In fact, high grade subjects had a lower mean A.C.T.H. score, which although nonsignificant at the .05 level, indicated a possible tendency for knowledge of handicapped law to result in fewer principled responses.

9. Males and females did not have significantly different mean D.I.T., A.C.T.H. or A.T.D.P. scores. Females did, however, have a higher mean score on each of the instruments, indicating there was a slight tendency for a relationship between sex and instrument scores.

10. Individual A.C.T.H. items were found to be consistent with the total test on over 90% of the original 33 items. Items retained for second field testing each had a correlation of .39 or higher with the total test.

11. The reliability of the A.C.T.H. Instrument was calculated as .71 using the Alpha correlation

coefficient formula .

12. Subjects reported having members of their immediate family who are handicapped had higher mean D.I.T. and A.C.T.H. scores than subjects reporting no family members who are handicapped, while the opposite pattern was displayed for mean A.T.D.P. scores. None of these differences were significant.

13. Subjects reporting that they had or did not have handicapped close friends did not have significantly different mean D.I.T., A.C.T.H., or A.T.D.P. scores.

14. Subjects reporting that they had integrated educational experience had significantly higher mean D.I.T. and A.C.T.H. scores than those reporting no such experience, D.I.T. t (64) = 3.58, A.C.T.H. t (85) = 2.26. This significant difference was retained after adjusting the "yes" respondent group to have the same mean age as the "no" respondents, D.I.T.t(74) = 3.40, A.C.T.H.t(77) = 3.02. The "yes" respondents had a lower mean A.T.D.P. score than the "no" respondents for the first calculation, but the difference was not significant. These results suggested that integrated educational experience effects the selection of principled responses on the D.I.T. and A.C.T.H.; further supports the relationship between the two instruments; and supplied another indicator that the A.T.D.P. does not measure the same thing as the D.I.T. and A.C.T.H.

CHAPTER V

DISCUSSION OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The discussion of findings, conclusions, and recommendations discussed in this chapter are based on the data collected in this study and the review of literature. As in any study undertaken in a new area of research involving instrument development, broad generalizations are premature. Data collected justified conclusions specific to the sample studied, but more importantly provided data that justify further research in the assessment and development of socio-moral valuing of handicapped individuals. Future research is necessary to further determine how the Action Choices Toward Handicapped (A.C.T.H.) should be used.

Discussion of the findings relative to this research will be discussed first, followed by a summary of the conclusions. Last, recommendations for future studies, and incorporation of strategies affecting socio-moral development of the nonhandicapped in integrated classrooms are presented.

Discussion of Findings

Relationship Between the A.C.T.H. and D.I.T.

A review of the literature revealed that conative (action choice) attitudes could serve a value reflective

function (Halloran, 1967; Matefy and Acksen, 1976; Rokeach, as reported in Hollen, 1972). Action choices serving a value reflective function compose the content of moral judgment, and have a positive relationship with the structure (reasoning) of moral judgment (Kohlberg, 1969; Piaget, 1962; Rest, 1979).

The A.C.T.H. items were written to represent characteristic reasoning of individuals at various levels or moral development. In other words, the A.C.T.H. was developed to represent moral judgment content reflective of socio-moral reasoning as measured by the Defining Issues Test (D.I.T.). The results of this study supported the contention that subjects' choices on the A.C.T.H. reflected underlying socio-moral reasoning as measured by the D.I.T.

The major finding of this study was that there was a significant positive correlation between scores on the A.C.T.H. and the D.I.T. in both field tests. After expanding the age and education range of the sample in the second field test to include high school students in addition to college and post-college subjects, the correlation coefficient increased from .43 to .57. This suggested that further expansion of the range of subjects on age and education may increase the correlation between the two instruments.

The positive relationship between the A.C.T.H. and D.I.T. was further supported by the significantly higher

A.C.T.H. scores for high D.I.T. scorers than low D.I.T. scorers, and the significantly higher mean A.C.T.H. and D.I.T. scores for subjects who had experienced integrated educational settings. This same group had nonsignificantly different A.T.D.P. scores when compared to the group not having experienced integrated settings, suggesting that the A.C.T.H. and D.I.T. measure a different construct than does the A.T.D.P.

Relationship between the D.I.T., A.C.T.H., and A.T.D.P.

Review of the literature established that cognitive or affective attitudes serving functions other than value reflective would not be expected to have a positive relationship with a measure of moral reasoning (Halloran, 1967; Krech, 1962; Lemon, 1973). This writer contended that the commonly used attitude toward handicapped scales do not serve a value reflective function, and that interpretation of results regarding values of the attitude holder are not justified (Altrocchi, 1961; Comer and Piliavin, 1975; Golin, 1970; Higgs, 1971; Stude, 1973). For this study, the Attitudes Toward Disabled Persons (A.T.D.P.) instrument was selected as an example of a commonly used attitudinal scale that this writer contended exemplified measurement of attitudinal component(s) and function(s) other than value reflective conations. Tentative support for this contention was obtained from review of a study resulting in a non-significant relationship between A.T.D.P. and D.I.T. scores

of nurses (Noffsinger, 1979). To test the relationship, a subsample of second field test subjects completed the A.T.D.P. in addition to the D.I.T. and A.C.T.H. As reported, a nonsignificant correlation was found between both the D.I.T. and A.T.D.P. scores, and the A.C.T.H. and A.T.D.P. scores.

An analysis of the results comparing mean D.I.T., A.C.T.H., and A.T.D.P. scores of subjects reporting that they did or did not have handicapped family members, handicapped close friends, or integrated educational experience further revealed a pattern of the A.T.D.P. scores being different than the A.C.T.H. and D.I.T. As reported, both mean D.I.T. and A.C.T.H. scores of subjects reporting integrated educational experience were significantly higher than those without integration experience. In contrast, the mean A.T.D.P. score of those with integration experience was lower than those without. This pattern was repeated for subjects reporting having handicapped family members, although the higher mean D.I.T. and A.C.T.H. scores, and lower A.T.D.P. scores were not significant at the .05 level.

This study did not attempt to determine what A.T.D.P. scores do represent. It can be concluded that in this study, the A.T.D.P. did not assess what the D.I.T. and A.C.T.H. assessed, and did not reflect moral reasoning as measured by the D.I.T.

Validity and Reliability of the A.C.T.H.

Content validity of the A.C.T.H. was supported by the panel of judges' acceptance of items developed to sample characteristic reasoning of individuals at various levels of moral development. Thirty-two of the original 33 items were accepted with no or minimum revision by the judges.

A.C.T.H. construct validity was based on literature reviewed which established the theory of potential value reflectiveness of action choice attitudes. The significant positive correlation between the A.C.T.H. and D.I.T. scores, measures of value reflective action choices toward the handicapped and general socio-moral reason respectively, supported this theory. The construct validity, i.e. the value reflectiveness of the A.C.T.H., was further supported by the significantly higher mean A.C.T.H. scores for high D.I.T. scorers than low D.I.T. scorers, and the significantly higher mean D.I.T. and A.C.T.H. scores of subjects having experienced integrated education.

Construct validity also is demonstrated by determination that the A.C.T.H. is not a function of potential rival explanations for subjects' scores, i.e. its discriminant validity (Sax, 1980, p. 297). The following discussion of potential rival explanations for subjects' A.C.T.H. scores relates to the construct validity.

One potential alternative explanation for A.C.T.H. scores was sensitivity to moral reasoning due to the

completion of another instrument. To test for this, the order of completion of the D.I.T. and A.C.T.H. instruments was randomly manipulated during the first field test. The mean scores of the two order groups were not significantly different, so the conclusion can be made that A.C.T.H. scores are not merely a function of instrument sensitivity due to order of instruments.

Another rival explanation for A.C.T.H. scores was that subjects were deliberately obtaining high scores regardless of their personal choices, i.e. "faking good." To test for this, first field test subjects were randomly instructed to respond to the A.C.T.H. items in either the most socially desirable manner possible, or according to their own personal preference. As discussed, mean A.C.T.H. scores of both groups were not significantly different. Interestingly, subjects directed to "fake good" had a lower mean score than the group assigned to select their own choices. The six subjects interviewed were asked to explain their choice of the most socially desirable responses in an attempt to better understand this phenomonon. Four of the six interviewees selected conventional responses as the most socially desirable when stage 3 conventional responses were available. Their explanations equated charity with "niceness," e.g. "It's good to go out of your way for less fortunates." This is consistent with Kohlberg's (1969) and Rest's (1979) description of stage 3 conventional

reasoning as a "good boy" orientation. Commitment to serving the handicapped out of pity rather than recognition and acceptance of their equal right to services represents this orientation. An individual who stressed "benevolent" actions toward the handicapped would most likely select actions which she/he might consider kind and charitable, but would very likely further segregate the handicapped from nonhandicapped peers physically and psychologically. For example, assigning a seperate grade such as an "E" for effort to handicapped students in regular classes may be considered charitable, but stigmatizes the handicapped student as being different. Determination of nonhandicapped students' charitable orientation would provide information relating to the need to plan educational activities emphasizing the inherent similar needs of all people, as discussed further in the "Educational Implications" section of this chapter.

The perception that charitable responses are the most socially acceptable provided an explanation for lower A.C.T.H. scores of subjects assigned to try to obtain a high score. This explanation is not sufficient to completely predict subject tendencies however, or there should have been a significant lower mean A.C.T.H. score for the group assigned to select the most socially desirable response. Another explanation for the nonsignificant differences between the social desirability and own opinion groups was suggested

by the fact that two of the six interviewees responded that they were unable to continue to "separate" selection of the most socially acceptable response from their own throughout the questionnaire. This result suggested that subjects may return to their own opinions in spite of efforts not to.

It can be concluded from these results that high A.C.T.H. scores were not merely a function of subjects' attempts to "fake good." Additional research, particularly in-depth interviews is recommended to further determine if subjects tend to select conventional rather than principled responses when trying to obtain high scores.

A third potential rival explanation for A.C.T.H. scores explored in this study was whether subjects scores were a function of their knowledge of the legal rights of the handicapped, i.e. whether they responded according to that knowledge rather than their own opinion. To test for this, first field test subjects who were enrolled in the mainstreaming course reported their grade on a midterm examination covering legal rights of the handicapped. The mean A.C.T.H. scores of high and low midterm scorers were not significantly different. A limitation of this analysis was that the midterm grades needed to be dichotomized ("A", non-"A" grades) due to the high proportion of "A" grades. Because of this, there were mid grades of "B" and "C" within the low group which did not provide much variance

from the "A" group. Another analysis was done between mean A.C.T.H. scores of the students reporting a grade of "D" or "F" and an equal number of randomly selected "A" group students. The difference was again nonsignificant. It was interesting to note that the mean A.C.T.H. score of the "non-A" groups in both analyses were higher than the "A" group, although the resulting test statistic was considerable smaller in the second analysis, $t = -1.30$ and $t = -.10$ respectively. A possible explanation for this result is that subjects with more knowledge of the legal rights of handicapped, operationally defined as higher midterm examination grades, tended to select the conventional "law and order" responses on the A.C.T.H. rather than the principled responses due to their knowledge. Removal of the mid grades for the second analysis resulted in closer mean A.C.T.H. scores, suggesting that students without much or too little knowledge of legal rights of the handicapped were the least affected in such a way as to decrease their selection of principled responses. This explanation does not completely explain the selection tendencies however or there would have been significantly lower mean scores for the "A" group. From this study it can be concluded that high A.C.T.H. scores were not merely a function of knowledge of the legal rights of the handicapped. Additional research is recommended to examine the possible tendency for students with knowledge of

handicapped law to favor conventional responses. This possibility has consistency with the "law and order" orientation of conventional reasoning (Rest, 1979). This raises an interesting question that should be explored further: do high grade subjects have apriori conventional orientation that affects their ability to learn handicapped law, or did learning handicapped law affect their conventional reasoning? What impact does a conventional orientation have on behaviors toward the handicapped? Such questions are beyond the scope of this study due to the post-hoc data collection, but are recommended for further study.

A final alternative explanation for A.C.T.H. scores was that scores were merely a function of a subjects' sex. To test this, mean scores of females and males were compared for all tests. As discussed, while female mean scores were higher in all cases, all differences were nonsignificant. It can be concluded that sex was not a significant determinant of scores, although it did have some effect. This relationship should be explored in future studies.

Additional support for the construct validity of the A.C.T.H. was found in the analysis of first field test interviewees selection of second choice item responses (see Appendix G for a transcript). An analysis of the subjects preferred second choices on A.C.T.H. items revealed

that low A.C.T.H./mean D.I.T. score subjects moved "up" in second choices; the low mean A.C.T.H./low mean D.I.T. subject stayed at the the conventional level for second choices; the high mean A.C.T.H./low mean D.I.T. subject moved "down" to conventional responses as second choice; and the high A.C.T.H./high D.I.T. subject stayed with principled responses as second choices. These data, though very limited, supported the construct validity of the A.C.T.H. as further indication of underlying reasoning of subjects firmly at a level (consistent A.C.T.H. and D.I.T. scores) and those with inconsistent A.C.T.H. and D.I.T. scores. Those with inconsistent scores tended to move toward their D.I.T. scores in their second choices on A.C.T.H. items.

The internal consistency of the A.C.T.H. was supported by the positive correlation found between 94% of the individual items and total scores from the first field test, and the .71 reliability coefficient calculated from the second field test results. The .71 reliability is within the acceptable range for measures of attitudes and values (Sax, 1970, pp. 506-509).

Variables Affecting A.C.T.H. Scores

Second field test subjects responded to questions regarding whether they did or did not have handicapped family members, handicapped close friends, and integrated education experience. Their responses were used in the

analyses of variables affecting A.C.T.H. scores.

As reported, mean D.I.T. and A.C.T.H. scores of subjects reporting having handicapped family members were higher than those reporting no handicapped family members, but were not significant at the .05 level. It was interesting that the mean A.T.D.P. scores of "yes" respondents were lower than the "no" respondents, the opposite pattern of A.C.T.H. and D.I.T. scores. Again the difference was nonsignificant.

No pattern emerged from subjects' scores reporting having or not having handicapped friends. Perhaps this question was too ambiguous, i.e. variable interpretation as to what constitutes a "close friend."

Significantly higher mean D.I.T. and A.C.T.H. scores were found for subjects reporting integrated educational experience compared to those reporting no experience. This significant difference was maintained even after adjusting the "yes" respondents to the same mean age as the "no" respondents. This result supported the need for further research on the effect of integration on socio-moral development. It can be concluded that in this study, subjects reporting integrated experience chose significantly more principled responses on the D.I.T. and A.C.T.H. than those without integration experience.

Interpretation of A.C.T.H. Scores

As discussed, the technique for scoring the A.C.T.H.

for this study was selected to be consistent with the D.I.T. scoring technique, i.e. the "P" score was calculated for each subject on both instruments. Therefore, both the D.I.T. and A.C.T.H. scores are interpreted as the percentage of principled responses selected by a subject, i.e. the emphasis on principled moral judgment.

A.C.T.H. norm "P" scores have not been established for various age groups. A mean "P" score of 75 was obtained from 244 subjects who participated in this study. Therefore, a score of 75 is tentatively recommended as a norm score for the 18-22 age group with college experience. Future research is needed to provide additional data for norm scores for various other groups.

A.C.T.H. scores are recommended for use as a means to compare groups (e.g. those with or without various characteristics) and within groups (e.g. to measure the effect of various treatments such as handicap simulations). Pre and post-measurement might be used.

Analysis of subjects' "P" scores on the A.C.T.H. and D.I.T. raised two questions which should be addressed: 1) what pattern emerged from analysis of subjects' non-principled responses, and 2) why was the mean A.C.T.H. "P" score higher than the mean D.I.T. "P" score?

Examination of A.C.T.H. item analysis revealed that some subjects' with the same "P" score selected different percentages of preconventional and conventional responses on items on which they selected nonprincipled responses.

The same pattern was revealed on some subjects' D.I.T. responses. For example, subject A may have selected 50% principled responses, 30% conventional, and 20% preconventional. Subject B may have also selected 50% principled, but 20% conventional and 30% preconventional. Rest (1979) discussed such "stage mixture" as common among many subjects, and a major reason for development of the "percentage of principled responses" scoring technique as opposed to simply stage scoring, i.e. identifying a subject as bieng "at" a given stage. The literature review suggested that selection of varying levels of responses indicated a subject who is in transition from one stage to another (Kohlberg,1969; Rest, 1979). Rest (1979) suggested that such patterns may also result from subjects' varying familiarity with topics presented by items; verbal fluency in various topics; or varying levels of moral judgment in different areas, e.g. justice and reciprocity (Rest, 1979, Chapter 2). Further research is needed in this area to determine the meaning of various patterns of response selection.

A "weighted" D.I.T. scoring technique is being developed and researched whereby preconventional and conventional responses are weighted in the final score (Rest, 1979a). A similar technique is possible with the A.C.T.H., and was used for experiemental analysis in this study. Subjects' summated scores (3 points for principled,

2 for conventional, 1 for preconventional responses) were calculated for each subject. These summated scores were found to have a .47 correlation with the D.I.T. "P" scores, and .92 correlation with A.C.T.H. "P" scores. The writer would hypothesize that the A.C.T.H. summated scores would have a higher significant positive correlation with a similarly scored D.I.T. As the D.I.T. weighted scoring technique is developed, further research comparing the A.C.T.H. summated scores to a similar D.I.T. score is recommended.

A pattern also was revealed from item analysis that a small number of items contained preconventional responses that were chosen more frequently than conventional by the top quartile of A.C.T.H. scorers. Item analysis following first field testing revealed this pattern on four items: 6, 20, 24, and 31 (see Appendix for first field test A.C.T.H.). Item 6, regarding which handicapped students have a right to an education was modified for the second field testing to make the responses better reflect preconventional and conventional reasoning. Insight as to the reason for this unusual pattern on item 31, regarding paying a handicapped factory worker not producing the norm work, was revealed by one of the interviewees. The subject justified selection of the intended preconventinal response of paying the worker piece rate by considering the factory employer as a self-employed businessman who would not be able to stay in business otherwise. This

perspective would involve a higher level of moral judgment than intended by the response, and may explain the selection of this response by other high A.C.T.H. scorers. This item also was revised for second field testing by describing the place of employment as a public service job. The other two items in which high A.C.T.H. scorers preferred the preconventional response over the conventional when they did not select the principled one involved grading handicapped students in mainstreamed classes and handicapped student participation in athletics. The athletic item (24) was eliminated from the second field test instrument, but the grading item was retained. It was the only item of those discussed where the pattern of high scorers preference for the preconventional response continued in the second field test. This writer suggests a possible explanation for this phenomenon. These two items may have been conceptualized as issues of social convention rather than morality by respondents. According to Nucci (1982) and Turiel (1978), social conventions are arbitrary behavioral uniformities which coordinate actions of individuals participating in a social system, distinct from concepts of morality. Tradition plays a major role in maintenance of social conventions. Traditionally, students are exposed to conventional uniformities regarding public school grading and athletic policies. Students may have learned to accept normal curve grading (intended as preconventional response)

and athletic coach's arbitrary rules (also intended as the preconventional response) as social concensus. If this were true, they may have responded to these items as rules of social convention rather than moral issues. Further research is recommended to explore what issues involving the handicapped and the nonhandicapped students conceptualize as social convention rather than morality. In-depth interviews to determine rationale for responses is recommended.

A final issue that should be discussed regarding A.C.T.H. scoring involved the higher mean A.C.T.H. "P" score than the mean D.I.T. "P" score for the 194 subjects completing both instruments. Review of the literature revealed two plausible explanations for this phenomenon.

First, numerous moral judgment studies reported by Rest (1979) resulted in subjects' higher moral judgment levels as moral conflicts likely to be found within the individual's life space (p. 55-56), i.e. those issues familiar to the subject. Because the majority of items presented in the A.C.T.H. involved issues encountered by students in their school experience, those topics may have been more familiar than the D.I.T. topics involving death of a spouse, hiring an employee, escaped prisoners, and a doctor's decision. Therefore, the familiarity may have effected their responses.

A second explanation is found in a review of

Kohlberg's (1965), Piaget's (1962), and Rest's (1979) research on moral judgment content and structure. Content decisions may precede structural reasoning in moral development. A subject "may be able to make action choices (at a level of moral development) before being able to verbalize the underlying structure" (Rest, 1979, p. 60). Therefore, it is not unusual that a subject would choose more principled action choices (A.T.D.P.) than principled reasoning responses (D.I.T.).

This writer suggests that both of these reasons accounted for the higher mean A.C.T.H. score than the D.I.T. A.C.T.H. items were constructed to represent issues encountered in integrated educational and community settings. A future study might further justify subject familiarity with issues addressed as effecting A.C.T.H. and D.I.T. scores by interviewing subjects to verify their level of familiarity with the topics represented, and submitting the A.C.T.H. to education practitioners to critique for representation of issues. As discussed in this report, the A.C.T.H. was constructed to reflect the content (action choices) of moral judgment, and therefore subjects' selection of principled action choices would be expected to precede principled reasoning (Rest, 1979, p. 60).

Summary of Conclusions

The results of this study supported the A.C.T.H. as being reflective of socio-moral reasoning as measured by the D.I.T., as evidenced by the following. A.C.T.H. and D.I.T. scores had a significant positive correlation on both field tests. The A.T.D.P. had a nonsignificant relationship with both the A.C.T.H. and D.I.T. Furthermore, the A.C.T.H.-D.I.T. correlation was significantly higher than the A.T.D.P.-D.I.T. correlation. These results suggested that A.C.T.H. scores were a better indicator of subjects' underlying socio-moral reasoning than are general attitudes toward the disabled as measured by the A.T.D.P. These results therefore suggest that use of the A.C.T.H. would be more appropriate than the A.T.D.P. in studies which seek to assess value reflective action choices toward the handicapped.

A.C.T.H. discriminant validity was supported by failure to retain instrument sensitivity, desire to "fake good," knowledge of handicapped law, or sex as rival explanations for principled responses. Construct validity was further supported by significantly higher mean scores on both the D.I.T. and A.C.T.H. of subjects reporting integration experience.

The significant positive correlation of items to total scores and the .71 reliability of the A.C.T.H. supported the internal consistency of the instrument.

The scoring technique used in this study was chosen to be consistent with the D.I.T. technique, i.e. subjects' "P" scores were calculated for both instruments. Subjects A.C.T.H. summated scores correlated .47 with D.I.T. "P" scores. Subjects summated A.C.T.H. scores correlated .92 with A.C.T.H. "P" scores.

Recommendations

Recommendations for Further Instrument Research

The A.C.T.H. instrument should be administered to a broader range of individuals in age and education. Score norms should be established for various groups to aid in interpretation of results. As far as possible, the D.I.T. should continue to be administered concurrently to provide additional data on the relationship between the instruments. When using the D.I.T., directions should be read orally.

Various A.C.T.H. scoring alternatives should be researched as discussed in the preceding section. The summated A.C.T.H. scoring technique should be utilized with weighted D.I.T. scores.

Consistency of A.C.T.H. scores over time should be determined. Test-retest scores should be used to further determine the reliability of the instrument. The effect of selecting socially desirable responses, knowledge of handicapped law, and sex should continue to be researched.

The A.C.T.H. should continue to be submitted to experts in moral judgment development and special education for

ongoing recommendations for modifications and/or use of the instrument. Field review by junior and senior high school administrators and teachers is specifically recommended.

Recommended Causal Comparative and Experimental Studies Using the A.C.T.H.

As discussed in Chapter I, a major rationale for this study was development of an instrument to measure value reflective action choices toward handicapped so that empirical studies could be conducted to determine variables effecting socio-moral development as measured by the instrument.

Three questions regarding subjects' experience with handicapped individuals were included in the second field test data collection procedure to further determine the relationship of the D.I.T. and A.C.T.H. and tentatively explore independent variables effecting socio-moral valuing of handicapped. Results suggested that integration effected general socio-moral reasoning and specific action choices toward handicapped. This result justifies further research as to the aspects of integration which act as change agents. Results showing a consistent response pattern on the D.I.T. and A.C.T.H. for individuals who have family members who are handicapped also justified further research in this area.

The higher mean D.I.T. and A.C.T.H. scores of subjects

reporting integrated education experience than subjects reporting no such experience is a particularly significant finding. This result supported the literature reviewed in Chapter I suggesting that integration has the potential to nurture principled socio-moral development of nonhandicapped (Cohen, 1978; East, 1976; Grunwald, 1981; Markus, 1980, Solomon, 1977; Turnbull and Turnbull, 1979; Yaffe, 1979). To this writer's knowledge, this study provides the first tentative empirical data to support that contention. Additional research is recommended to compare various factors involved in integrated and nonintegrated settings. Variables such as age of subjects, varying length of integration experience, experience with various types of handicapped students should be researched to further delineate what aspects of integration effect socio-moral development. For example, subjects who participated in this study might be contacted again to obtain more in-depth information regarding their integration experience. Such information could be used to factor out the variables effecting moral judgment as measured by the A.C.T.H. and D.I.T. Such research is needed to recommend integration procedures which would most likely effect the socio-moral development of students.

Experimental research is recommended to better determine specific independent variables effecting socio-moral development. Four variables are specifically

recommended for study as they emerged through the literature review as change agents common to value reflective attitudes and general socio-moral reasoning, i.e. those effecting the content and structure of moral development. These factors are cognitive dissonance, perspective taking, social responsibility, and cooperative interaction (Biskin and Hoskisson, 1974; Cohen, 1980; Crockenberg and Nicolayev, 1979, Donaldson, 1980, Enright, 1979; Evans, 1976; Freeman and Giebink, 1979; Gottlieb, 1980; Hughs, 1979; Johnson and Johnson, 1978; Kohlberg, 1972; Krech, 1962; Moser, 1977; Piaget, 1962; Roe, 1971; Tracy and Cross, 1973; Turiel, 1978).

Cognitive dissonance regarding the handicapped may be caused by violation of expectations about the handicapped, i.e. handicapped people not confirming previously held stereotypes. Vicarious observation of handicapped people, guest lectures by handicapped people, films and books portraying the handicapped living nonstereotypic dependent lives are examples of treatment which could produce cognitive dissonance for research. The Council on Interracial Books for Children in New York (Council on Interracial Books, 1982) is developing basal textbooks focusing on handicappism. The effect of using such text-books should be explored. A second form of cognitive dissonance is experienced when an attitude holder perceives inconsistency in self-professed values and attitudes

realting to that value. Use of the affective domain taxonomy, where subjects are encouraged to clarify, organize, and characterize individual values (Krathwohl et.al. 1956) could be used as treatment in this type of research. Subjects would proceed through a process of identifying attitudes and values, organizing these into a structural whole, and comparing the compatibility of their attitues and values.

A second type of treatment variable recommended for further research is that of perspective taking. Perspective taking, i.e. experiencing handicapped characteristics, can occur through vicarious observation of handicapped individuals and reactions of others to them, or role taking of handicapped people. Kohlberg (1969) and Piaget (1962) contended that role-taking transfers external regard for others to an internal perspective of other selves. Handicap simulations would be an example of a treatment that might be used in research to determine the effect of perspective taking on socio-moral development.

A third recommended treatment is that of taking active social responsibility for a handicapped person. Moser (1977) emphasized that "moral development is enhanced by action on behalf of chosen moral goals" (p. 85). A tutoring program would be an example of treatment that might be used in this research.

The fourth recommended treatment research is to study

the relationship of various types of integrated learning environments and the socio-moral development of students. Specifically, cooperative, individualistic, and competitive learning environments are recommended for comparison. Martino et.al. (1979) and Redl, (1959) maintained that in a cooperative learning environment, children see the fairness and justice of treating group members in accordance with their needs. Classroom environments could be assessed and children in each could be compared as to their socio-moral development. Research in this area would most likely be quasi-experimental or causal-comparative, as assignment of students or teachers, and manipulation of classroom enviornments is difficult in educational facilities.

In summary, further research is recommended to study the relationship of socio-moral development to having members of the immediate family who are handicapped; integrated educational settings; and the effect of cognitive dissonance, perspective taking, social action, and cooperative learning environments.

Recommendations for Diagnostic-Prescriptive Classroom Integration

The A.C.T.H. is recommended for use in a diagnostic prescriptive values education program. The A.C.T.H. might be used as a pre and post assessment of changes in subjects exposed to opportunities available in integrated settings purported to enhance socio-moral development.

Review of the literature established that moral development is primarily a product of interaction with others allowing opportunity for comparison, cooperation, resolution of conflicts, perspective taking, and social responsibility (Bisken and Hoskisson, 1974; Kohlberg, 1964; Matefy and Acksen, 1976; Piaget, 1962; Rest, 1979; Roe, 1971). Therefore, in addition to recommendations for further research on socio-moral development effected by integration, opportunities inherently available in educational settings for enhancing moral development are recommended for incorporation into a values education program. Integration of handicapped and nonhandicapped students provides naturally occurring opportunities for development of socio-moral development of students. Numerous authors have enumerated such opportunities: exposure to and understanding of differences in people; acquisition of new repertoires for interacting with a broader range of people; recognition of inherent similarities in people; development of cooperative activities; and social action on behalf of others (Cohen, 1978; East, 1976; Grunwald, 1981; Markus, 1980; Royer, 1977; Solomon, 1977; Turnbull and Schulz, 1979; Yaffe, 1979).

Current educational approaches to enhancing moral development emphasize development and clarification of students' values. Integration can be used in each of the major approaches. Three of the major "values education"

approaches are: values clarification; affective domain education; and the moral dilemma approach, based to a great extent on the works of Raths and Simon; Krathwohl; and Kohlberg respectively. A short example of how situations inherent in integrated classrooms could be used with each values education approach follows.

A "Values Clarification" teaching technique is to have each class member identify their own unique needs. Class members then compare and contrast themselves to others, leading to increased awareness of individual differences and similarities (Simon et.al. 1972). Handicapped participants in this activity would lead to clarification of the common needs of all people.

Use of the "Affective Domain" approach involves the process of identifying, conceptualizing, organizing, and characterizing individual value systems (Krathwohl et.al. 1956). Group and individual discussions in which students compare professed values and confront possible discrepant values is a teaching method utilized in this approach. Students may be encouraged to compare, for example, their professed valuing of equal opportunities for all and their choice of educational opportunities for handicapped students in their classrooms to determine whether their values form a coherent organizational pattern.

The "Moral Dilemma" approach emphasizes socio-moral development through confrontation and resolution of moral

dilemmas (Galbraith and Jones, 1976 and Kohlberg, 1969). Integration potentially presents numerous moral dilemmas which students could discuss. For example: if a handicapped student's participation in competitive class team sports diminished a team's chance to win, yet the student was a class member, should or shouldn't she/he be allowed to participate?

These examples of how opportunities available through integration could be used in values education are not meant to be inclusive, but rather brief examples of how such opportunities might be employed. The A.C.T.H. is recommended for use in values education to determine its effect on value reflective action choices toward handicapped.

General Summary

This final section brings the writer full circle to the Chapter I discussion of social morality as manifested by reintegration of the handicapped into the mainstream of society. Integration was portrayed as a reflection of, as well as a catalyst to development of the socio-moral values of the nonhandicapped.

Education seeks to maximize benefits to all students. This research has taken a necessary first step in the study of integration as a potential benefit to not only the handicapped student, but the nonhandicapped student as well. An instrument to measure socio-moral valuing of handicapped was developed and determined to have a significant

positive relationship with a measure of general socio-moral reasoning. This instrument can now be used to conduct further research in the area of variables effecting the socio-moral action choices of the nonhandicapped. This study also resulted in the first known empirical data showing that integrated educational experience has a positive effect on nonhandicapped students' selection of principled action choices toward the handicapped.

REFERENCES

References

Affleck, J., Lowenbraun, S. & Archer. Teaching the mildly handicapped in the regular classroom. Columbus, Oh: Charles Merrill Publishing Co., 1980.

Alese, J.A. Operation awareness. Mental Retardation, 1973, II (3), 38-39.

Altrocchi, J. & Eisdorfer, C. Changes in attitudes toward mental illness. Mental Hygiene, 45 (1), 563-570.

Anthony, W.A. & Carkhuff, R.R. Effects of training on rehabilitation counselor trainee functioning. Rehabilitation Counseling Bulletin, 1970, 13 (4), 333-342.

Appleby, J, Dahl, P. & Lipe, D. Mainstreaming guidebook for vocational educators, Salt Lake City, Utah: Olympus Publishing Co., 1978.

Asher, N.W. Manipulating attraction toward the disabled: an application of the similarity-attraction model. Rehabilitation Psychology, 1973, 20 (4), 56-64.

Barclay, J. The impact of handicapped students on other students in the classroom. Journal of Research and Development in Education,1974, 12 (4), 80-92.

Barngrover, E. A study of educators' preferences in special education programs. Exceptional Children, 1971, 37 (10), 754-755.

Beatty, G. & Gardner, D. Motivating teachers for vocational curriculum development of the handicapped. Education, Summer 1980, 10 (4), 360-366.

Bernstein J. Kim is handicapped, but. Today's Education, March 1980, 69 (1), 76.

Biskin, D. & Hoskisson, K. Moral development through children's literature. The Elementary School Journal, Dec. 1974, 75 (3), 153-157.

Bode, J. & Page, R. Comparison of measures of moral judgment. Psychological Reports, August 1978, 43 (1), 307-312.

Bradford, R. The special child in the regular classroom. Exceptional Children, 1973, 39 (5), 384-390.

Brooke, E. 94-142, Getting the money to make it work. Today's Education, Nov. 1977, 66 (4), 50-51.

Brown, F. Principles of educational and psychological testing. New York: Holt, Rinehart, and Winston, 1976.

Burrello, L. & Sage, D. Leadership and change in special education. Englewood Cliffs, N.J.: Prentice-Hall, 1979.

Byrne,D., London, O., & Reeves, K. The effects of physical attractiveness, sex, and attitude similarity on interpersonal attraction. Journal of Personality, 1968, 36, 259-271.

Cohen,S. Improving attitudes toward the handicapped. Education Digest, March 1978, 43 (7), 16-20.

Cohen, S. Improving attitudes toward the handicapped. In D. Smith (editor), The Classroom Teacher and the Special Child, Special Learning Corporation, 1980, 4-13.

Comer, R. C. & Piliavin, J.A. As others see us; attitudes of physicially handicapped and normals toward own and other groups. Rehabilition Literature, 1975, 36 (7),206-225.

Council on Interracial Books for Children, Inc., 1841 Broadway, New York, 10023.

Corrigan, D. Political and moral contexts that produced p.l. 94-142. Journal of Teacher Education, Nov.- Dec., 1978, 29 (6).

Costin, F. & Kerr, W.D. The effect of an abnormal psychology course on students' attitudes toward mental illness. Journal of Educational Psychology, 1962, 53 (5), 214-218.

Crockenberg, S. B. & Nicolayev, J. Stage transition in moral reasoning as related to conflict experienced in naturalistic settings. Merrill-Palmer Quarterly, July 1979, 25 (3), 185-192.

Davy, J. The social meaning of education. Teacher's College Record, Spring, 1980, 81 (3), 345-360.

Department of Health, Education, and Welfare. Education of handicapped children. Washington D.C.: Federal Register, August, 1977.

Donaldson, J. Changing attitudes toward handicapped persons: a review and analysis of research. Exceptional Children, April 1980, 46 (7), 504-513.

East, L. A mainstreaming success story. Today's Education, March 1976, 65 (4).

Edwards, A. Techniques of attitude scale construction, Englewood Cliffs, N.J.: Prentice-Hall, 1957.

Enright, R & Sutterfield, S. Treating the regular class in the mainstreaming process: increasing social cognitive development. Psychology in the Schools, January 1979, 16 (1), 110-118.

Evans, J. Changing attitudes toward disabled persons: experimental study. Rehabilitation Counseling Bulletin. June 1976, 19 (1), 573-587.

Ezekiel, M. & Fox, K. Methods of correlation and regression analysis. New York: John Wiley and Sons, 1959.

Fraenkel, J. Goals for teaching values and value analysis. Journal of Research and Development in Education. February 1980, 13 (2), 93-102.

Freeman, S. & Giebink, J. Moral judgment as a function of age, sex, and stimulus. The Journal of Psychology, June 1979, 102 (1), 43-47.

Gaddis, E. Teaching the slow learner in the regular classroom. Belmont, Calif.: Fearon Publ., 1971.

Galbraith, R E. & Jones, T. M. Moral reasoning, a teaching handbook for adapting Kolhberg to the classroom. Mpls., Minn.: Greenhaven Press Inc., 1976.

Gearheart, B. & Weishahn, M. The handicapped child in the regular classroom, Saint Louis, MO.: Mosby Co., 1976.

Gerler, E. Preventing the delusion of uniqueness: multimodal education in mainstreamed classrooms. Elementary School Journal, September 1979, 80 (1), 35-39.

Gillung, T. Labels and teacher's expectation. Exceptional Children, April 1977, 54 (7), 464-465.

Godejohn, C. J., Taylor, J., Muhlenkamp, A.F., & Bloesser, W. Effect of simulation gaming on attitudes toward mental illness. Nursing Research, 1975, 24 (5), 367-370.

Goldstein, K. & Blackman, S. Generalizations regarding deviant groups. Psychological Reports, 1975, 37, 278.

Golin, A.K. Stimulus variables in the measurement of attitudes toward disability. Rehabilitation Counseling Bulletin, 1970, 14 (1), 20-26.

Gottlieb, J. Improving attitudes toward retarded children by using group discussion. Exceptional Children. Oct. 1980, 47 (2), 220-229.

Greenwald, A. & Brock, T. Psychological foundations of attitudes, New York: Academic Press, 1969.

Griffen, G. Least restrictive environment: peer relations, assessing the state of the art. Paper presented at the annual meeting of the American Educational Research Association, N.Y., April 1977.

Grunwald, H. Cheers for the tutoring team. Life, March 1981, 4 (3), 116-120.

Hagerty, R. & Howard, T. (editors). How to make federal mandatory special education work for you. Springfield, Ill.: Charles Thomas, 1978.

Halloran, J.D. Attitude formation and change. Great Britain: Leicester University Press, 1967.

Handlers, A. & Austin, K. Improving attitudes of high school students toward their handicapped peers. Exceptional Children, Nov. 1980, 47 (3), 228-229.

Hartoonian, H. A disclosure approach to value analysis in social studies education: rationale and components. A paper presented at the third Annual Conference on Social Education and Social Science, Kellogg Center, Michigan State University, May 11 and 12, 1973.

Herlihy, J. & Herlihy, M. Mainstreaming in the social studies. Washington,D.C.: National Council for the Social Studies, 1980.

Higgs, R.W. Attitude formation, contact or information. Exceptional Children, 1971, 42 (4), 496-497.

Hinkle, D., Wiersma, W., & Jurs, S.G. Applied statistics for the behavioral sciences. Chicago, Ill.: Rand Mc-Nally College Publ., 1979.

Hollen, C. Attitude and value change, unpublished doctoral dissertation, Michigan State University, 1972.

Howe, C. Administration of special education. Denver, CO.: Love Publ. Co., 1981.

Hughes, R. L. & Casper, D. Implementing a moral education

program through attitude change theory. Clearing House, May 1979, 52 (9), 431-434.

Ingwell, R.H.,Thoreson, R. W., & Smits, S. S. Accuracy of social perception of physically handicapped and non-handicapped persons. In H.S. Moses and C.H. Patterson (eds.), Research Readings in Rehabilitation Counseling. Illinois: Stipes Publishing Co., 1973.

Johnson, D.W. & Johnson R. Mainstreaming: development of positive interdependence between handicapped and non-handicapped students. Mpls., Minn.: University of Minn. College of Education, 1978.

Jones, R. The hierarchical structure of attitudes toward the exceptional. Exceptional Children, March, 1974, 41 (6), 430-435.

Jones, T., Sowell, V., Jones, J., Butler, L. Changing children's perceptions of handicapped people. Exceptional Children, 1980, 47 (5), 365-368.

Kavanagh, E. A classroom teacher looks at mainstreaming. Elementary School Journal, March 1977, 77 (4), 317-320.

Keogh, B.K. & Levitt, M.L. Special education in the mainstream. Focus on Exceptional Children, Jan. 1976, 8 (1), 1-11.

Kleck, R., Buck, P.O., Goller, W.L., London, R.S., Pfeiffer, J.R. & Vukcevic, D.P. Effect of stigmatizing conditions on the use of personal space. Psychological Reports, 1968, 23, 111-118.

Kleck, R. Emotional arousal in interaction with stigmatized person. Psychological Reports, 1966, 19, 12-26.

Kohlberg, L. Development of moral character and moral ideology. In Hoffman, Martin and Goffman, Lois (eds.), Child Development Research. New York: Russell Sage Foundation, 1964, 383-431.

Kohlberg, L. Stage and Sequence: The cognitive-developmental approach to socialization. In Golin, David (ed.) Handbook of socialization theory and research. Chicago, Ill,: Rand McNally and Co., 1969.

Kohlberg, L. & Mayer, R. Development as the aim of education. Harvard Educational Review, Nov. 1972, 42 (4), 449-496.

Krathwohl, D. R., Bloom, B.S., Masia, B.B. Taxonomy of Education objectives, the classification of educational goals. New York: David McKay Co., 1956.

Krech, D., Crutchfield, R. & Ballachey, E. Individual in society, New York: McGraw-Hill Book Co., 1962.

Kurdek, L. Perspective taking as the cognitive basis of children's moral development: a review of the literature. Merrill-Palmer Quarterly, January 1978, 24 (1), 3-23.

Lamb, J. & Burrello, L. The role of the council of administrators of special education. Exceptional Children, Sept. 1979, 46 (1), 42-48.

Lemon, N. Attitudes and their measurement. London: B. T. Batsford, Ltd,1973.

Linsky, A.S. Why evaluate work conferences. Nursing Outlook, 1963, 11 (9), 656-659.

Lott, B.E. & Lott, A.J. The formation of attitudes toward group members. Journal of Abnormal and Social Psychology, 1960 61 (6), 297-300.

Magrab, P. & Elder, J. (editors). Planning services to handicapped persons. Baltimore, MD.: Paul Brookes Publ., 1979.

Markus, E. Mapping the social structure of a class: a practical instrument for assessing some effects of mainstreaming. The Journal of Special Education, fall 1980, 14 (3), 311-324.

Mattin, R., Shafto, M., & Van Deinse, W. The reliability, validity, and design of the defining issues test. Development Psychology, Sept. 1977, 13 (5), 460-468.

Martin, R. The teachers' right in p.l. 94-142. Journal for Learning Disabilities, June 1978, 11 (6), 331-333.

Martino L. & Johnson, D.W. The effects of cooperative v. individualistic instruction on interaction between normal progress and l.d. students. Journal of Social Psychology. 1979, 107, 177-183.

Mastroianni, M. & Dinkmeyer, D. Developing an interest in others through peer facilitation. Elementary School Guidance and Counseling, Feb. 1980, 14 (3), 214-221.

Matefy, R. & Acksen, B. The effect of role-playing discrepant positions on change in moral judgments and attitudes.

The Journal of Genetic Psychology. fall 1976, 128 (2), 189-200.

Moser, R. Theory and practice: a new e.r.a.? Theory into Practice, April 1977, 16 (2), 81-87.

N.E.A. Panel. Instruction and professional development committee, p.1 . 94-142 and teachers, Today's Education, Nov. 1977, 66 (4),57-60.

N.E.A. Panel. Update on education of the handicapped. Today's Education, Sept. 1978, 67 (3), 80-93.

Noffsinger, A. R. American and British nurses' attitudes toward disabled persons: the role of needs and moral reasoning (Doctoral dissertation, University of Kentucky, 1979). Dissertation Abstracts International, 1979, 64 64-5 30 30. (Abstract No.: 53030).

Nucci, L.P. Conceptual development in the moral and conventional domains: implications for values education. Review of Educational Research, Spring 1982, 52 (1), 93-122.

PA School Journal Excerpt. Education of the handicapped. Education Digest, March 1978, 43 (7), 12-15.

Palmertown, K.E. & Frumkin, R.M. College counselors' attitudes toward education considered a determinant of attitudes toward disabled persons. Perceptual and Motor Skill, 1969, 28 441-442.

Parish, T., Baker, S., Amheart, K., & Adamchak, P. Normal and exceptional children's attitudes toward themselves and one another. Journal of Psychology, March 1980, 104 (2), 249-253.

Pasanella, A. & Volkmor, C. Teaching handicapped students in the mainstream: coming back or never leaving. Columbus, OH.: Charles Merrill Publ., 1981.

Piaget, J. The moral judgment of the child, New York: Collier Books, 1962.

Pittel, S. & Mendelson, G. Measurement of moral values: a review and critique. Psychological Bulletin, July 1966, 66 (1), 25-35.

Poorman, C. Mainstreaming in reverse with a special friend. Teaching Exceptional Children, March 1980, 12 (7), 46-49.

Porter, N. & Taylor, N. How to assess the moral reasoning of students. Ontario, Canada: Institute for Studies in Education, 1972.

Powers, D. Secondary school mainstreaming and the educable mentally retarded. The Education Digest, March 1980, 45 (7), 46-49.

Rapier, J. Adelson, R., Carey, R. & Cooke, K. Changes in children's attitudes toward the physically handicapped. Exceptional Children, Sept. 1972, 39 (9), 229-233.

Rath, L.E., Harmin, M.& Simon, S.B. Values and teaching. Columbus, OH: Charles Merrill Publ. 1966.

Redl, F. & Wattenberg, W. Mental hygiene in teaching. New York: Harcourt, Brace and World Inc., 1959.

Rest, J. Defining issues test manual ,Mpls., Minn.: University of Minn. Press, 1979a.

Rest, J.R. Development in judging moral issues. Mpls, Minn.: University of Minn. Press, 1979.

Reynolds, M. Social environment of the schools: what research and experience say to the teacher of exceptional children, Nat'l. Inst. of Ed. Washington D.C., 400-76-C119, 1980.

Roe, R., publisher. Development of moral character. In Developmental Psychology Today, Del Mar, Calif.: C.R.M. Books, 1971.

Rosen, H. The development of socio-moral knowledge, a cognitive structural approach. New York: Columbia University Press, 1980.

Royer, J. Integrating the handicapped. Today's Education, Sept. 1977, 66 (3), 24.

Rucker, C. The participation of retarded children in junior high academic and non-academic classes. Exceptional children, 1969, 35, 617-623.

Sadlick, M. & Penta, F.B. Changing nurse's attitudes toward quadriplegics through use of television. Rehabilitation Literature, 1975, 36 (5), 274-278.

Sapon-Shevin, M. Another look at mainstreaming: exceptionality normality, and the nature of difference. Phi Delta Kappan, Oct. 1978, 60 (2), 119-121.

Sapon-Shevin, M. Mainstreaming: implementing the spirit of the law. Journal of Negro Education. Summer 1979, 48 (3), 364-381.

Sarason, S. B. & Doris, J. Educational handicap, public policy and social history. New York: The Free Press, 1979.

Sax, G. Principles of educational and psychological measurement and evaluation. Belmont, Calif.: Wadsworth Publ., 1980.

Schroedel, J. G. Attitudes toward persons with disabilities. Albertson, New York: Human Resources Center, 1979.

Schuessler, K. Analyzing social data, a statistical orientation. Boston: Houghton Mifflin Co., 1981.

Shaver, J. & Curtis, C. Handicappism and equal opportunity. Reston, VA.: foundation for exceptional children, 1981.

Shotel, J. Teacher attitudes associated with integration of handicapped. Exceptional Children, May 1972, 38 (9), 677-683.

Simon, S.B., Howe, L.W., & Kirschenbaum, H. Values clarification. New York: Hart Publ., 1972.

Simonson, M. Attitude measurement: why and how. Education Technology, Sept. 1979, 19 (9), 34-38.

Smith, D. & Larson, P. Adolescent attitudes toward disabled persons in an integrated and non-integrated school setting. Education, Summer 1980, 100 (4), 390-394.

Solomon, E. New York city's prototype school for education of the handicapped. Phi Delta Kappan, Sept. 1977, 59 (1), 609.

Spencer, M. Wheelchairs in a primary school. Special Education Forward Trends. March 1980, 7 (1), 18-20.

Stonehouse, C. Moral development: the process and the pattern. Counseling and Values, Oct. 1979, 24 (1), 2-9.

Stude, E. W. Evaluation of short-term training for rehabilitation counselors: Effectiveness of an institute on epilepsy. Rehabilitation Counseling Bulletin, 1973, 16 (3), 146-154.

Szilagyi, A.D. & Wallace, M. Organizational behavior and performance. Santa Monica, Calif.: Goodyear Publ., 1980.

Tracy, J. J. & Cross, H. J. Antecedents of shift in moral judgment. Journal of personality and social psychology, May 1973, 26 (2), 238-244.

Turiel, E. Social regulations and domains of social concepts. In Damon, W. (editor) New Directions for child development: San Francisco: JOsey Bass Publ., 1978.

Turnbull, A. & Schultz, J. Mainstreaming handicapped students: a guide for the classroom teacher. Boston, MA.: Allyn and Bacon, 1979.

Turnbull, R. & Turnbull, A. Free appropriate public education. law and implementation. Denver Co.: Love Publ., 1979.

Vander, C. J. Physiological measures as a means of assessing reactions to disabled. New Outlook for the Blind, 1976, 70 (3), 101-103.

Walker, L. Cognitive and perspective taking: prerequisites for moral development. Child Development, March 1980, 51 (2), 131-139.

Wheeless, L. R. Attitude and credibility in the prediction of attitude change: a regression appraoch. Speech Monographs, 1974, 41 (3), 277-281.

Yaffe, E. Experienced mainstreamers speak out, Teacher, Feb, 1979, 96 (6).

Yuker, H.E., Block, J.R., & Young, J.H. The attitudes toward disabled scale. New York: Human Resources Center, 1966.

APPENDIX

APPENDIX A

Original A.C.T.H. Instrument with Description of Action Choice Items and Responses

ACTION CHOICES TOWARD HANDICAPPED

Directions: Select the <u>one</u> response to each item that most closely represents your preferred choice. Answer all items. Thank-you for your assistance.

1. Handicapped students should be mainstreamed, i.e. attend classes with nonhandicapeed students because. . .
   ___ I would be reminded of how lucky I am .
   ___ there is a law requiring mainstreaming when possible.
   ___ handicapped students have an equal right to education.

2. Handicapped students should be mainstreamed if . .
   ___ they can keep up with the rest of the class.
   ___ they would benefit from it.
   ___ the school would lose money if they don't allow it.

3. Which of the following is the best reason for mainstreaming?
   ___ nonhandicapped students would have an opportunity to be nice to less fortunate people.
   ___ I would see what it would be like to be handicapped.
   ___ Handicapped and nonhandicapped can learn from each other.

4. Handicapped students should be mainstreamed if. .
   ___ they can learn more than they would in a seperate class.
   ___ the majority of the regular students want them in their class.
   ___ I would not lose any attention from the teacher.

5. Handicapped students should receive an education if. .
   ___ their families will pay the entire cost.
   ___ the community has a program they can fit into.
   ___ nonhandicapped students receive an education.

6. Handicapped students should receive an education . .
   ___ as described on an individual plan developed for them.
   ___ only if there are enough of them to make a class, and the school can find a willing teacher.
   ___ if they will be able to work as adults and pay back in taxes what it cost to educate them.

7. Who should decide whether handicapped students can attend public school?
   ___ parents of the handicapped, because they know their needs.
   ___ the superintendent, or highest authority at the school.
   ___ the school board, representing the community majority.

8. Handicapped students should receive an education . .
   ___ if the cost of their education won't take away money from regular students.
   ___ that is determined by their individual needs.
   ___ if their families pay any extra costs over an above what it costs to educate a regular student.

9. What type of instruction should a school provide for handicapped students?
   ___ whatever the principal assigns.
   ___ classes at a lower level of difficulty than regular students take, e.g. slower reading classes.
   ___ instruction in whatever areas the handicapped student needs.

10. Where should the money come from to pay for education of the handicapped?
   ___ the same places money comes from for regular students' education.
   ___ donations from concerned citizens, churches, service clubs, etc.
   ___ parents of the handicapped.

11. How should nonhandicapped people act toward handicapped people?
   ___ the same way they act toward anyone.
   ___ the way handicapped people act toward them.
   ___ they should be more patient and kind, make an extra effort to be nice.

12. If you see a handicapped person having trouble opening his locker at school . .
   ___ I would do nothing, as he should be helped by someone paid to do so.
   ___ I would do the same thing I'd do if I saw anyone having trouble with a locker.
   ___ I would help him if he was a personal friend.

13. If a community has only a set amount of money to spend on education, what students should have priority?
   ___ the students who show the most potential to become successful in life.
   ___ money should be distributed evenly, even if some students would not receive as many benefits as they would if they were prioritized.
   ___ the regular students who are not handicapped or gifted, because they represent the majority of students.

14. If the school board receives a gift of $1000, how should they spend it?
   ___ spend it so it is spread out to benefit all students a little.
   ___ spend it on the handicapped because they deserve it.
   ___ use it as a scholarship for the student with the most potential to become successful in life.

15. How would you decide whether to invite a handicapped person home for dinner?
___ I try to be nice to handicapped, so would make it a point to invite a handicapped person home.
___ I would invite the person home if my parents told me to.
___ I would decide to invite the person home on the same basis as I decide to invite anyone home.

16. A handicapped student should take a lab class only if . .
___ the lab has been previously equipped with special safety devices.
___ the person needs the lab class to meet individual goals.
___ I would not be distracted or hampered.

17. If a handicapped student needs a special tutor to understand the teacher. .
___ the school should provide one even if the tutor has to be hired.
___ one should be provided if the school already has a tutor available that isn't busy.
___ the school should provide one only if the superitendent decides to.

18. The funds spent for handicapped students. .
___ should be the same as what are spent on regular students
___ should be porportionate to their future ability to repay society by getting a job, voting, etc.
___ should be based on the needs of the handicapped, even if it costs more to educate the handicapped.

19. If a handicapped student can not finish all his assigned class work during the amount of time regular students take . .
___ he should be given a passing grade anyway if he tried hard.
___ the time should be extended if his handicap affected his ability to complete the work, otherwise he should be graded like others.
___ he should not have taken the class if he couldn't do the work.

20. Which handicapped students have a right to a free public education?
___ all.
___ only those reasonably expected to live independently some day.
___ the ones who can fit into classes offered by the community.

21. How should handicapped students be graded in a mainstreamed class?
___ in comparison to other students, if they are at the bottom of the class they should get the low grades.
___ in comparison to their own individual goals, if they accomplish their own goals they should get a high grade.
___ they should get a different grade. e.g. an "E" for effort

22. How should the decision be made as to how much money should be spent on a handicapped person's education?
___ according to how much is required to provide an optimum education.
___ according to how much is spent on regular students, i.e. spend the same.
___ according to how handicapped they are, there is more hope for less handicapped so they should receive more resources than hopeless cases.

23. What reading materials should be provided for a high school handicapped student?
___ materials normally used with younger students so they won't be too hard.
___ whatever materials the handicapped person or his/her family provides.
___ materials at his/her reading level.

24. What should a regular education teacher do if a handicapped student hits a nonhandicapped student in the mainstreamed classroom?
___ the same immediate procedure that is done with any student.
___ encourage the student to hit back so the handicapped student learns the consequences of hitting.
___ do not allow the handicapped person to remain in class.

25. A handicapped student should participate in athletics with nonhandicapped unless.
___ the teacher or coach doesn't allow it.
___ his/her handicap requires a modified physical education.
___ the student would be on a team that would have to compete against a team that had no handicapped members.

26. Handicapped people should live. .
___ away from nonhandicapped, and be taken care of by their families.
___ in groups where they can be taken care of by trained people.
___ in the regular community whenever possible.

27. If a group home for eight handicapped adults is being built in a community, where should it be located?
___ outside of the regular residential area.
___ in the regular residential area.
___ the town members should vote on where they want it located.

28. Who should be primarily responsible for handicapped adults who can not support themselves?
___ society .
___ the handicapped persons' families.
___ charitable organizations.

29. Who should decide if a handicapped person can live next door to you?
___ the handicapped person who would live there.
___ I should if I would have to live next door to the.handicapped person.
___ the majority vote of my entire neighborhood.

30. If a handicapped person applied for a job that would require modifying the work area before she could do the job. . .
___ she should get the job anyway because handicapped people have been discriminated against too long.
___ she should not be considered for the job.
___ she should be hi if she is the best candidate, and modifications made at the expense of the company.

31. Handicapped children should begin school before age five if. .
___ their parents pay for it.
___ the school provides early childhood education for all students.
___ they need early childhood education to meet individual needs.

32. A handicapped worker who works up to his capacity, but is still not able to produce as much as nonhandicapped workers at the same Company should be paid. .
___ minimum wage.
___ the same salary as other workers.
___ whatever portion of the regular salary their production represents e.g.if they do half the work they should get half as much pay.

33. If a college student is qualified, and wants to take a class that meets in a building she is unable to get into because of her handicap. . .
___ the building should be modified at the expense of the college.
___ classmates should be assigned to carry the student into the building.
___ the student should take another class.

DESCRIPTION OF ACTION CHOICE ITEMS

Item	Response	Moral Judgment Represented	Characteristic(s) of level represented
1	I would be reminded of how lucky I am	pre-conventional	obsession with self, understands others only in relation to self
	there is a law requiring..	conventional	right is defined by what laws and rules say is right
	handicapped students have an equal. .	principled	rights are non-discriminatory
2	they can keep up with. .	conventional	the majority should benefit, regardless of the minority
	they would benefit from it	principled	each person's interest should be maximized, equal access to pursuit of happiness.
	the school would lose money. .	pre-conventional	one should do what brings freedom from punishment
3	nonhandicapped students would...	conventional	nice people are charitable
	I would see what it would be like..	pre-conventional	obsession with self-gain, interested in what "I" would gain from the exchange
	handicapped and nonhandicapped..	principled	true reciprocity is interested in maximizing benefits to all parties, cooperation, equality
4	they can learn more than. .	principled	maximixe each persons' interests
	the majority of the students. .	conventional	the majority will prevails, it is up to the majority to distribute benefits to minority groups

	I would not lose..	pre-conventional	obsession with self-interest, interested in absolute exchanges where "I" don't lose anything
5	their families pay. .	pre-conventional	minority have no rights other than what they pay for, absolute exchange, material worth determines the value of people
	the community has a program	conventional	society determines the rules and provides benefits to members as majority or ruling party dictates, services to minority are charitable
	nonhandicapped students receive..	principled	rights are non-arbitrary
6	as described on an individual..	principled	maximize individual interests majority will prevails, any service provided to minority are charitable
	if they will be able to work. .	pre-conventional	the value of a person is based on their material worth, cooperation is a matter of "an eye for an eye"
7	parents of the handicapped	principled	each person participates in decisions affecting him/herself
	the superintendent. .	pre-conventional	right is what the immediate authority figure dictates
	the school board. .	conventional	the majority leaders, respresenting the majority have a right to establish binding laws all must abide by
8	if the cost..	conventional	majority should benefit, regardless of the minority

	that is determined by individual..	principled	each person's interests should be maximized
	if their families pay. .	pre-conventional	an individual's value is determined by their worth, absolute exchange
9	whatever the principal assigns	pre-conventional	obedience to known authority figure
	classes at a lower level. .	conventional	nice people are charitable to people less fortunate
	instruction in whatever. .	principled	each person's interests should be maximized
10	the same places money. .	principled	equal consideration for all
	donations from concerned. .	conventional	nice people are charitable to less fortunate people
	parents of the handicapped	pre-conventional	absolute exchange, value determined by worth
11	the same way they act. .	principled	equal consideration for all
	the way handicapped people act..	pre-conventional	cooperation only if both parties gain by exchange, "eye for an eye"
	they should be more patient. .	conventional	"nice" person orientation, benevolent charity
12	I would do nothing. .	pre-conventional	absolute exchange, "let's make a deal" cooperation only if both parties benefit
	I would do the same thing. .	principled	equal consideration for all
	I would help him if. .	conventional	understands interests of people in close association, e.g. friends
13	the students who show the most. .	pre-conventional	a person's value is determined by their material, or potential material worth
	money should be distributed evenly..	principled	no one should receive benefits at the expense of others
	the regular students. .	conventional	maximize the benefits of the majority

14	spend it so it is spread out. .	principled	each person's interests should be maximized
	spend it on the handicapped. .	conventional	benevolent charity is what "nice" people do
	use it as a scholarship. .	pre-conventional	a person's value is determined by their material, or potential material worth
15	I try to be nice. .	conventional	benevolent charity is nice
	I would invite, if parents, ,	pre-conventional	good is what the immediate authority figure demands
	I would decide. on the same basis..	principled	equal consideration for all
16	the lab has previously. .	conventional	minority groups must fit into majority conventions if they are to receive benefits
	the person needs the lab class. .	principled	each person's interests should be maximized
	I would not be distracted. .	pre-conventional	obsessed with self-interest, will cooperate only if "I" gain from it
17	the school should provide. .	principled	maximize each person's interests, equal resources do not assure equal access
	one should be provided if. .	conventional	minority groups must fit into majority conventions if they are to receive benefits
	the school should. if super..	pre-conventional	right is what the immediate authority figure dictates
18	should be the same. .	conventional	society determines an absolute equal reward for members, minority must fit in if they are to receive benefits
	should be proportionate. .	pre-conventional	a person's value is based on their material worth

	should be based on the needs. .	principled	each person's interest should be maximized, equal resources do not assure equal opportunity
19	he should be given a passing. .	conventional	benevolent charity is nice
	the time should be extened if. .	principled	extenuating circumstances considered in making judgment
	he should not have taken. .	pre-conventional	absolute justice
20	all.	principled	nonarbitrary distribution of rights
	only those reasonably expected. .	pre-conventional	person's value based on material worth
	the ones who fit into. .	conventional	minority groups must fit into what the majority establishes if they are to receive benefits
21	in comparison to other students. .	pre-conventional	absolute justice
	in comparison to their own goals. .	principled	individual worth, each person should develop to their fullest potential, a person's worth is not determined by a comparison to others
	they should get a different grade. .	conventional	benevolent charity is nice
22	according. . optimum edication. .	principled	each person's interests should be maximized, equal resources do not assure equal opportunity
	according. . spend on regular. .	conventional	society determines an equal reward for members
	according. . how handicapped. .	pre-conventional	a person's value is determined by their material worth
23	materials, younger children..	conventional	benevolent charity is nice

	. . materials family provides. .	pre-conventional	each person pays their own way
	materials at. . level	principled	each person's interests should be maximized
24	the same immediate procedure. .	principled	equal consideration, no one should receive advantages at the expense of others
	encourage. . hit back. .	pre-conventional	punishment fits the crime
	do not allow. .	conventional	those who do not fulfill standard expectations do not deserve benefits
25	the teacher or coach doesn't. .	pre-conventional	right is what the immediate authority figure or caretaker dictates
	his/her handicap . .	principled	each person's interests should be maximized
	the student would be on a team. .	conventional	the interests of the majority prevail benefits are extended to the minority only so far as they do not hamper interest of the majority
26	away from non-handicapped. .	pre-conventional	each to his/her own
	in groups where they can be. .	conventional	benevolent charity is nice
	in the regular community. .	principled	non-arbitrary social interaction, all humans are of equal value
27	outside of the regular. .	pre-conventional	each to his/her own
	in the regular residential area.	principled	non-arbitrary social interaction
	the town members should vote. .	conventional	majority will prevails over interests of minority
28	society.	principled	all humans bear a responsibility to each other
	the handicapped person's family	pre-conventional	everyone must pay their own way, bear their own burden
	charitable organizations	conventional	benevolent charity is nice

29	the handi-capped person. .	principled	each person participates in decision-making affecting him/herself
	I should if I would have to live. .	pre-conventional	self-interest prevails
	the majority vote. .	conventional	the majority has more right to benefit than the minority
30	she should get the job. .	conventional	benevolent charity is nice
	she should not be considered. .	pre-conventional	the authority figure should not have to compromise for the benefit of minority
	she should be hired if. .	principled	equal consideration, maximize all
31	their parents say for it	pre-conventional	absolute cooperation
	the school provides. .	conventional	minority groups must fit into what prevails if they are to receive benefits
	they need. .	principled	equal resources do not assure equal opportunity, maximize each person's interest, development of all to potential
32	minimum wage.	conventional	society has the right to establish minimal obligations to members
	the same salary	principled	each person's interests should be maximized, peoples' value not determined by material worth
	whatever portion. .	preconventional	absolute exchange
33	the building should be modified. .	principled	non-arbitrary distribution of rights, maximize interests of all
	classmates.. carry the student..	conventional	benevolent charity is nice
	the students should take. .	pre-conventional	inability to assume another's perspective

APPENDIX B

First Field Test A.C.T.H. Instrument with Modified Directions

ACTION CHOICES TOWARD HANDICAPPED

Directions: Select the one response to each item that you feel is the most socially acceptable. Answer all items.

1. Handicapped students should be mainstreamed, i.e. attend classes with nonhandicapped students because . . .
   ___ I would be reminded of how lucky I am not to be handicapped.
   ___ there is a law requiring mainstreaming when possible.
   ___ handicapped students have an equal right to education.

2. Handicapped students should be mainstreamed if . .
   ___ they can keep up with their classmates.
   ___ they would benefit from it.
   ___ the school would lose money if they broke a law by not allowing mainstreaming.

3. Which of the following is the best reason for mainstreaming?
   ___ nonhandicapped students would have an opportunity to be nice to less fortunate people.
   ___ I could see what it would be like to be handicapped.
   ___ Handicapped and nonhandicapped can learn from each other.

4. Handicapped students should be mainstreamed if. .
   ___ they can learn more than they would in a seperate class.
   ___ the majority of the regular students want them in their class.
   ___ I would not lose any attention from the teacher.

5. Handicapped students should receive an education if . .
   ___ their families pay the entire cost.
   ___ the community has a program they can fit into.
   ___ they can benefit from it.

6. Handicapped students should receive an education . .
   ___ as described on an individual plan developed for them.
   ___ only if there are enough of them to make a class, and the school can find a willing teacher.
   ___ if they will be able to work as adults and pay back in taxes what it cost to educate them.

7. Handicapped students should receive a public education. .
   ___ if the cost won't take money away from regular students.
   ___ that is determined by their individual needs.
   ___ only if a law requires it.

8. How should nonhandicapped people act toward handicapped people?
   ___ the same way they act toward anyone.
   ___ the way handicapped people act toward them.
   ___ they should be more patient and kind, make an extra effort to be nice.

9. What areas of instruction should a school provide for handicapped students?
___ whatever the principal assigns because he is the authority.
___ classes at a lower level of difficulty, e.g. slow reading classes.
___ instruction in whatever areas the handicapped student needs.

10. Where should the money come from to pay for public education of handicapped?
___ the same places as for regular students' education because the handicapped have an equal right to education.
___ donations from charitable people and organizations, e.g. churches.
___ parents of the handicapped because they are responsible for them.

11. If you see a handicapped person having trouble opening his locker . .
___ do nothing, as he should be helped by someone paid to do so.
___ do the same thing as for anyone having trouble with their locker.
___ help him if he is a personal friend.

12. If a community has only a set amount of money to spend on education, what students should have priority?
___ the students who show the most potential to become financially successful in life.
___ distribute the money so that those needing the most receive the most.
___ the regular students because they represent the majority.

13. If the school board receives a gift of $1000, how should they spend it?
___ Spend it on students who need extra funding for an optimum education.
___ Spend it on the handicapped because they deserve it.
___ Use it as a scholarship for the student most likely to become financially successful and a leading community member.

14. How would you decide whether to invite a handicapped person home?
___ I would invite them home to make it a point to be nice.
___ I would invite them home if my parents asked me to.
___ I would decide on the same basis as inviting anyone home.

15. A handicapped student should take a lab class . .
___ only if the lab was previously equipped with safety devices.
___ if the student needs the class, and it should then be modified if necessary for the student's optimum participation.
___ if the regular class members would not be hampered or distracted.

16. The funds spent on handicapped students . .
___ should be the same as what are spent on regular students.
___ should depend on their future ability to repay society by working.
___ should be based on their needs even if it costs more then regular education costs.

17. If a handicapped student needs a special tutor to understand the teacher. .
___ the school should provide one even if the tutor has to be hired.
___ one should be provided by the school if one is already employed that isn't busy.
___ the school should provide one if the superintendent decides to.

18. If a handicapped student cannot finish all his assigned class work during the amount of time regular students take . .
___ he should be given a passing grade anyway if he tried hard.
___ the time should be extended if his handicap affected his ability to complete the work on time.
___ he should not have taken the class if he can't do the work.

19. Which handicapped students should have a right to a free public education?
___ all handicapped students.
___ only those reasonably expected to live independently some day.
___ the ones who can fit into classes offered by the community.

20. How should classes containing mainstreamed students be graded?
___ on a normal curve, top students get A's, low students get F's.
___ students should be graded according to whether they reached their individual goals even if everyone receives the same grade.
___ the handicapped should get a different grade, e.g. an E for effort.

21. How should the decision be made as to how much money to spend on education for the handicapped?
___ according to how much is required to provide an optimum education.
___ according to how much is spent on regular students, i.e. spend the same.
___ according to how handicapped they are, there is more hope for less handicapped so they should receive more resources than hopeless cases.

22. What reading materials should be provided for high school handicapped students?
___ the district should provide low reading level materials.
___ whatever materials the handicapped person or his family provides.
___ the district should provide materials at his level.

23. What should the teacher do if a mainstreamed handicapped students hits another student?
___ It depends on the circumstances.
___ Encourage hitting back to teach the student the consequences.
___ Do not allow the handicapped student to remain in class.

24. A handicapped student should participate in athletics with nonhandicapped unless . .
___ the teacher or coach doesn't allow it.
___ his/her handicap requires modified physical education.
___ the student would be on a team competing against a team that had no handicapped members.

25. Handicapped people should live. .
___ away from nonhandicapped and be taken care of by their families.
___ in groups so they can be taken care of by trained people.
___ in the regular community whenever possible.

26. Where should a group home for handicapped adults be located?
___ outside of a regular residential community.
___ within a regular residential community.
___ it should depend on where the majority of community members want it to be located.

27. Who should be responsible for non-independent handicapped adults?
___ society because we have a responsibility to each other.
___ families of the handicapped because it is a personal problem.
___ charitable organizations because that is their purpose.

28. Who should decide if a handicapped person can live next door to you?
___ the handicapped person who would live there.
___ I should if I would be the one living next door to the person.
___ the majority vote of the entire neighborhood.

29. If a handicapped person applied for a job that would require modifications to the work area before she could do the job. .
___ she should get a different job not requiring modifications.
___ she should not be considered for any job with the company.
___ she should be hired if she is the best candidate, and modifications made at the expense of the company.

30. Handicapped children should begin school before age five . .
___ only if their parents pay for it.
___ at public expense if all children receive early education.
___ at public expense if they need it to meet individual needs.

31. A handicapped worker who works up to his capacity, but is still not able to produce as much as nonhandicapped workers at the factory . .
___ should be paid minimum wage.
___ should receive the same salary as other workers.
___ should be paid on piece rate rather than salary as other workers are paid.

32. If a college student is qualified, and wants to take a class that meets in a building she is unable to get into because of her handicap. .
___ the building should be modified at the expense of the college because the student has an equal right to take the class.
___ classmates should be assigned to carry the student to class.
___ the student should take another class because her problem is not the fault of the college or other students.

APPENDIX C

Second Field Test A.C.T.H. Instrument

ACTION CHOICES TOWARD HANDICAPPED

Directions: Select the one response to each item that most closely represents your preferred choice. There is no right or wrong answer. Answer all items. Thank-you for your participation.

1. Handicapped students should be mainstreamed, i.e. attend classes with nonhandicapped students because . . .
   ___ I would be reminded of how lucky I am not to be handicapped.
   ___ there is a law requiring mainstreaming when possible.
   ___ handicapped students have an equal right to an optimum education.

2. Handicapped students should receive an education if . . .
   ___ their families pay the cost.
   ___ the community has an educational program they can fit into.
   ___ they can benefit from it.

3. Who should decide if a handicapped person can live next door to you?
   ___ the handicapped person who would live there.
   ___ I should if I would be the one living next door to the person.
   ___ the majority vote of the entire neighborhood.

4. Handicapped students should be mainstreamed if . . .
   ___ they could keep up with their regular education classmates.
   ___ they would benefit from it.
   ___ the school would lose money if they broke a law by not allowing mainstreaming.

5. A handicapped student should take a lab class. . .
   ___ only if the lab had previously been equipped with safety devices.
   ___ if the student needs the class, and it should then be modified if necessary at the school's expense.
   ___ if the regular class members would not be hampered or distracted.

6. Handicapped students should receive a public education . . .
   ___ if the cost won't take money away from regular students.
   ___ that is determined by their individual needs.
   ___ only if the law required it.

7. If a handicapped student in a regular class needs a tutor to understand the teacher. . .
   ___ the school should provide one even if the tutor has to be hired.
   ___ one should be provided by the school if one is already employed that is available.
   ___ the student should be moved to a special class.

8. If a handicapped person applied for a job that would require modifications to the work area before she could do the job. . .
   ___ she should be given a different job with the Company that doesn't require changes.
   ___ she should not be considered for any job with the Company.
   ___ she should be hired if she is the best candidate, and modifications made at the expense of the Company.

9. Handicapped students should be mainstreamed if. . .
   ___ they could learn more than they would in a seperate class.
   ___ the majority of the regular students want them in their class.
   ___ I would not lose any attention from the teacher.

10. What areas of instruction should a school provide for handicapped students?
    ___ whatever the principal assigns because he is the authority.
    ___ classes at a lower level of difficulty, e.g. slow reading classes.
    ___ instruction in whatever areas the handicapped student needs.

11. Handicapped children should begin school before age five. . .
    ___ only if their parents pay for it.
    ___ at public expense if all children receive early education.
    ___ at public expense if they need it to meet individual needs.

12. If the school board receives a gift of $1000, how should they spend it?
___ spend it on students who need extra funding for an optimum education.
___ spend it on the handicapped because they deserve it.
___ use it as a scholarship for the student most likely to become financially successful and a leading community member.

13. Where should a home in which six nonrelated handicapped adults lived with a caretaker be located?
___ outside of a regular residential community.
___ within a regular residential community.
___ it would depend on where the majority of the community members wanted it to be.

14. How should classes containing mainstreamed students be graded?
___ on a normal curve, top students get A's, low students get F's.
___ students should be graded according to whether they reached their individual goals.
___ the handicapped should get a different type of grade, e.g. an "E" for effort.

15. Which handicapped students should have a right to a free public education?
___ all handicapped students.
___ only those who would benefit from it by being able to be independent some day.
___ the ones who could fit into classes offered by the community.

16. If a community had only a set amount of money to spend on education, what students should have priority?
___ the students who show the most potential to become leading community members.
___ the regular students because they represent the majority.
___ distribute the money so that those needing the most receive the most.

17. If a handicapped student cannot finish all his assigned class work during the amount of time regular students take in a mainstreamed class. . .
___ he should be given a passing grade anyway if he tried hard.
___ the time should be extended if his handicap affected his ability to complete the work.
___ he should not have taken the class if he can't do the work .

18. Who should be primarily responsible for non-independent handicapped adults?
___ society because we have a responsibility to each other.
___ families of the handicapped because it is a personal problem.
___ charitable organizations because that is their purpose.

19. How should the decision be made as to how much money to spend on education of handicapped?
___ according to how much is required to provide an optimum education?
___ according to how much is spent on regular students, i.e. spend the same.
___ according to how handicapped they are, i.e. spend less on the hopeless cases.

20. A handicapped worker who works up to his capacity, but is still not able to produce as much as nonhandicapped workers at a public service job. . .
___ should be paid minimum wage regardless of other employees salary.
___ should receive the same salary as other workers.
___ should be paid piece rate rather than salary as other workers are paid.

21. The funds spent on handicapped students. . .
___ should be the same as what are spent on regular students.
___ should depend on their future ability to repay society by working.
___ should be based on their needs even if it costs more than regular education costs.

APPENDIX D

Defining Issues Test

Verbal Instruction to Subjects

and

Instrument

VERBAL INSTRUCTIONS TO SUBJECTS

Put the last three numbers of your telephone number on both tests by "identification number."

Answer the remainder of the questions in the first block of the Defining Issues Test.

(allow approximately two minutes)

These questionnaires, the Defining Issues Test and Action Choices Toward Handicapped, ask your opinion about controversial social issues. the first questionnaire asks your opinion about a variety of social issues. The second asks your opinion about issuses involving the handicapped.

Look at the first questionnaire, the Defining Issues Test. there are six stories involving decisions to be made about a social situation. Following each story are issues that a person might consider in making the decision. After reading each story you are to read each issue and rate its importance as a consieration in making the decison. After rating each issue in importance, you are to select the four most important issues.

Look at the sample story.
Read it on your own.

(allow approximately one minute)

Now look at the six issues. Each issue is to be rated in terms of its importance in making a decision about buying a car. The issues have been rated as one person may rate them. Read through the issues and reasoning rated as one person may rate them. Read trhough the issues and reasoning that person used for marking them as they are. Note that there will be issues that may not be comprehended or may sound like gibberish. These should be rated as no importance.

(allow approximately two minutes)

After rating the issues, the last task is to select the four most important issues. Your top choices should be those you rated as having the most importance. For example, issues two and five were rated as having great importance in deciding whether to buy a car, and thus were ranked most and second most important.

Remember, following each story, the issues are to be rated and then ranked in terms of how important that issue is in making the decision discussed in the story.

Look at the second questionnaire, the Action Choices Toward Handicapped. You are asked to choose the one response to each item that most closely represents your preferred choice.

Answer all items on both questionnaires. Your answers are confidential. Turn both questionnaires in together.

DEFINING ISSUES TEST

This questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to math problems. We would like you to tell us what you think about several problem stories. The papers will be fed to a computer to find the average for the whole group, and no one will see your individual answers.

Please give us the following information:

Identification Number: _____

Age: _____ Sex: _____

Class enrolled in when completing questionaires: _____

_____

Is there a member of your immediate family (parent, child, sibling) who is handicapped? _____

Do you have any close friends who are handicapped? _____

Have you ever taken any classes in which a handicapped person was enrolled? _____

What is your major? _____

SAMPLE

* * * * * * * *

In this questionnaire you will be asked to give your opinions about several stories. Here is a story as an example.

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family's only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realized that there were a lot of questions to consider. Below there is a list of some of these questions.

If you were Frank Jones, how important would each of these questions be in deciding what car to buy?

Instructions for Part A: (Sample Question)

On the left hand side check one of the spaces by each statement of a consideration. (For instance, if you think that statement #1 is not important in making a decision about buying a car, check the space on the right.)

IMPORTANCE:

Great	Much	Some	Little	No	
				✓	1. Whether the car dealer was in the same block as where Frank lives. (Note that in this sample, the person taking the questionnaire did not think this was important in making a decision.)
✓					2. Would a used car be more economical in the long run than a new car. (Note that a check was put in the far left space to indicate the opinion that this is an important issue in making a decision about buying a car.)
		✓			3. Whether the color was green, Frank's favorite color.
				✓	4. Whether the cubic inch displacement was at least 200. (Note that if you are unsure about what "cubic inch displacement" means, then mark it "no importance.")
✓					5. Would a large, roomy car be better than a compact car.
				✓	6. Whether the front connibilies were differential. (Note that if a statement sounds like gibberish or nonsense to you, mark it "no importance.")

Instructions for Part B: (Sample Question)

From the list of questions above, select the most important one of the whole group. Put the number of the most important question on the top line below. Do likewise for your 2nd, 3rd and 4th most important choices. (Note that the top choices in this case will come from the statements that were checked on the far left-hand side--statements #2 and #5 were thought to be very important. In deciding what is the most important, a person would re-read #2 and #5, and then pick one of them as the most important, then put the other one as "second most important," and so on.)

MOST	SECOND MOST IMPORTANT	THIRD MOST IMPORTANT	FOURTH MOST IMPORTANT
5	2	3	1

STUDENT TAKE-OVER

At Harvard University a group of students, called the Students for a Democratic Society (SDS), believe that the University should not have an army ROTC program. SDS students are against the war in Viet Nam, and the army training program helps send men to fight in Viet Nam. The SDS students demanded that Harvard end the army ROTC training program as a university course. This would mean that Harvard students could not get army training as part of their regular course work and not get credit for it towards their degrees.

Agreeing with the SDS students, the Harvard professors voted to end the ROTC program as a university course. But the President of the University stated that he wanted to keep the army program on campus as a course. The SDS students felt that the President was not going to pay attention to the faculty vote or to their demands.

So, one day last April, two hundred SDS students walked into the university's administration building, and told everyone else to get out. They said they were doing this to force Harvard to get rid of the army training program as a course.

Should the students have taken over the administration building? (Check one)

__Yes, they should take it over ___ Can't decide ____No, they shouldn't take it over

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Are the students doing this to really help other people or are they doing it just for kicks?
					2. Do the students have any right to take over property that doesn't belong to them?
					3. Do the students realize that they might be arrested and fined, and even expelled from school?
					4. Would taking over the building in the long run benefit more people to a greater extent?
					5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.
					6. Will the takeover anger the public and give all students a bad name?
					7. Is taking over a building consistent with principles of justice?
					8. Would allowing one student take-over encourage many other student take-overs?
					9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative?
					10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
					11. Are the students following principles which they believe are above the law?
					12. Whether or not university decisions ought to be respected by students.

From the list of questions above, select the four most important:

Most Important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (Check one)

_____ Should steal it _____ Can't decide _____ Should not steal it

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Whether a community's laws are going to be upheld.
					2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
					3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
					4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.
					5. Whether Heinz is stealing for himself or doing this solely to help someone else.
					6. Whether the druggist's rights to his invention have to be respected.
					7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
					8. What values are going to be the basis for governing how people act towards each other.
					9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
					10. Whether the law in this case is getting in the way of the most basic claim of any member of society.
					11. Whether the druggist deserves to be robbed for being so greedy and cruel.
					12. Would stealing in such a case bring about more total good for the whole society or not.

From the list of questions above, select the four most important:

Most important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison? (Check one)

_____ Should report him _____ Can't decide _____ Should not report him

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
					2. Everytime someone escapes punishment for a crime, doesn't that just encourage more crime?
					3. Wouldn't we be better off without prisons and the oppression of our legal systems?
					4. Has Mr. Thompson really paid his debt to society?
					5. Would society be failing what Mr. Thompson should fairly expect?
					6. What benefits would prisons be apart from society, especially for a charitable man?
					7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
					8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
					9. Was Mrs. Jones a good friend of Mr. Thompson?
					10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
					11. How would the will of the people and the public good best be served?
					12. Would going to prison do any good for Mr. Thompson or protect anybody?

From the list of questions above, select the four most important:

Most Important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

THE DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway.

What should the doctor do? (Check one)

_____ He should give the lady an overdose that will make her die

_____ Can't decide

_____ Should not give the overdose

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Whether the woman's family is in favor of giving her the overdose or not.
					2. Is the doctor obligated by the same laws as everybody else if giving her an overdose would be the same as killing her.
					3. Whether people would be much better off without society regimenting their lives and even their deaths.
					4. Whether the doctor could make it appear like an accident.
					5. Does the state have the right to force continued existence on those who don't want to live.
					6. What is the value of death prior to society's perspective on personal values.
					7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
					8. Is helping to end another's life ever a responsible act of cooperation.
					9. Whether only God should decide when a person's life should end.
					10. What values the doctor has set for himself in his own personal code of behavior.
					11. Can society afford to let everybody end their lives when they want to.
					12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live.

From the list of questions above, select the four most important:

Most Important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster himself didn't have anything against Orientals, he was afraid to hire Mr. Lee because many of his customers didn't like Orientals. His customers might take their business elsewhere if Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee.

What should Mr. Webster have done? (Check one)

_____ Should have hired Mr. Lee _____ Can't decide _____ Should not have hired him

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Does the owner of a business have the right to make his own business decisions or not?
					2. Whether there is a law that forbids racial discrimination in hiring for jobs.
					3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
					4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.
					5. What individual differences ought to be relevant in deciding how society's roles are filled?
					6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
					7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
					8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
					9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
					10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
					11. Whether the Christian commandment to love your fellow man applies in this case.
					12. If someone's in need, shouldn't he be helped regardless of what you get back from him?

From the list of questions above, select the four most important:

Most Important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

NEWSPAPER

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the war in Viet Nam and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

Should the principal stop the newspaper? (Check one)

_____ Should stop it _____ Can't decide _____ Should not stop it

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Is the principal more responsible to students or to the parents?
					2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?
					3. Would the students start protesting even more if the principal stopped the newspaper?
					4. When the welfare of the school is threatened, does the principal have the right to give orders to students?
					5. Does the principal have the freedom of speech to say "no" in this case?
					6. If the principal stopped the newspaper would he be preventing full discussion of important problems?
					7. Whether the principal's order would make Fred lose faith in the principal.
					8. Whether Fred was really loyal to his school and patriotic to his country.
					9. What effect would stopping the paper have on the student's education in critical thinking and judgments?
					10. Whether Fred was in any way violating the rights of others in publishing his own opinions.
					11. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
					12. Whether Fred was using the newspaper to stir up hatred and discontent.

From the list of questions above, select the four most important:

Most Important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

APPENDIX E

Attitudes Toward Disabled Persons Scale

ATDP - FORM O

No._____ 3-9/10/57

ATDP SCALE

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3 or -1, -2, -3: depending on how you feel in each case.

+3: I AGREE VERY MUCH	-1: I DISAGREE A LITTLE
+2: I AGREE PRETTY MUCH	-2: I DISAGREE PRETTY MUCH
+1: I AGREE A LITTLE	-3: I DISAGREE VERY MUCH

_____ 1. Parents of disabled children should be less strict than other parents.

_____ 2. Physically disabled persons are just as intelligent as non-disabled ones.

_____ 3. Disabled people are usually easier to get along with than other people.

_____ 4. Most disabled people feel sorry for themselves.

_____ 5. Disabled people are the same as anyone else.

_____ 6. There shouldn't be special schools for disabled children.

_____ 7. It would be best for disabled persons to live and work in special communities.

_____ 8. It is up to the government to take care of disabled persons.

_____ 9. Most disabled people worry a great deal.

_____ 10. Disabled people should not be expected to meet the same standards as non-disabled people.

_____ 11. Disabled people are as happy as non-disabled ones.

_____ 12. Severely disabled people are no harder to get along with than those with minor disabilities.

_____ 13. It is almost impossible for a disabled person to lead a normal life.

_____ 14. You should not expect too much from disabled people.

_____ 15. Disabled people tend to keep to themselves much of the time.

_____ 16. Disabled people are more easily upset than non-disabled people.

_____ 17. Disabled persons cannot have a normal social life.

_____ 18. Most disabled people feel that they are not as good as other people.

_____ 19. You have to be careful of what you say when you are with disabled people.

_____ 20. Disabled people are often grouchy.

APPENDIX F

Item Analysis

ITEM ANALYSIS

Part I. Graphic Representation

A graphic representation of the percentage of high and low subjects on the A.C.T.H. selecting each of the three responses to each item was utilized. The high group consisted of the top 53 scores, and the low consisted of the 60 students who scored lower than the high group on the ACTH. The items were analyzed to determine if a larger percentage of high scorers chose the principled response, and a larger percentage of low scorers chose the preconventional response on each item.

The results are as follows:

Item:	Response Weighted:	% of low group selecting:	% of high group Selecting:
1.	3 (principled)	83	96
	2 (conventional)	10	2
	1 (preconventional	5	2
2.	3	70	90
	2	22	9
	1	3	0
3.	3	93	100
	2	5	0
	1	2	0
4.	3	78	92
	2	8	2
	1	12	6
5.	3	80	90
	2	18	9
	1	2	0

19.	3	75	90
	2	8	6
	1	17	4
20.	3	38	77
	2	15	4
	1	45	19
21.	3	42	90
	2	45	6
	1	13	4
22.	3	93	96
	2	3	0
	1	3	4
23.	3	95	92
	2	0	0
	1	3	4
24.	3	68	88
	2	13	4
	1	13	11
25.	3	72	98
	2	10	2
	1	2	0
26.	3	77	94
	2	22	6
	1	2	0
27.	3	58	73
	2	18	13
	1	23	13
28.	3	80	94
	2	12	6
	1	7	0
29.	3	67	94
	2	12	4
	1	2	2
30.	3	43	73
	2	37	23
	1	17	4
31.	3	30	57
	2	13	4
	1	52	38

6.	3	75	86
	2	3	0
	1	22	11
7.	3	72	98
	2	2	0
	1	25	2
8.	3	73	79
	2	17	15
	1	10	6
9.	3	88	100
	2	8	0
	1	2	0
10.	3	90	94
	2	8	6
	1	2	0
11.	3	97	98
	2	2	2
	1	2	0
12.	3	65	90
	2	25	9
	1	8	0
13.	3	70	90
	2	2	6
	1	25	4
14.	3	95	100
	2	3	0
	1	2	0
15.	3	62	88
	2	17	6
	1	20	6
16.	3	32	84
	2	60	15
	1	7	0
17.	3	40	69
	2	45	27
	1	12	2
18.	3	77	96
	2	8	2
	1	15	2

32.	3	73	88
	2	13	9
	1	10	2

Part II. Correlation Coefficients

The Correlation Coefficient between selection of the principled response for each item and the total scores was also determined. For this correlation, the top quartile and low quartile of total ACTH scores was used. The item correlations were as follows.

1	.58	12	.56	23	.0
2	.62	13	.50	24	.34
3	.35	14	.35	25	.34
4	.65	15	.46	26	.63
5	.47	16	.57	27	.49
6	.46	17	.53	28	.39
7	.72	18	.43	29	.39
8	.31	19	.65	30	.54
9	.51	20	.53	31	.51
10	.51	21	.78	32	.47
11	. 0	22	.08		

APPENDIX G

One-One Interview Data

ONE-ONE INTERVIEW RESULTS

Six subjects volunteered for intensive one-one interviews regarding their responses on the ACTH. A summary of the subjects follows.

Subject 116: 90 on the ACTH
41.7 on DIT
age 21, female
Mainstreaming class, A on test, Own Response Set

Subject 115: 86 on the ACTH
35 on the DIT
age 41, female
Gen. Psych. class, Socially Acceptable Set

Subject 114: 90 on the ACTH
31.7 on the DIT
age 19, male
Gen. Psych. class, Socially Acceptable Set

Subject 002: 19 on the ACTH
35 on the DIT
age 19, male
Gen. Psych. class, Socially acceptable Set

Subject 071: 62 on the ACTH
30 on the DIT
age 20, female
Mainstreaming class, f on test, Own Response Set

Subject 106: 95 on the ACTH
51 on the DIT
age 21, female
Mainstreaming Class, A on test, Own Response Set

A summary of their responses to the questions asked during the one-one interview follows.

Q: Restate the items in your own words.

A: None of the respondents had difficulty interpreting items other than items 24 and 26. Subjects 2, 106, and 114 questioned whether item 24 referred to physical education class athletics or competitive athletics. This item was eliminated in the revised instrument.

Subject 2 interpreted item 26, "Where should a group home be located," as meaning an "institution/hospital like facility." On the revised instrument, the meaning of group home was more specific.

Q: If I asked you to select the most socially acceptable response, rather than your own opinion, would hou change any of your answers?(Asked of subjects in the Own Response Set.)

A: Subjects 116 and 71 said they would consider switching their responses on item 3 (both had selected principled) to the more charitable (conventional) response. They both did the same with item 8. On item 14, subject 116 said she would switch to the charitable (conventional) response from her own (principled).

In other words, in each of these cases, the respondent would have changed their response from principled to conventional in order to try to appear socially acceptable.

Q: If I asked you to select your own opinion, rather than the most "socially acceptable" response, would you change any answers? Why did you select the responses you did as being the most "socially acceptable?" (Asked of subjects in the Socially Acceptable Response Set.)

A: Subject 115 said, "I started out trying to think of the nicest answer, but pretty soon ended up just answering according to my own opinion, so I answered with my own opinion in spite of the directions."

Subject 2 had selected the charitable (conventional) response on each item where such a response was offered. He indicated that his reasons for doing so in order to appear socially acceptable was that "handicapped people are a lot worse off than the rest of us. They should make us realize how lucky we are. If more people saw handicapped people they'd go out of their way to help them more. It's good to go out of your way for less fortunates." He said it was "easy to pick out the nicest responses because there was a guy on my block

real handicapped who the whole neighborhood pitched in to help his mom do his patterning each day."

Subject 114 said he felt item 11, response 2; item 14, response 3; item 24, response 1; item 3, response 1; item 8, response 3; and item 13, response 2 were the most obvious ones to pick if you wanted to "look good." Four of these six responses were those representing conventional moral judgment.

Subjects 106 and 114 said they weren't able to separate the most socially acceptable responses from their own opinions.

Q: What would your second choices be on the items?

A: Subject 2 selected conventional responses as second choices for the majority of the eleven items he initially chose the preconventional response to. On the thirteen items he initially chose conventional responses to, his second choice was preconventional on six, principled on two, and no choice on five. For the eight items he initially selected principled responses to, he equally preferred either of the other two responses.

Subject 71 said she would not pick any of the responses given as second choices, but would give different responses. As an example, she said her second choice on item 17 (reagrding the need for a tutor for an EEN student in a regular class) "they should be in a different class where a special teacher can give them all the help they need." She gave as a second choice for item 19 (regarding which handicapped students have a right to an education) "those who could benefit from it by getting a job later on." These responses developed by subject 71 are conventional.

Subject 114 said he couldn't pick second choices because he equally disliked the other options.

Subject 115 said that she picked her responses because she felt "handicapped people should have the same rights as others." When asked if she had any second choices, she replied, "When I think more about it, I think the laws go overboard sometimes, like in the question about funding, maybe they shouldn't get anymore than the other kids. Contributions should defintely be used as much as possible, you know, like the Lion's Club. So the items that have to do with paying for the handicapped, my second choices would be to either limit them to what

the regular kids get or get contributions." This is a conventional response, reflecting an emphasis on equal resources regardless of need, and charitable assistance.

Subject 116 said she had no preference for one more than the other of the remaining two responses on each item.

Subject 106 said that her second choices would have been other responses not given except for item 30 (the only item in which she initially selected the conventional rather than principled response). Her second choice was the principled. As an example of an alternative response as a second choice, she said item 32 (regarding accessibility of a classroom) would be "move the entire class to a location accessible to the handicapped student." This would also be a principled response, as was her first choice.

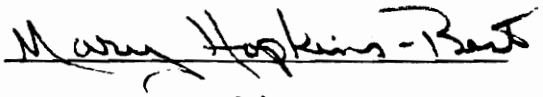
VITA

Mary Hopkins-Best was born in Cumberland, Wisconsin on June 4, 1952. She completed elementary and secondary school in Cumberland. During 1970-71 she attended Gustavus Adolphus in St. Peter, Minnesota. During 1971-75 she attended the University of Wisconsin Eau Claire and was graduated cum laude with a B.A. in Elementary and Special Education in May, 1975. She received her M.S. in Vocational Rehabilitation from the University of Wisconsin Stout in May, 1977.

From 1973-74 she worked for the Wisconsin Department of Agriculture in state and national marketing. From 1975-77 she taught Special Education in Menomonie, Wisconsin. From 1977-81 she was an Instructor in the Special Education Teacher Training Program at the University of Wisconsin Stout, and was appointed as Director of that program in 1979. She began her doctoral program of studies in Special Education Administration at Virginia Polytechnic Institute and State University in summer, 1980. That summer she served as a Research Assistant in the Special Education Administration Program. During 1981-82 she served as a Graduage Assistant in the same program.

During her doctoral program of studies, she completed an internship involving participation in the evaluation of the Special Education Program of the Kenosha School District

at Kenosha, Wisconsin; and taught a class on "Integration of Secondary Handicapped Students" in a class composed of teachers and administrators from Salem, Virginia. In addition to these experiences, she has been a presentor at the national Council for Exceptional Children and American Vocational Association Conventions; presented at numerous Wisconsin conferences; published a curriculum for Trainable Mentally Retarded Vocational Education; served as a consultant to Maryland School Evaluators and Wisconsin regional service agencies; taught at the St. Peter Minnesota State Hospital; and coordinated Special Education Girl Scouting in Eau Claire, Wisconsin. She is a member of the Council for Exceptional Children and Phi Delta Kappa.



Mary Hopkins-Best

DEVELOPMENT OF AN INSTRUMENT TO MEASURE ACTION CHOICES TOWARD HANDICAPPED PERSONS REFLECTIVE OF UNDERLYING GENERAL SOCIO-MORAL REASONING

by

Mary Hopkins-Best

(ABSTRACT)

Increased integration of the handicapped in regular classrooms, popularly called mainstreaming, has drawn attention to how nonhandicapped students are affected. Numerous authors have contended that integration has the potential to positively affect nonhandicapped individuals' socio-moral development. Empirical data to support this contention have not accumulated as an instrument has not been available to measure value reflective conative attitudes toward the handicapped.

This study addressed the problem of development of an instrument to measure action choices toward the handicapped which would reflect the attitude holder's underlying general socio-moral reasoning. Item responses relating to integration issues were constructed to represent characteristic moral judgment at various levels. The developed "Action Choices Toward Handicapped" (A.C.T.H.) instrument was field tested with two samples of 138 subjects each, including high school students, graduate students, and teachers. Research questions focused on instrument

validity, internal consistency and reliability, and variables affecting scores. Validity was supported by a panel of judges critique, and a significant positive correlation between scores on the A.C.T.H. and the Defining Issues Test (D.I.T.) of general moral reasoning. Nonsignificant effects of: order of tests; directions to try to obtain a high score; knowledge of handicapped law; and sex supported the discriminant validity of the A.C.T.H. The reliability was determined to be .71. Variables tested for their effect on scores included reported: family member who is handicapped; close handicapped friend; and integrated education experience. Mean A.C.T.H. and D.I.T. scores were significantly higher for subjects reporting having had integrated educational experience. Forty-six of the subjects also completed a commonly used test of general attitudes toward disabled persons, the A.T.D.P. Subjects' A.T.D.P. scores had a nonsignificant correlation with the both the A.C.T.H. and D.I.T. scores, indicating that the developed instrument was a better indicator of attitude holder's underlying socio-moral reasoning in this study. Additional research is recommended before making generalizations about use and interpretation of the developed A.C.T.H. instrument.