

A STUDY OF RELATIONSHIPS AMONG MOTHER,  
STUDENT, AND TEACHER LEVELS OF MORAL  
REASONING IN A DEPARTMENT OF DEFENSE  
MIDDLE SCHOOL

Dissertation for the Degree of Ph. D.  
MICHIGAN STATE UNIVERSITY  
LOWELL T. JACOBSON  
1977



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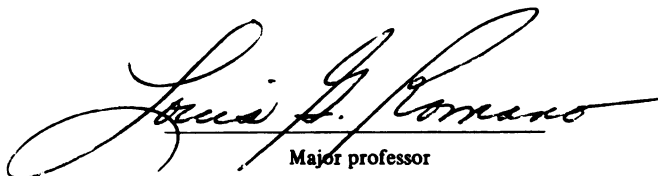
A STUDY OF RELATIONSHIPS AMONG MOTHER, STUDENT,  
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DEPARTMENT OF DEFENSE MIDDLE SCHOOL

presented by

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has been accepted towards fulfillment  
of the requirements for

Ph.D. degree in Education

  
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Date July 22, 1977



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## ABSTRACT

### A STUDY OF RELATIONSHIPS AMONG MOTHER, STUDENT, AND TEACHER LEVELS OF MORAL REASONING IN A DEPARTMENT OF DEFENSE MIDDLE SCHOOL

By

Lowell T. Jacobson

Moral education has become an important issue in education and social circles today. Although it has been an integral part of the American school system since its inception, it has only recently become a focal point in the United States, mostly because of tragedies such as the Watergate scandal, My Lai, and the uprisings on the college campuses during the 1960's. The purpose of this study has been to identify levels of moral reasoning among teacher, mother, and student groups in one selected overseas American school to determine to what extent these groups differ in their levels of moral reasoning and the impact that these differences have on the moral education program at the school.

A review of the literature pointed out that: (1) teachers would score higher in their levels of moral reasoning than the mothers; (2) teachers would score higher in levels of moral reasoning than the students; (3) American-born mothers would score higher in their levels of moral reasoning than the Japanese-born mothers; and (4) Japanese-American children would score higher in their levels of



moral reasoning than their American-born counterparts. It was generally believed that the five groups would achieve different mean scores on the test instrument.

The test instrument employed was the Defining Issues Test (DIT) authored by James Rest at the University of Minnesota. Each group was given the test. The adults were permitted to take the test in the privacy of their own homes but the students were required to complete the questionnaire under the supervision of the school counselor at the school.

Mean scores, standard deviations, ranges, and confidence intervals were computed for each comparison. The omnibus one-way ANOVA test was first conducted on the mean scores to determine whether there was a significant difference among the groups. The F-test revealed a highly significant difference ( $F = 26.614$ ,  $df = 4, 164$ , and  $p < .01$ ), and it was decided to conduct six post hoc contrasts using the Scheffé procedure and setting the overall level of significance at  $p < .05$ .

Generally, the findings of the study were as follows:

(1) The teachers scored at a significantly higher level of moral reasoning than both the mother and student groups; (2) The American-born mothers scored at a significantly higher level of moral reasoning than the Japanese-born mothers; (3) The two groups of mothers each scored at a significantly higher level of moral reasoning than their respective group of children, although the scores of the two groups of mothers were relatively close together; and (4) The Japanese-American students scored at a significantly higher level of

moral reasoning than their American-born counterparts. In general, it was expected that the scores would progress from high to low from teachers to mothers to students. The most important finding in this study was that the Japanese-American students scored at a significantly higher level of moral reasoning than their counterparts, who were children of American-born mothers.

Of the 204 subjects chosen for this study, 169 completed the questionnaire. This included 26 of the 30 teachers (87 percent), 65 of the 86 mothers (75 percent), and 78 of the 86 students (91 percent).

This research study drew heavily on the studies in moral education conducted by Piaget (1932), Kohlberg (1958-76), and Rest (1969-76).

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A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Administration and Higher Education

1977

This dissertation is dedicated to my wife, Margaret,  
for her loving and continued and unfailing support  
and encouragement in this major undertaking.

## ACKNOWLEDGMENTS

This dissertation could not have been completed without the support and encouragement of several people.

To Dr. Louis Romano, who served as my committee chairman, mentor and strong supporter, goes my deepest respect and appreciation for his continued and never-failing support and encouragement during the completion of my program and of this dissertation. His undiminished enthusiasm and extensive knowledge of what needed to be done served me in an excellent and timely manner. No student could ask for more assistance than Dr. Romano provided.

I wish to publicly express my great appreciation to Dr. Harvey Clarizio, who gave me excellent and timely advice in the exceedingly interesting area of moral development and education. Also, to Dr. Sheldon Cherney, Dr. Samuel Corl and Dr. Lawrence Sarbaugh, I would like to extend a warm and genuine word of appreciation, for serving on my guidance committee, and for their continued interest, encouragement and support throughout my educational program.

In addition, I would like to convey my appreciation to Dr. Keith Goldhammer, Dean of the College of Education, and to Dr. Lois Bader, for their strong and encouraging support at critical times during the development of my program and of this dissertation.

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## CHAPTER I

### THE PROBLEM

#### Introduction

Moral reasoning and development of our children in the United States has become of great concern to a large segment of our population in recent years, as evidenced by the large number of articles in both popular and professional journals. It is a concern for parents, clergy, and educators in particular because of the generally accepted nature of the roles these three groups play in socialization in our society. However, until recently, there has been little professional research in this area. In general, psychologists avoided the topic of moral development in children since psychological matters pertaining to moral development were thought to be unverifiable and inappropriate topics for psychology as a science. Following early studies by Hartshorne and May (1928-30) and the work of Piaget (1932), there was a dearth of activity and interest in moral development. A search of ERIC during the summer of 1976 showed a vast majority of the studies in moral education have been conducted since 1970.

In the years since 1970 there has been an extreme amount of criticism of the public schools' deemphasis of values education. Some, like Max Lerner, a widely read syndicated news columnist,

say the schools are not fulfilling the role society originally intended for them to serve. What he said (1976) was:

What it amounts to is a growing number of people feel that America has taken the wrong turn in education, and the results are low behavior standards in the schools and poor test results by the students. In effect, the people want the nation's schools to turn back to where the roads forked and take the earlier road which they feel we have abandoned--the road toward strong discipline, hard work, basic subjects, traditional values.

Lerner has strong feelings about what is going on in public schools, and apparently is not alone in his beliefs if you accept the notion that the number of articles on the subject in the press and in professional journals is an indication of the support he has for his beliefs.

Even though much criticism has been directed at the public schools, it is not so simple to delineate these problems within the public schools. This country has gone through traumatic experiences in recent years, e.g., tragedies like the Watergate scandal, My Lai, the student uprisings on university campuses, and the Korean probe. The American public has become acutely aware of the problems relating to moral values, or, more accurately, the apparent lack of moral values.

#### Need for the Study

The particular need for this study is simply that it has never been done before. It is believed that each community needs to begin to establish some sort of community standard of expected behavior.

It has been established that the American public, educators, and psychologists are concerned about moral development. All of these groups learn to make moral decisions and to channel their aggressive and hedonistic desires, to develop self-control, and to comply within reason to societal expectations. If they fail to do so, they and society will most likely suffer.

Many people are concerned over the moral example being set today. One need only look to the Watergate and the Korean scandals as examples of what people in high office--and in many other places of public trust--are doing to realize that there is a vast contradiction between what they say and what they do. Many of us are wondering why this is so, and whether or not our children are being affected by their example.

Another example of the apparent need for this study was evidenced by the student riots on our college campuses during the 1960's. It is believed that the vast number of studies in moral reasoning, call it moral education if you will, emanated from these difficult years. Outsiders, i.e., public citizens who supported these institutions, were concerned that the problems were trying to be solved by the students in a manner which they could not accept. Some were outraged, others terrified. Most people were confused because they could not understand why the students were so violent in their reactions to the decisions being made at the national level to the problems the nation was facing.

One man in the educational community of scholars who has become concerned by this phenomenon in our lives, especially of the

reactions by the young people of the country, is B. Frank Brown, who is a prominent member of the American educational community and Director of the prestigious Kettering Foundation's I.D.E.A. Institute, based in Melbourne, Florida. Although he is not the only such educator to speak out on such matters, what he says is a reflection of the kinds of things educators are talking about in moral education, and he gives us reason to look at student rights in light of the responsibilities that go along with them. In a 1976 speech, he said:

The situation is this: The schools have been agitated for the past ten years over the question of student rights, but there has been no corresponding hue and cry over the equally important matter of student obligations. The result is that a critical imbalance now exists between students' rights and their responsibilities. The major problem in American education is the unresolved question: What obligations do students have in school and society in return for their entitlement to 12 years of education at public expense? Put succinctly, this is a question to which no one has proposed an answer. Research is nil and the literature is extremely thin.

The consequence is that schools have not delineated student responsibilities, so that the student knows precisely what they are, nor are they woven into the curriculum in any decipherable way.

Research has made it clear that schools are in the business of moral education, although it is less clear what role the schools should play in developing moral reasoning skills of our children. Brown has said that he believes that there have been relatively few clear clues the public has given to its schools concerning the role the public expects its schools to play in what nearly everyone agrees is a crucial area. While a few educators and social psychologists are developing programs which are designed to develop

the moral reasoning of our students, the schools are not experiencing any great swell of educational innovations nor programs in moral education. Still, most people believe that all schools are helping students develop their moral reasoning skills. There are reasons why schools are reluctant to deal with moral education programs.

One of the reasons why teachers have been reluctant to teach moral reasoning to their students is because of the continued prevailing attitude that this is an area that "belongs" to the parents, and the teachers are concerned that they will do something to displease members of the community. While teachers are keenly aware that each child brings with him to his class unique attitudes and philosophies of moral development, they presume that these levels are the result of their parents' training in moral reasoning, and it is not in the realm of the public schools to make any formal attempt to develop the moral reasoning of the students. There has been adequate advice for teachers to follow in recent years, especially when it comes to parents' expectations of what schools should actually teach, but too often these expectations are contradictory to each other. These problems have persisted now to such a point that parents are saying that the schools do indeed have a role to play in the development of moral reasoning of their children. The nature of this role, however, has not yet been clearly delineated.

It has been discussed why teachers are apprehensive about teaching moral values in the schools, but how do parents actually

think about it? According to the 1976 Gallup Poll, published in Phi Delta Kappan in October 1976, 69 percent of the parents polled wanted the schools to share more of the responsibilities of teaching moral values to their children.

One other influential segment of our society has become alarmed by the amount of violence in the public schools, as reflected in Birch Bayh's article in the October issue of Phi Delta Kappan. Bayh, as a member of Congress, has been involved on the committee to investigate violence and vandalism in the public schools. His article is quoted here in its entirety because of its direct relationship to this study, and, in particular, helps to support the need for this study:

#### "SHOCKING" VIOLENCE LEVEL IN SCHOOLS REPORTED BY BAYH

Senator Birch Bayh (D-Ind) has released two volumes containing the transcripts of hearings he conducted on school vandalism. He says they leave little doubt "that our schools are facing disturbing, and at times critical, levels of violence and vandalism.

"The nation is currently spending \$600 million in education dollars each year as a result of vandalism in schools," Bayh said. "This," he added, "is more money than we spent for textbooks in 1972 and enough to hire 50,000 additional experienced teachers without increasing taxes one cent.

"Even more shocking," the senator said, "are the 70,000 physical assaults on teachers and the literally hundreds of thousands of assaults on students perpetrated in our schools annually.

"The effects of these incidents, of course, extend far beyond the immediate victim and the stark statistic," Bayh said.

"The challenging task of education becomes almost impossible to carry out," he continued, "when teachers are afraid to walk the halls, when they are raped in their classrooms in front of their students, when a superintendent attributes

the high truancy rate of his district to a fear of gangs, when students are victimized by organized extortion operations demanding lunch money, and when drugs are easily obtained from pushers circulating in our hallways and playgrounds."

There is, then, an accepted need of broad segments of our American society to identify the problems related to the moral development of our children. There is a specific need on the part of the schools to identify and help to resolve the problem, within their resources, because the schools are one segment of our society which has as their primary goal the education of these youngsters. We spend millions of dollars each year to help students reach their academic goals. Perhaps we should begin to pay closer attention to developing their moral reasoning skills.

The need for this particular study is to continue to develop research to add to the already growing amount of literature concerning moral education. This being an intercultural study, it is intended to determine, among other things, whether there are any differences in the levels of moral reasoning skills between the Japanese and American societies, as reflected in scores on a test of moral reasoning. This study aims at three of the most important segments in a selected school, which are divided into five groups, and seeking to identify the levels of moral reasoning development of each group, as well as their differences in mean scores and their interrelationships. Finally, the significance of these differences and relationships will be explored for the impact they have on the moral education program at the school.



### Importance of the Study to Education

It has been pointed out in the previous section that different segments of our American society are interested in improving the moral education of our students, because, according to the reports, there is a problem in this area. Parents are alarmed and want the schools to share in the responsibility for developing the moral values of their children; the professional community has conducted a great number of studies in moral education; and members of the United States Senate are disturbed over the amount of vandalism, and other crimes, that are perpetrated today within the public schools. The mandate is not so clear, however, on what the schools should do nor how to develop a program of studies aimed at improving the moral development of our students. There is, however, one man, and his associates, who has developed a foundation for a moral education program for our schools.

Lawrence Kohlberg, Director of Harvard University's School of Moral Education, has been working with this problem since 1958, when he completed his doctoral dissertation on the subject at the University of Chicago. He and his colleagues around the country have been introducing what they call Just Schools, which are based on his theory of cognitive development of moral reasoning skills. The moral education program of these schools is based on the six stages of moral development Kohlberg first identified in his 1958 dissertation at the University of Chicago. These six stages are:

Pre-Conventional Level

Stage 1: Punishment and Obedience Orientation

Stage 2: Instrumental Relativist Orientation

Conventional Level

Stage 3: "Good Boy-Nice Girl" Orientation

Stage 4: Law and Order Orientation

Post-Conventional Level

Stage 5: Social-Contract Legalistic Orientation\*

Stage 6: Universal Ethical Principle Orientation\*

Kohlberg has developed a test of moral maturity to assist him in identifying levels of moral reasoning with the students in these Just Schools, as well as in his other research. This study is seeking to identify the levels of moral development in five groups within a selected community and the impact of their differences and interrelationships using a test similar to Kohlberg's. It seeks to identify on which levels the five groups, consisting of a teacher group, two mother groups, and two student groups, are presently operating.

It is believed that the developmental match between the teachers' and mothers' levels of moral reasoning should be similar to each other, and above the students' levels, if these two influential groups are to form a compatible model for the students to follow. If they differ greatly, and one group is not above that

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\*These two stages were combined into one Stage 5 in early 1977.

of the students, there will be conflicting sets of moral explanations for the students to model, and it may cause confusion for the students. If, on the other hand, the developmental match between the two groups is in harmony with each other, the models are not presented as contradictory for the students and they will have a consistent environment in which to learn to develop their moral reasoning skills.

The study of the differences of moral reasoning skills between the two groups of children has an intercultural basis, and should lend significance to the educational program, as well as future studies, if they are significantly different. Further analysis will be conducted, as will be identified in the section concerning the hypotheses.

It appears to be commonly understood that the American society has an extreme diversity of cultural heritages and that we accept the fact that our society lacks homogeneity, especially when compared to a homogeneous society such as that found in Japan. One possible way out of the dilemma that this lack of homogeneity forces on us is to focus on process rather than content. According to Kohlberg's findings (1972), culture affects contents of moral development but not the processes; i.e., according to his research, all cultures go through the same stages (processes), although the content covered may vary.

Educators in the United States pride themselves on having a school system which has been able to deal successfully with the diverse problems found in our society. However, the area of

developing programs of moral education has led the teachers in the country to an uncertain feeling that this is an extremely difficult and touchy subject. As a result, they are no longer as certain as they once were that they can resolve the issues in society within the schools, even if the resources were made available to them.

The schools have tried to correct a number of the ills inherent in our society, with varying degrees of success. However, as has been stated, the schools are now expected to become involved in developing programs of moral education for our students. Since Rest and his associates have found (Rest, 1974) that moral reasoning does not keep pace with intellectual reasoning unless it is stimulated, it seems crucial that the schools provide this stimulation, but perhaps only in a more structured and formalized manner.

#### Statement of the Problem

If moral reasoning is to be meaningful to any segment of our society, then communities need to begin to identify the levels of moral reasoning different segments of that community presently have. For this study, the investigator has selected a Department of Defense overseas middle school, for the purpose of identifying and evaluating the moral reasoning levels of the five groups mentioned previously. This study shall consider the levels of development of moral reasoning of the five groups and their mean score differences. An effort will be made to answer the following research questions:

1. What is the magnitude of the mean score differences among the measures of moral reasoning of the five groups in this study?
2. How does the influence of the home compare with that of the school?
3. How do the Japanese and American mothers compare with each other in their stages of moral reasoning?
4. How do the children of the Japanese and American mothers compare with each other in their stages of moral reasoning?
5. How do the Japanese and American mothers compare with their own children in their levels of moral reasoning?

#### Definition of Terms

The presentation of the following definition of terms is intended to aid in the interpretation and understanding of this study and to assist in clarifying terms for possible replications of this study. All definitions have been taken from the literature or from Webster's College Dictionary, Second Edition.

Criterion: A standard, rule, or test by which a judgment of something can be formed.

Expectation: Something that is expected by someone or by some group.

Development: Changes that take place over time in an individual.

Moral reasoning: The cognitive processes by which we arrive at decisions of a moral nature.

Stage: A period, level, or degree in a process of development, growth, or change; refers to an orderly sequence of changes such that a child must go through Stage 1 before Stage 2, etc.

Value: A value is an enduring belief that a specific mode of conduct or end-state of existence is personally and socially preferable to alternative modes of conduct and end-states of existence.

Values education: A systematic study of the values of an individual, group, or society.

### Summary

In sum, this study will attempt to add to our knowledge of moral education in several ways:

1. It will attempt to determine whether the home (the mother) has a greater impact on moral reasoning than the school does.
2. It will attempt to determine if the influence of the Japanese mother on moral reasoning differs in magnitude from the influence the American mother has on moral reasoning.
3. It will determine whether Japanese and American children differ in their levels of moral reasoning.
4. It will compare the teacher stages of moral reasoning with those of Japanese and American mothers. If teachers are to be effective in conveying moral messages to parents, there must be a match between teacher's moral communications and the moral level of parents.
5. It will attempt to determine the match between the moral stages of parents and their children. For example, are Japanese mothers closer to their children in their stages of moral reasoning than is true of American mothers and their children?

6. Finally, this study will add to the body of knowledge regarding the applicability of Rest's Defining Issues Test (DIT) to children below the age of 12 and to third-culture children.

### Overview

Chapter I has provided a frame of reference for this entire study. A statement of the problem examined in this study has been presented and the need for a study of this nature described. Terms that are important to the study have been defined, as well as the importance of the study to education.

Chapter II will present a review of the literature directly related to moral development and moral education and also a review of pertinent related literature. From this review a history of the development of the levels of moral reasoning will be described. Characteristics of each level of moral reasoning will be explored, as presented in the writings of authorities in the field, as well as the reports of studies related to this subject.

The research design and the procedures used to develop the design are described in Chapter III. Details relating to the samples, the instrument, the raw data, the statistical method employed, and the administrative procedures used will be outlined.

An analysis of the data is presented in Chapter IV. Appropriate descriptive statistics are presented with the hypotheses of the study.

A summary of the study with the significant findings, conclusions, implications, and recommendations for further study will be presented in Chapter V.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### Introduction

The review of the literature begins with a brief listing of historical dates in the study of moral development as it relates to the field of American education. Following that will be a review of the major contributors in the field, and a comparison of their views.

The literature will review the dominant figure in the field of moral development in America, Lawrence Kohlberg. However, as it will be pointed out in this chapter, his works draw heavily from both John Dewey and Jean Piaget. Following the completion of these sections, the works of James Rest and his associates at the University of Minnesota will be reviewed because of their relationship to this study.

This particular study is based upon the studies of the prominent members in the field of moral development, using the research material in this chapter to serve as its foundation. The comparison in this study of three of the prominent groups in the subject community will be the first of its kind.

### History of Moral Development Within American Education

The study of moral development of our children centers in American education around the works of the prolific researcher and writer, Lawrence Kohlberg. Kohlberg has dominated the field since he burst on the scene at the University of Chicago in 1958 when he wrote his doctoral dissertation entitled "The Development of Modes of Moral Thinking and Choice in Years Ten to Sixteen." To stop there, however, would be to leave out other prominent leaders in the field such as Dewey and Piaget, and to ignore the impact of the forerunners to them, as well as the potential impact of Rest and his associates. Let it suffice for the moment to list some of the most significant dates and movements in this field since the Puritans began their schools in North America in the early 1600's.

1600's--The Puritans established their schools to provide the means for maintaining their society, to teach reading, writing, and religion which would insure the good of the state and, in turn, the good of God (Cleaver, 1975:3).

1836 --William Holmes McGuffey published his first Eclectic Reader and followed that with others until the series, which ultimately sold over 122,000,000 copies, was completed in 1863. He was interested in elementary education and used his readers to teach reading, encourage an appreciation of literature, and inculcate moral principles in the child (Commager, 1962:viii).

- 1837 --Horace Mann analyzed the needs of the Massachusetts school system for 12 years, and concluded that students should be educated for future preparation in their government, and to this end the student would be given a moral education, which is a "primal necessity" of social existence. In his view, moral principles could be imposed by the teacher (Cremin, 1957).
- 1908 --John Dewey disagreed with McGuffey, claiming that knowing right from wrong is not a substitute for right conduct. He wanted the schools to give students an opportunity to test their judgments and translate moral ideas in their own behavior (Dewey, 1959).
- 1928-30--Hartshorne and May's studies of deceit, considered a classic American study in moral development, found that you cannot predict later moral behavior of an adolescent who does cheat. However, they found that you can predict quite a lot about an adolescent who does not cheat (Hartshorne and May, 1928).
- 1932 --Jean Piaget's 1932 study, considered a classic study in the field of moral education, was entitled The Moral Judgment of the Child. It is clear that even in 1932, Piaget was able to see that the developmental approach to the analysis of the child's morality would help to clarify the nature of adult morality.
- 1936 --The Educational Policies Commission of the National Education Association published a report which said that

"the democratic process is vital and ever-changing, and that the school must maintain an eternal vigilance to protect the integrity of education and the continuation of democratic processes" (Cleaver, 1975).

- 1950 --The Executive Committee of the NEA asked this same Commission mentioned above to develop ways to improve the teaching of values. The report reaffirmed the duty of the school to uphold the ideals of American democracy-- individual and religious freedom. "The development of moral and spiritual values is basic to all other educational objectives" (Cleaver, 1975:6).
- 1958 --Lawrence Kohlberg completed his doctoral dissertation mentioned earlier, at the University of Chicago, and laid the foundation for the development of his model of moral development of the child based upon the three stages of Piaget's 1932 study.
- 1963 --Bandura and McDonald, working at Stanford University, found that students, after observing adult models, and reinforced with approval for adopting the model's evaluative responses, produced substantial changes in the children's moral judgment responses (Bandura and McDonald, 1963).
- 1966 --Louis Rath published his book, Values and Teaching, which is the forerunner of all "values clarification" processes and materials. This book, written in conjunction with Merrill Harmin and Sidney Simon, is the

foundation for the values clarification approach in American education (Raths et al., 1966).

1973 --Grace Kachaturoff said, "The school's business is to promote the good and moral life, teaching the student what the values of life are." Loukes blamed adults for following a neutral course in the moral training of our children, "so anxious to liberate our children from our own shortcomings, that we leave them to do their own growing up without a framework" (Cleaver, 1975:11).

1974 --Rest and his associates introduced the Defining Issues Test, called the DIT, an objective-type test which has helped researchers lay the groundwork for more extensive research in the area of moral development (Rest, Manual, 1974).

#### The Writings of John Dewey on Moral Education

Much of American education today is dominated by thinking that first was brought into focus through the writings of John Dewey. His philosophy that experience is the best teacher is an underlying major factor in education even now, in moral education as well as in skills development.

He stated, in his 1916 book entitled Democracy and Education: "Aristotle, in fact, at once attacked the Platonic teaching on the ground that moral virtue is like an art, such as medicine; the experienced practitioner is better than a man who has theoretical knowledge but not practical experience of disease and remedies" (Dewey, 1916:5).

Dewey believed it to be a "commonplace of educational theory that the establishing of character is a comprehensive aim of school instruction and discipline" (Dewey, 1916:5). This is a foundational statement for the writings of Kohlberg. It should be noted that Dewey used the word character more often than the term moral development.

Much of Dewey's writings, including the following quotation from his 1916 book, speaks about the way in which the development of moral knowledge progresses in the schools:

Moral education in school is practically hopeless when we set up the development of character as a supreme end, and at the same time treat the acquiring of knowledge and the development of understanding, which of necessity occupy the chief part of school time, as having nothing to do with character. . . .Lessons about morals signify as matter of course lessons in what other people think about virtues and duties.

Dewey, the giant in the field of American education, so dominates our teaching methodologies that it is not difficult to see why modern-day researchers in moral education trace their research studies back to him. He wanted schools to provide experiences for their students which would help them to connect what they learn in the classroom to what is actually occurring outside the school. Although this concept is not particularly difficult to comprehend, it is not to say that it is easy to place into operation in our American schools.

The study of moral development of the child, while it did not originate with John Dewey, did become more clearly focused after he published his 1909 book entitled Moral Principles in Education. He pointed out that "the traditional conceptions of moral education

are narrow, formal, and pathological." Dewey believed that moral principles are real and that the moral education is the development in the child of moral ideas, not necessarily ideas about morality (ethics). For Dewey, the best moral education is participation in social life.

If a child is not exposed to participation in social life, he will be handicapped. "His little span of personal memory and tradition is overlaid with the long centuries of the histories of all people" (Dewey, 1902:5).

Dewey strongly believed that a child had to learn the relationship between what he learned at school and how it related to the larger world outside. The school, according to Dewey, would fail if it did not accomplish this major goal.

### The Writings of Jean Piaget

Piaget's research and publications are so comprehensive and so fully developed that a guide is needed in approaching his works. A prolific author, having published over 24 books and countless magazine articles, he has dedicated his life to the development of the field of child psychology, after receiving training and education as a biologist. Most of his works concern the development of intellect, using what he calls the "Cognitive Developmental" approach.

Piaget, a Swiss who speaks French and whose works have been translated into the English language, has defined morality as: "The essence of morality is respect for a system of rules"

(Spencer-Pulaski, 1971:71). He observed that most of these rules have been handed down from generation to generation, from father to son, but in the case of children's games, the rules are perpetuated from the older child to the younger child. His works are based on interviews (the clinical method) with children at play, drawing his conclusions from their actions and comments. He investigated the children's attitudes toward rules by asking questions. How did rules begin? Can they be changed? Have rules always been the same as they are today? Here are the answers of one small boy, Fal, five years old, to Piaget's questions (Piaget, 1932).

Long ago when people were beginning to build the town of Neuchatel, did little children play at marbles the way you showed me?

Yes.

Always that way?

Yes.

How did you get to know the rules?

When I was quite little my brother showed me. My daddy showed my brother.

And how did your daddy know?

My daddy just knew. No one told him.

How did he know?

My daddy just knew.

How did he know?

No one showed him!

Am I older than your daddy?

No, you're young. My daddy had been born when we came to Neuchatel. My daddy was born before me.

Tell me some people older than your daddy.

My grand-dad.

Did he play marbles?

Yes.

Then he played before your daddy?

Yes, but without rules [said with conviction].

What do you mean by rules? [Fal does not know this word, which he has just heard from our lips for the first time.

But he realizes that it means an essential property of the game of marbles; that is why he asserts so emphatically that his grand-dad did not play with rules so as to show how superior his daddy is to everyone else in the world.]



Was it a long time ago when people played for the first time?  
 Oh, yes.  
 How did they find out how to play?  
 Well, they took some marbles, and then they made a square,  
 and then they put the marbles inside it . . . etc. [he enumer-  
 ates the rules that he knows].  
 Was it little children who found out or grown-up gentlemen?  
 Grown-up gentlemen.  
 Tell me who was born first, your daddy or your grand-dad?  
 My daddy was born before my grand-dad.  
 Who invented the game of marbles?  
 My daddy did.  
 Who is the oldest person in Neuchatel?  
 I dunno.  
 Who do you think?  
 God.  
 Did people know how to play marbles before your daddy?  
 Other gentlemen played [Before? At the same time?]  
 In the same way as your daddy?  
 Yes.  
 How did they know how to?  
 They made it up.  
 Where is God?  
 In the sky.  
 Is he older than your daddy?  
 Not so old.  
 Could one find a new way of playing?  
 I can't play any other way.  
 Try. [Fal does not move.]  
 Couldn't you put them like this [we place the marbles in a  
 circle without a square]?  
 Oh, yes.  
 Would it be fair?  
 Oh, yes.  
 As fair as the square?  
 Yes.  
 Did your daddy use to play that way or not?  
 Oh, yes.  
 Could one play still other ways?  
 Oh, yes. [We then arrange the marbles in the shape of a T,  
 we put them in a matchbox, etc. Fal says he has never seen  
 this done before, but that it is all quite fair and that you  
 can change things as much as you like. Only his daddy knows  
 all this!]

Fal expressed great respect for rules, which he attributed to his  
 father, who was older and wiser than either God or his grandfather!

Piaget found that children's attitudes toward rules went through a complete transformation after about the age of 10. Rules were then no longer considered by these children to be sacred cows laid down by adults, but instead decisions to be made by the children who were playing the game. He called this attitude toward rules "the morality of cooperation."

It can be seen that, as a young child, the child will accept rules as infallible, perpetuated by different family members, but that this attitude changes after about the age of 10, when a child will no longer accept rules as infallible. In short, he is starting to question the reasons for rules, and believes that rules can be changed as long as everyone who plays the game agrees to the rule changes. We hear children say, after they have committed an act that is considered wrong, e.g., breaking a dish or a plate, that they "didn't mean to." In other words, they did not deliberately do it and they are asking adults to measure their intentions rather than their actions.

Piaget found that children's objectivity at about the age of five or six turns to one of subjectivity after 10 years of age. He believed that "objective responsibility diminishes on the average as the child grows older, and subjective responsibility gains correlatively in importance" (Spencer-Pulaski, 1971:71).

He found that this same developmental process could be seen in children's attitudes toward lying and stealing. Young children did not even understand what it meant to lie, but that by about

seven, children knew that a lie was an untruth, although they could not always differentiate between a lie and a mistake.

Piaget observed two levels of justice in the child, with two corresponding levels of morality. The earliest concept of justice was based on retribution, which he called "punishment by retribution," meaning "an eye for an eye and a tooth for a tooth." As one child said, "He [the one being punished] ought to be stopped from doing what he likes," as a punishment for his deed (Piaget, 1932). This concept of justice corresponds to the first level of morality, i.e., the Morality of Constraint, when rules are first made by adults for children.

As children grow older and form their groups with their peers at school they put equality (fairness) of treatment and mutual cooperation above punishment, being more aware of individual motives and circumstances. This Piaget calls the second phase, or the Morality of Cooperation.

It can be seen, then, that the child's concept of justice is formed as a reaction to parents punishing their children for not following their directions, which the child accepts until about the age of seven, at which time the child can basically distinguish the difference between right and wrong. However, when he has had the opportunity to form his groups at school, he learns the importance of mutual cooperation.

This section can best be concluded by quoting Spencer-Pulaski's 1971 summary of Piaget's levels of moral development.

Piaget thus leads us to see that it is the growth of strong moral solidarity among grade-school children that brings about equilibrium, an equilibrium based on mutual respect and consideration. Wise parents and teachers have always been aware of this and, by being gentle, considerate, and fair with their children, have achieved much happier results than those who have ruled by authority. In these troubled days, when the youth of our land are revolting against all forms of moral constraint and discipline from above, there may be lessons for us in Piaget's gentle philosophy. If the young people can be brought to see that the need for "law and order" is as much theirs as their elders', if the generations can work together in mutual respect and cooperation, we may once again have greater harmony in our land.

### The Writings of Lawrence Kohlberg and Associates

The second classic study that this study is based upon is that of Lawrence Kohlberg's 1958 unpublished dissertation at the University of Chicago, entitled "The Development of Modes of Moral Thinking and Choice in Years Ten to Sixteen."

Kohlberg has been given credit for "reviving and legitimizing the empirical study of moral development and has developed a major model of the growth of moral reasoning (Kurtines & Grief, 1974).

Kohlberg has called his approach to moral education "The Cognitive-Developmental Approach: A New Way to Understand Morality and Approach to Moral Education" (Kohlberg, 1971). Kohlberg believes that there are several ways of dealing in the classroom with the dilemmas of ethical relativity. They are:

1. The Bag of Virtues,
2. Traditional Moral Education as Social Relativity,
3. --by not dealing with it,
4. --and of attempts to deal with it.

One of the methods of judging the significance of a research study is the volume of research which emanates as a result of that study. Using this criterion, Kohlberg's study must be considered the landmark study in the field of moral development and education.

In Kohlberg's own words, "The basis of the cognitive-developmental approach to morality is that children do have their own ways of thinking and that moral education must be based on a knowledge of stages of moral development" (Kohlberg & Selman, 1972). He has found that, upon observation, children have standards of their own which did not come from parents, peers, or teachers. In other words, the child has organized his own way of deciding between right and wrong.

The six stages, identified later in this chapter as well as in Appendix A, are said by Kohlberg and his associates to be universal; i.e., they are found in all cultures, although other researchers question the validity of these studies, even though they have documented their extensive research in villages and cities in the United States, Great Britain, Taiwan, Israel, Yucatan, and Turkey. These stages looked at the form, or structure, of children's reasoning rather than at the content alone, using as an example the child of Kohlberg, who, at the age of four, decided to join the vegetarian movement in the United States and would not eat meat. His rationale was that it is bad to kill animals so he should not eat meat. However, when read a story by his father about Eskimos one night, he learned that they killed seals, whereupon the boy became angry and announced that it would be all right to eat the

meat of Eskimos because they killed seals. Thus, when discussing content, his rationale was at a high stage, but when discussing structure, meaning it was all right to eat Eskimos, his rationale was at a low stage. This episode helps to illustrate that children often do generate their own moral values and maintain them in the face of moral training.

Developmental change, which Kohlberg says his six stages of moral development represent, means that movement must be forward in the sequence and no steps can be skipped. An individual may stop his development at any stage, but when he does resume his movement, he must move in accord with these steps. In other words, moral reasoning of the conventional type (Stages 3 and 4) cannot be reached unless the individual has first gone through Stages 1 and 2. No adult in Stage 4 has gone through Stage 5, but all those in Stage 5 have gone through Stage 4.

There are two primary differences between Kohlberg's and Piaget's systems.

1. Kohlberg's system is more highly differentiated, using six (now five) distinct stages, as opposed to Piaget's three levels;

2. Piaget believed that an individual at about the age of 12 is capable of autonomous reasoning, but Kohlberg believes that moral maturity, defined as the capacity for principled (Stage 5) reasoning, is reached by very few people, and then usually not until their early 20's, at the earliest.

Kohlberg's 1958 study centered about 84 middle- and lower-class boys, aged 10, 13, and 16, from Chicago. He presented his

moral dilemmas to these boys. These dilemmas were designed to present "a conflict between habitual conformity to a rule or authority as against a utilitarian or 'greatest good' response to situational values and social value objects" (Kohlberg & Selman, 1972). From examination of the boys' responses to these situations, Kohlberg "isolated" six developmental types of value orientations, which later evolved into his six stages. These six types were identified as:

1. Obedience and Punishment,
2. Naively Egoistic,
3. Good Boy,
4. Authority and Social-Order Maintaining,
5. Contractual Legalistic,
6. Conscience or Principles

Kohlberg and his associates have described the way in which they believe that morality develops in stages and have reviewed research which supports the universality of the stages, thereby refuting the "scientific truth" of ethical relativity. They go on to say that they subscribe to these general points on moral development:

1. We often make different decisions and yet have the same basic moral values.
2. Our values tend to originate inside ourselves as we process our social experience.
3. In every culture and subculture of the world the same basic moral values are found, and the same steps toward moral

maturity are found. While social environments directly produce different specific beliefs (e.g., smoking is wrong, eating pork is wrong), they do not engender different basic moral principles (e.g., consider the welfare, treat other people equally).

4. Insofar as basic values are different, it is largely because we are at different levels of maturing in thinking about basic moral and social issues and concepts. Exposure to others more mature than ourselves helps stimulate maturity in our own value processes. We are, however, selective in our response to others and do not automatically incorporate the values of elders or authority important to us.

Kohlberg's rationale for the necessity of teaching moral education in the schools to his stages of moral development he considers valid. He believes that moral education can and should be taught, but that it cannot be taught through direct teaching and instruction, according to the results of their research.

A second point is that when a stage is attained, an individual cannot be taught a higher stage directly because he must generate it himself; the task of the teacher is to facilitate such a process.

Several studies suggest that it is not possible to get children to comprehend stages much higher than their own. Moral education has not succeeded in the past because, according to Kohlberg, "it has disregarded the problem of developmental match and has generally involved only an attempt at transmitting a set of adult moral cliches" (Kohlberg & Selman, 1972). He believes that,



if moral communications are to be effective, the level of moral development of the child should ideally be no more than one step below the level the teacher presents his lessons on. In order to do this the teacher must know on what level the children in his class operate.

On the other hand, if a teacher presents a lesson one step below the level of development of a child, the child will reject it as being an inadequate way of thinking. In other words, the child was not challenged by the teacher's presentation of the lesson.

What can the teacher do to stimulate change in the classroom? Again, according to Kohlberg, the teacher's primary task is to help the child:

1. Focus on genuine moral conflicts,
2. Think about the reasoning he uses in solving such conflicts,
3. See inconsistencies and inadequacies in his way of thinking, and
4. Find means of resolving such inconsistencies and inadequacies.

In summary, to be effective, the teacher must, according to Kohlberg:

1. Have knowledge of the child's level of thought,
2. Match the child's level of communicating at the level directly above,
3. Focus on reasoning, and

4. Help the child experience the type of conflict that leads to an awareness of the greater adequacy of the next stage.

In the context of what is happening to moral education in the schools today, the social studies in its "concepts and values" approach is a method Kohlberg says is a good beginning. Kohlberg sees the basic value of such a program as providing children with the opportunity for active involvement in moral decisions. Furthermore, morality should be a more explicit concern in the school curriculum. Students should be directly involved in the moral decisions of the school by participation.

In the past, many people believed that only the home could have a significant effect on the child's moral development.

On the other hand, it is the generally agreed conclusion that schools do teach moral development, if not by direct teaching, then by implication. Kohlberg speaks to this issue:

. . . We are proposing that the teacher and the school cannot deny their responsibility for the child's moral development on the ground that it is all determined in the home. While it may be comforting to the teacher to think that the child's moral problems are due solely to his home background, this belief is neither objectively supported by the data nor is it constructive (Kohlberg & Selman, 1972).

Teachers and principals are concerned about the connection between how people think and how they behave. Kohlberg's reaction to this is: ". . . in order to substantiate our approach to moral education we must show that how a person thinks does relate to how he acts" (Kohlberg & Selman, 1972).

By examining the Hartshorne and May finding of 1928-30, we can find that, according to their research, you cannot predict the later moral behavior of an adolescent who does cheat, although we are able to predict quite a lot about an adolescent who does not cheat. These studies, according to Kohlberg, do demonstrate a strong relationship between moral judgment and behavior.

In 1964, students in Berkeley, California, had to make a decision whether or not to stage a sit-in at the Administration Building to preserve what they considered to be their right of political free speech on the campus. It was shown by Kohlberg that 80 percent of Stage 6 subjects sat in, while only 10 percent of those at Stages 3 and 4 (the Conventional Level) sat in because they believed that such civil disobedience was a violation of authority (Kohlberg & Selman, 1972).

Students at Stage 6 believed that everyone has the right and obligation to defy an order which violated a moral principle.

Kohlberg (1972:39) has summarized his main points in this way:

1. The fundamental deduct of focusing directly upon "good behavior" is that the definition of such a notion may be relative only to the standards and biases of the teacher or judge;
2. The teacher's initial task is to understand, from the child's viewpoint, what is good or bad about a given behavior;
3. Since the child's judgments of good and bad comprise a natural developmental sequence, it is plausible to conceive of some thinking as being more morally mature than others;

4. It is both psychologically and ethically legitimate to encourage the child to act in accordance with his highest level of judgment, an aim quite different from attempting to make him act in compliance with the teacher's standards of behavior; and

5. Insofar as discrepancies between judgment and action reflect a form of cognitive conflict that may serve to promote development, encouraging correspondence between judgment and behavior will be a stimulus to behavior.

Kohlberg (1972) says:

In conclusion, promoting mature moral action is difficult, and it is not achieved by inspirational sermons or by classroom management tricks. It requires, first, moral conviction on the part of the teacher. It implies, secondly, clarity about those aspects of moral development the teacher should encourage in children at given developmental levels as well as clarity in regard to appropriate methods of moral communication with these children. Most important, moral education implies that the teacher listen carefully to the child's moral communications. The teacher must be concerned about the child's moral judgments (and the relation of the child's behavior to these judgments) rather than about the conformity between the child's behavior or judgments and the teachers.

#### The Writings of James Rest and Associates

James Rest and his associates at the University of Minnesota, who have been working since the early 1970's to develop a different kind of test than the subjective test Kohlberg has devised, call their test an alternative method of assessing moral development.

The focal point of this study rests upon the results of the Defining Issues Test that Rest has developed. Although he has built his test on the same moral dilemmas of Kohlberg's test,

the objectivity of the DIT makes it easier to administer, score, and interpret. Both tests are based on a series of moral dilemmas, the classic one being the Heinz Dilemma:

In Europe, a woman was near death from cancer. One drug might save her, a form of radium that a druggist in the same town had recently discovered. The druggist was charging \$2,000, ten times what the drug cost him to make. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could get together only about 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." The husband got desperate and broke into the man's store to steal the drug for his wife. Should the husband have done that? Why?

Rest earned his doctorate at the University of Chicago in 1969. He also trained under Kohlberg for one year in the early 1970's at Harvard University's School of Moral Education, where he learned how to administer, score, and interpret Kohlberg's test. Therefore, since Rest has based his writings on Kohlberg's studies, used Kohlberg's moral dilemmas, and has studied extensively under Kohlberg's supervision, it is not surprising that Rest's research emanates from Kohlberg's. The primary differences are compared between Piaget's, Kohlberg's, and Rest's in the next section, to include Rest's interpretation of the levels and/or stages of Piaget and Kohlberg. However, Rest's method of assessing moral development, i.e., a series of moral dilemmas, giving written choices on the dilemmas and then requiring the subject to choose the four most important ones, is an alternate way--an objective method--to assess moral development.

To summarize the main differences between the two tests, the chart on the following page emphasizes the comparison.

<u>KOHLBERG (Moral Judgment Scale)</u>	<u>REST (Defining Issues Test)</u>
1. Subjective and projective	1. Objective
2. Open-ended	2. Close-ended
3. About two hours to administer	3. Less than an hour to administer
4. Individual test	4. Individual or group
5. Subjects are ages 10 through adult	5. Subjects are junior high through adult
6. Examiner required to interpret subject's answers using projective technique	6. Objective method of interpreting answers
7. Difficult to administer	7. Easy to administer
8. Examiner requires extensive training before he can administer the test to a subject	8. Examiner need only follow written directions
9. Requires subject to recall, and to pass judgment	9. Requires only recognition level to pass judgment
10. No specific reading level required	10. Requires minimum reading level of junior high
11. Scoring takes much time	11. Scoring takes less than 10 minutes
12. End result of stage-typing	12. End result is P (for Principled) - score (may be stage-typed)
13. Considered most reliable test of moral maturity on the market although it is criticized for lack of objectivity	13. Relatively new test

This list is not intended to be an extensive comparison but rather an indicative one. Rest believes that there is room in the field for more than one type of test and, further, that many more studies need to be conducted to validate the DIT. It is, according to Rest, a step in the direction of providing alternatives for the assessment of moral development.

A more complete description of the DIT will be given in Chapter III--Methodology. Rest does, however, refer to stage-typing, having done extensive research in the area, and his work in this area will be compared in the next section to Kohlberg's and to Piaget's. Rest (Analysis, 1976:42) himself speaks to the issue of stage-typing versus other methods of assessing moral development:

In any case, the major task ahead is not to defend or save the stage model at all costs, but to seek more fine grain ways of representing and researching developmental phenomena that will give us greater precision than we now have, and to determine how much coherence, unity, and systemization there really is in people's moral thinking.

### A Comparison of the Writings of Piaget, Kohlberg, and Rest

#### Introduction

It must first be reaffirmed that Piaget has written a classic study of moral development, i.e., his The Moral Judgment of the Child, written in French in 1932 and translated into English by Flavell in 1948.

Secondly, Kohlberg's 1958 doctoral dissertation at the University of Chicago is considered to be a classic American study on moral development. His notable associates are Elliott Turiel and Robert Selman, but they also include a host of other men prominent in the field today. They include James Rest, now at the University of Minnesota, and Edmund Sullivan and Clive Beck, both at the Ontario Institute for Studies in Education (OISE) at the University of Toronto.

Thirdly, Rest has provided the background research and the test, i.e., the DIT, for this study, and his associates at the University of Minnesota are, to name a few, Douglas Anderson, Richard Coder, Douglas Cooper, JoAnna Masanz-Coder, and Panavitsch.

Finally, although most of Kohlberg's and Rest's studies emanate from Piaget, and most of Rest's studies emanate from Kohlberg, both Kohlberg and Rest trace the origins of their research back to John Dewey.

#### Levels and Stages of Piaget, Kohlberg, and Rest

Piaget identified three levels of moral development beginning at about the age of two. Piaget called the time from the ages of 0-2 a Sensorimotor period, while Kohlberg refers to this time as a Premoral stage. Regardless, it means that moral development in a child does not begin until about the age of two.

The complete outline of Piaget's cognitive development of the child, Kohlberg's stage development, and Rest's stage development can be found in Appendix A. At this point it is important to know that this chapter is dealing with an abbreviated comparison of the research and methodologies of the three men as well as their primary thoughts and concepts. See Tables 2.1 and 2.2.



Table 2.1.--Comparison of levels of Piaget and Kohlberg.

Piaget (Stewart, 1973)	Kohlberg (1972)
Sensorimotor Period (0-2)	Premoral
Preoperational (2-7)	Preconventional
Concrete Operational Period (7-11)	Conventional
Formal Operational Period (11-adult)	Postconventional

Table 2.2.--Comparison of stages of Kohlberg and Rest.

Kohlberg (1972)	Rest (Analysis, 1976:8)
Stage 1: Punishment & Obedience	Stage 1: The Morality of Obedience: "You do what you're told"
Stage 2: Instrumental Relativist	Stage 2: The Morality of Instrumental Egoism and Simple Exchange: "Let's make a deal"
Stage 3: "Good Boy-Nice Girl"	Stage 3: The Morality of Personal Concordance: "Be considerate, nice and kind, and you'll get along with people"
Stage 4: Law and Order	Stage 4: The Morality of Law and Duty to the Social Order: "Everyone in society is obligated and protected by the Law"
Stage 5: Social-Contract Legalistic	Stage 5: The Morality of Societal Consensus: "What laws the people want to make is what ought to be"
Stage 6: Universal Ethical Principle	Stage 6: The Morality of Non-arbitrary Social Cooperation: "How rational people would organize cooperation is moral"

### Piaget's Influence on Rest's Writings

In the development of a P-score concept, Rest progressed from the three levels of Piaget and Kohlberg and the six stages of Kohlberg to a single P-score, which measures principled thinking (Stages 5 and 6). Rest believed that this score is more indicative of the way a person actually reasons, stating that no one is 100 percent at one stage anyway. Piaget's influence on Rest's writings is listed in Table 2.3.

Table 2.3.--Piaget's influence on the writings of Rest (Rest, Analysis, 1976:8).

- 
1. The employment of a stage model.
  2. Making cooperation the central concept of moral judgment development.
  3. Morality is seen as part of the evolutionary process of creating new systems leading to greater equilibrium of the person with his environment, in this case, the social environment.
  4. Many of Piaget's explanatory devices are used to describe development.
  5. As in Piaget's (1932), Kohlberg's (1969), and Selman's (1976) accounts of the development of moral judgment, certain acquisitions in role-taking are seen as prerequisite to the development of moral judgment.
- 

### Methods of Assessing Moral Judgment

Piaget measured by conclusions drawn from interviews with children. He often would take a walk to observe children at play.

Then he would interview the children, asking questions about rules of the games they were playing, as in the case of *Fal* mentioned earlier in this chapter. Finally, after using his gentle persuasive method of questioning, he would think about what had happened and draw his own conclusions. These conclusions would always be carefully recorded when he wrote, which he always did early every morning.

Kohlberg, according to the research, measured the 84 boys in Chicago in his original study by using Piaget's method of questioning and then drew his own conclusions. From these conclusions, he developed his now famous six (now five) stages of moral development. Kohlberg recorded and categorized the statements into what has evolved as his six original stages of moral development. He did not set six stages and then fit the boys' answers into them, but--and this is crucial--he categorized into six stages the ways in which the boys responded to his questioning. From these six stages, and from the questions which evolved into the nine moral dilemmas he now uses in his test of moral maturity, Kohlberg has developed an empirical method of testing for moral maturity. This is what made his study the classic American study of moral development. Although his test is criticized by some because of, among other reasons, a lack of objectivity, it is still considered the most conclusive test of moral development available.

Rest studied with Kohlberg, learned his method of assessing moral development, and developed his own interpretation of the six stages of moral development. Using this research as his foundation, he developed the DIT based on six of the nine moral dilemmas of

Kohlberg. This test is an objective test and is presented by Rest as simply an alternative method of assessing moral development. It is a recent test, originating in the early 1970's, so it is too early to determine the impact on the field of moral development although preliminary research indicates the test is reliable and valid.

Significant Statements on Moral Development by Piaget, Kohlberg, and Rest

In concluding this section, it may be helpful to list some statements which are significantly important and indicative of what each man has actually said.

Piaget:

1. The majority of parents are poor psychologists and give their children the most questionable of moral trainings (Spencer-Pulaski, 1971:12).
2. Adult authority is not sufficient to create in children a true sense of justice (p. 12).
3. Knowledge is derived from action--To know an object is to act upon it and to transform it--To know is therefore to assimilate reality into structures of transformation, and these are the structures that intelligence constructs as a direct extension of our actions (p. 12).

Kohlberg:

1. Each child is his own moral philosopher (Stewart, 1971:II-61).

2. Behind the moral values and character traits we have considered lies another moral reality: the existence of the larger society with its rules and laws, as well as the smaller society of the school with rules of its own (Kohlberg & Selman, 1972:12).

3. Restriction of moral education to value clarification is not an adequate solution to the problems of moral education (p. 12).

4. Teachers constantly act as moral educators: they tell children what to do, make evaluations of children's behavior, and direct children's relations in the classroom (p. 12).

Rest:

1. Every person is born into an association of people (Rest, Analysis, 1976:4).

2. Moral thinking describes the basic relationships among people in terms of a person's rights (what kinds of claims a person can make on others in his own interest) and a person's responsibilities (the claims that others can make on their behalf from the person) (p. 4).

3. Two conditions for establishing a stable and reliable system of social cooperation are:

- a. The knowability of its norms by all its participants, and
- b. The acceptance and support of the system by the participants (p. 4).

4. Concepts of fairness and justice are essentially notions about the balancing of individual interests and how the benefits of cooperation are to be reciprocated (p. 4).

5. Moral judgment is concerned with how the benefits and burdens of social cooperation are to be distributed (the rules of a social system which assign people's rights and responsibilities (p. 4).

### Summary

Moral education (moral reasoning, values education) has been in our schools since the Puritans arrived in North America in the early 1600's. The development of moral reasoning has been a primary task of our public schools since then, according to Horace Mann in 1837, and with which William Holmes McGuffey agreed in his readers, published between 1836 and 1863. John Dewey in 1908, Jean Piaget in 1932, Lawrence Kohlberg in 1958, and James Rest in 1974 all agree. The moral development of our students is of primary concern to all educators, just as much as is the cognitive development of the basic skills a primary concern of our schools.

Although, generally, few people disagree that the teaching of moral development of our children is a basic, required task assigned to all school teachers, there are at least two basic schools of thought on how we should teach our youngsters:

1. To teach them through a process of indoctrination, or
2. To teach them by creating an educational atmosphere in which they can discover their own values, and not judging whether

their values are the same as the societies in which they live (call this the "values clarification" method).

No single pattern has emerged as the best method of teaching students moral reasoning, but Kohlberg and Simon would appear to be the main proponents of one and two above, Kohlberg trying to indoctrinate students ("you can teach moral development") and Simon teaching "values clarification." Rest, although he implies that teaching a course in ethics helps to improve scores on his DIT, has not specified any method that best deals with the information he has compiled from his data on the DIT.

Kohlberg's studies are based on his own test of moral reasoning, and his rationale basically comes from Piaget and Dewey, as does the rationale of Louis Rath, the mentor of Sidney Simon. Kohlberg criticizes the values clarification approach, not because of its procedure, but that he does not consider it to be a sufficient solution to the relativity problem (Kohlberg, 1971:17).

Moral education is a key issue in American education today, as it has been since the Puritans started the first American schools in the early 1600's. The tests devised by Kohlberg and Rest are both important measures of moral development of the young, and both will contribute much to the measure of how a person reasons when confronted with moral dilemmas of modern-day America.

According to the latest Gallup Poll of Public Attitudes Toward the Public Schools, the respondents to the poll believed that both parents and schools neglect moral education more than any

quality most important in the development of a child (Phi Delta Kappan, 1976:194).

The members of Phi Delta Kappa are almost unanimous in thinking that the schools should actively pursue the teaching of moral education, although they cannot agree on the single best approach (Phi Delta Kappan, 1975:664).

John Dewey believed that the schools were dramatically affected by the industrial revolution because of the impact on the family when the father began working for other, larger organizations (Dewey, 1974:9). "Even our moral and religious ideas and interests, the most conservative because the deepest-lying things in our nature, are profoundly affected. That this revolution should not affect education in some other than a formal and superficial fashion is inconceivable" (p. 9).

#### Relationship of This Study to Research Findings in Moral Development and Education

This research project will be based upon the works of Piaget, Kohlberg, and Rest. Kohlberg, whose work has its roots in a Piagetian base, is considered to be the leader of American research in moral development and education. This research study attempts to add to the general body of data regarding moral development and education by investigating the level of moral reasoning among a sample of third-culture persons. A thorough review of the literature on moral reasoning indicates that no such study has been undertaken heretofore. This study seeks to fill this gap in our knowledge regarding the moral development and education of



third-culture youth, their teachers, and their parents by investigating their respective levels of moral reasoning, the interrelationships among groups, and the implications for educational practice. Moral reasoning will be assessed through use of Rest's Defining Issues Test (DIT), a scale which is receiving increasing attention from researchers. This study will attempt to add to the body of literature on the DIT by investigating its appropriateness with (a) children under the age of 12 and (b) third-culture youth. To date, the appropriateness of this scale for such samples has not been determined.

## CHAPTER III

### DESIGN OF THE STUDY

#### Introduction

The objectives of this study were to provide an indication of interrelationships among the three major groups of people in the school community, i.e., the teachers, the students, and the mothers as measured on the DIT.

This chapter is concerned with a description of the sample, procedures used to select the students, a description of the instrument used, its validity and reliability, methods for collection of the data, and the procedures used for analysis of the data.

Although Chapter III, Design of the Study, is a review of the plan of operation for this study, it does not include in it any part of the Defining Issues Test, the test used to measure the moral development of the subjects in this study. The test will be found in Appendix B, which includes a copy of the test and directions, as well as relevant correspondence with Rest which authorized the use of the DIT for the purposes of this study. Also, directions for scoring and interpreting the test will be found in Appendix B.

In addition to relevant information and correspondence concerning the use of the DIT, other important and necessary letters authorizing administration of the test to members of the school community will be found in Appendix B.

### Description of the Population

The population considered for this study has been selected from a Department of Defense Overseas school. It is a middle school, enrolling students from the ages of 10 to 14 in grades five, six, seven, and eight. The school is located in a large metropolitan area of a highly industrialized nation in the Far East.

The school has an enrollment of 336 students and a parental population of approximately 672. There are 30 faculty members employed by the school, including the three that are shared by another school. All of these professional educators are included in this study, although only a sampling of approximately 26 percent of both students and mothers is included.

The composition of the fathers' heritage is over 95 percent American citizenship, with a small number of fathers who are citizens of the Philippine Islands. However, the composition of the mothers is approximately 65 percent American born, while the remaining 35 percent of the mothers are foreign born.

The parents have come to their overseas assignments from a wide variety and from great numbers of different schools, both from other overseas commands and from school systems in the United States. There are parents from nearly every one of the United States and several mothers from other countries, the predominant number of foreign-born mothers coming from the host nation of Japan.

Teachers employed at the school were recruited through the Central Civilian Personnel Office of the Department of Defense Overseas Dependents Schools, called DODDS, located in

Washington, D.C. A small number of the 30 teachers was recruited locally, but all were still required to meet the stringent requirements of DODDS. The 30 professional faculty members came from 21 states and averaged over 11 years of teaching experience, most of this experience in the DODDS system. More than one-half of the faculty claimed cities of 100,000 population or more as their home, while a few came from very small towns.

#### Nature and Selection of the Subjects

1. Faculty--The DIT was given to the entire population of the faculty, consisting of 30 professional educators. The entire population was tested, both because this was such a comparatively small group but also because of the group's influence over the students at the school. Sixty percent of the group had earned their master's or higher degree, while the remaining 40 percent had earned their bachelor's degree.

2. Students--The sample of this group consisted of approximately 26 percent of each of the two major subgroups, i.e., the students who are children of the Japanese mothers, consisting of 24 students, and the children of American-born mothers, consisting of 63 students. The random selection, using a table of random numbers, came from each of the four grade levels, as indicated in Table 3.1.

3. Mothers--The mothers selected for this study were the mothers of the children selected at random at school. Their educational level was presumed to be similar to their husbands' educational level, described in Table 3.2. This presumption was that most of the mothers had earned their high school diploma with a

small number having earned as high as a bachelor's degree.

Seventy-two percent of the mothers were married to enlisted men, 18 percent of the mothers to officers, 9 percent to DOD civilians, and 1 percent to an undefined category. Officer rank, it must be noted, demands a college degree, while enlisted ranks make no such demand, although it was assumed that a small number would have earned their bachelor's degree.

Table 3.1.--Selection of students and mothers.

Grade	Japanese-Born Mothers		American-Born Mothers	
	Total	Selected	Total	Selected
Five	20	6	61	15
Six	26	7	69	18
Seven	26	6	63	16
Eight	19	5	52	14
Totals	91	24	245	63

Table 3.2.--Rank of father.

Grade	Officer	Enlisted	DOD Civilian	Other	Total
Five	14	60	6	1	81
Six	17	70	8	0	95
Seven	14	64	10	1	89
Eight	16	47	7	1	71
Totals	61	241	31	3	336
Percent	18%	72%	9%	1%	100%

### Instrument Employed

The instrument used was the Defining Issues Test, called the DIT, which was developed by James R. Rest, an associate professor at the University of Minnesota and a former student of Lawrence Kohlberg. The test is an objective test of moral judgment based upon the studies of Kohlberg, who now is Director of Harvard University's School of Moral Education. The Kohlberg test is a subjective test; that is to say, it is a projective test which requires much training in scoring and interpretation.

Both of the tests consist of a series of moral dilemmas to which the subject must react. These dilemmas have been developed over a period of the last two decades. The DIT presents each dilemma and then has the subject react in writing to the dilemma by stating, on a Likert-type scale, whether he/she thinks it is important, and to what extent it is important to that subject. At the end of each series of 12 questions--all of the dilemmas have 12 questions to which each subject must respond--the subject is further required to identify and prioritize the four most important questions to him/her.

Kohlberg developed his test over the past two decades, beginning when he was a doctoral candidate at the University of Chicago in the late 1950's. He selected 84 boys, aged 10 to 16, as his subjects, whom he has retested every three years since, to see the patterns of development in moral reasoning.

Rest, on the other hand, has indicated a need for new options of assessing moral judgment and criteria for evaluating

validity. As a result, he has developed an objective test which was designed to measure the moral judgments of people. Rest's instrument, then, is the DIT, which is an objectively scored, closed option test, giving the subject five ways to answer the 12 questions about each dilemma, ranging from (in the subject's opinion) No Importance to Great Importance on a Likert-like rating scale. The primary difference between Rest's DIT and Kohlberg's test is that, while using basically the same set of moral dilemmas, the DIT attempts to determine the stages of moral development of an individual, using a series of 12 questions from which the subject can select one of five standardized answers. The subject selects and interprets his own reasons for answering. In the Kohlberg test, the interviewer asks an open-ended question, necessitating the subject to formulate and develop his own answer, which the interviewer must then interpret using a complicated projective technique.

The 60 questions, 12 on each of the 5 dilemmas, have been developed by Rest to permit objective assessment of moral judgment, compared to the more subjective projective technique Kohlberg's test uses. The standardized administration and scoring make it easier to score and allow more researchers to test for stages of moral development by using the instrument. Preliminary data on reliability and validity appear promising.

#### Validity of Instrument

The DIT has been administered many times and in an August 1976 report to the National Institute of Mental Health, the results

of 136 test administrations on 5,714 subjects were carefully analyzed. What the results indicate have definite implications for the validity of the test. In particular, according to Rest (NIMH Report, 1976:10),

This suggests the tentative hypothesis that, roughly speaking, development in moral judgment seems to advance dramatically as long as a person is in school, and at whatever point the person stops his education, his moral judgment score tends to stabilize. Adult subjects who ended their formal education many years ago tend to have about the same scores as students currently at that level of formal education.

Table 3.3, summarizing the 136 studies of the report, supports the reasoning that scores improve with age but stop wherever a person ends his schooling.

Table 3.3.--Summary of 136 studies using the DIT.

Age/School Level	Studies	Subjects	Average (%age Score)
Junior high groups	26	1,322	21.9
Senior high groups	18	581	31.8
Nonstudent adult groups	29	1,149	40.0
College groups	57	2,479	42.3
Students in graduate or professional school	6	183	53.3
Totals	136	5,714	

Since one way of determining the validity of a test is whether or not scores increase with age, this chart indicates validity for the test, since it very clearly shows an increase of scores as a subject grows older. It also shows one other thing,



namely that development of moral reasoning powers needs to be stimulated in order for scores to improve. Evidently, scores increase with age, as indicated in Table 3.3, up to a point, that point being when a subject completes his formal schooling, after which the scores over a number of test validations usually level off at that particular age level, unless the person is stimulated enough to continue his education.

However, it may not be simple educational stimulation that causes this because scores on the tests also have some relationship to intelligence. In Table 3.3 one notes that the higher the educational level the higher the score of moral reasoning. The question seems, then, to be that of: Do students pick higher stage "issues" because they appreciate their greatest adequacy as conceptual frameworks or do subjects select high stage issues without understanding them, but merely select them due to a test-taking set to pick more complex-sounding items? In partial answer to the question, Rest has pointed out in the test manual that "The DIT correlates significantly with the Differential Aptitudes Test and the Iowa Test of Basic Skills for ninth graders (in the 30's and the 40's); and the DIT correlates .42 with the IQ Quick Test for Adults" (Coder, 1974).

As one measure of validity, then, the DIT shows that scores do increase with age. Furthermore, it has been clearly shown that educational stimulation does improve scores and that the scores level off when formal education stops. Finally, there is a significant relationship between intelligence and moral reasoning,

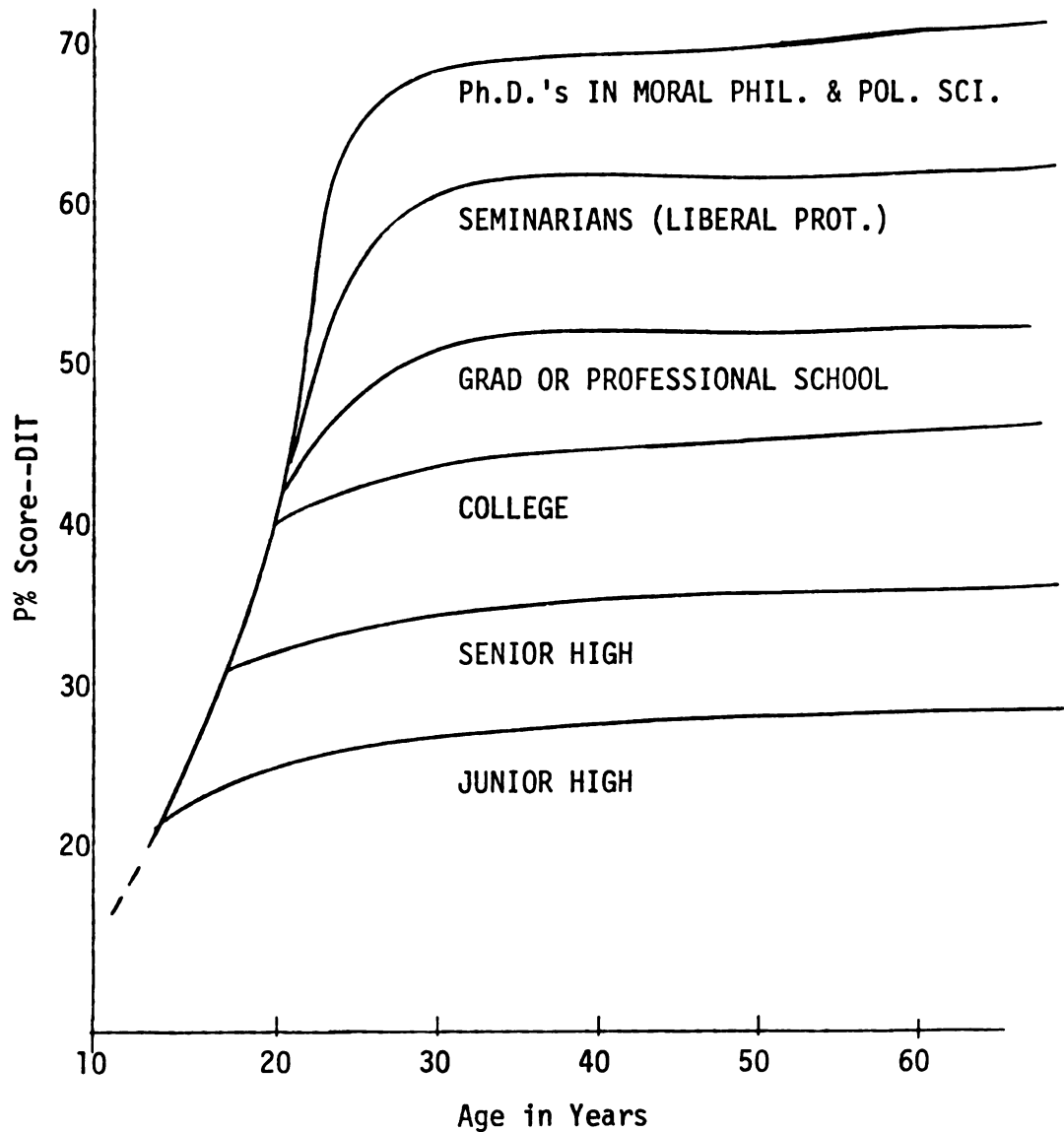
although it is less clear that this relationship is as critical as exposure to higher levels of education. It might be argued, for example, that intelligent people score higher, but, on the other hand, that brings into focus the dilemma of why scores level off when formal schooling ends.

Another way to show that the DIT is a valid testing instrument is to measure its correlation against a widely known test measuring moral reasoning. In this case, the most widely known test of moral reasoning in America today is the Kohlberg Test of Moral Reasoning.

On the only known correlational measure between the DIT and the scale developed for Kohlberg's test, Rest et al. (1974) found a .68 correlation by stage typing by the global rating method and correlating it with "P" score of the DIT. Although the DIT is an objective test, versus the subjective test using the projective technique found in Kohlberg's test, the .68 correlation indicates that the DIT has validity when compared to Kohlberg's test. It is recognized that projective-type tests in any subject, but especially in moral reasoning, are open for criticism because of the inherent difficulty in "proving" validity. Even so, there is a significant correlation between the two tests.

In a 1973 study by McGeorge, college students were asked to "fake good" and "fake bad" on the DIT. The study clearly indicated that subjects could fake downward but not upward on the DIT.

Table 3.4.--Hypothetical relation of P-score, age and education  
(Rest, NIMH Report, 1976).



However, when determining the validity of a test, it is most important to determine whether the test does indeed measure what it is purporting to measure.

In the case of this study, the DIT has been validated for subjects 12 years of age and older, which includes all subjects in this study in grades seven and eight, and all teachers at the school, as well as the American-born mothers of the children. The exceptions, of course, are the group of ESL (English as a Second Language) students at all four grade levels, the students at grades five and six (aged 10 and 11), and the Japanese-born mothers of the ESL students. Since one of the purposes of this study has been to expand the use of the test to include younger students (10 through adult instead of 11 through adult) and ESL students and their mothers, the specific conditions under which the test was given to these subjects will be described under the plan of action.

The test, then, with the exceptions listed above, has been adequately tested on at least 5,714 subjects from the ages of 12 through adult and has proven itself a valid instrument for these individuals.

#### Reliability of Instrument

Reliability, as applied to educational measurements, may be defined as the level of consistency of the measuring device.

Rest et al. (1974) found that the P%-age score correlation of 28 ninth graders given the DIT two weeks apart was .81.

McGeorge (1973) reported a .65 correlation for 47 undergraduate

students testing 18 days apart. Some of the studies, e.g., Panowitsch and Hart (1974), said:

The studies suggest that unless an intervention is specifically focused on moral problem solving or at effecting psychological development, there won't be significant changes in DIT scores over a period of a few months.

This is to suggest that there are certain courses such as ethics, which deal specifically with development of moral reasoning, which will result in significantly different scores on the DIT.

#### Longitudinal Changes and Factors Associated With Changes

From the first study by Rest et al. (1974), 88 of the original 160 subjects were tested again in 1976 to determine any change in their scores. The results were very interesting as well as statistically significant. A summary of the results found that:

1. On the P-index the group as a whole showed highly significant upward movement.
2. Those formerly in the junior highs and now in the senior highs moved up 3.4 points on the P-scale, and the former senior highs moved up 12.0 points.
3. Those going to college increased their scores more than twice of those who did not go to college.
4. There were no significant male-female differences.
5. When asked why they believed their scores had changed the subjects gave such reasons as: (a) broader knowledge of world affairs, (b) "growing up," and (c) new social contacts, an expanding social world.

6. Two-year stability was .68 for the former junior high students, .54 for the senior highs, and .58 for the entire group.

7. Correlation of their P-scores with comprehension and attitudes was similar at the second testing to that of the first, which were all highly statistically significant.

### Procedures

The DIT was designed for people of ages 12 through adult who use the English language as their native language.

The test was given at the selected school to what amounted to six different groups, of which the test had been standardized on three of these groups. These three groups were the teachers, the American-born mothers, and their children in the seventh and eighth grades (age 12 and above). The test had not been designed for use with the remaining three groups, i.e., the fifth and sixth graders (10 and 11 years of age) whose mothers were American born, all the Japanese-born mothers, and their children in all grade levels.

It must be reiterated that one of the purposes in using this test was to expand the age level of people it could be appropriately used on. In this case it was to be used on younger students, foreign-born mothers whose husbands were American born, and the children, ages 10 to 14, of these marriages.

The test was given to 10 selected students to determine whether or not it could be used for this part of the study. The school counselor, a fully qualified and highly competent counselor trained in the successful administration of tests, gave the

preliminary test to 10 students in December 1976. Results of this test indicated that all 10 of the students had no unusual difficulty with understanding and completing the test, contrary to what the test manual had led us to expect. In the counselor's own words, "I was surprised, but none of the students had any unusual difficulties with the test." All 10 of the students were able to prioritize their answers as well as discriminate between what was important and what was unimportant to them. In short, they had no more difficulty with the test than older students would have had. The ESL students were surprisingly capable of taking the test, with a fifth grade boy doing unusually well, showing exceptional perception in his reasoning.

As a result of the preliminary test, the following items were decided on, or contain information pertinent to the process to be followed in the giving of the test. In particular, it was concluded that:

1. All of the three groups could take the test with no more difficulty than others.
2. The Japanese-born mothers would be asked to take the test, with the understanding that it would be very difficult, if not impossible, for some, but that enough of them could complete it.
3. The directions would remain the same for all groups with the exception that the adults would be allowed to take the test on their own while the students would take the test under the supervision of the school counselor, at the school.

4. It was desired that nearly 100 percent of the students and teachers would complete the questionnaire and 80 percent of the mothers, including the Japanese-born mothers.

5. The results of the test would be analyzed carefully before making the final comparisons. It should be noted that there were two cross-checks built into the test, one to check on consistency, the other to check on the seriousness of the subjects who took the test, as well as whether or not the subjects could or would be discriminating in the selection of their answers.

6. The results would be analyzed in two ways, i.e., purged and unpurged. The unpurged group consisted of all tests that were taken, just as long as the test was complete. The purged group consisted of the group of tests after the inconsistent and non-discriminating subjects' tests were removed. Rest indicated that this is the method they have used. It is believed that, for the purposes of this study, both analyses would lend value to the results.

7. The results of each test give one score, which is called the P%-age, or Principled, score. The highest possible score was approximately 97 percent, which is the raw score if a maximum of 56 is divided by 60. This is the total of the scores of each subject at stages 5A, 5B and 6.

8. The stage categories of Kohlberg are computed and recorded for each subject, but the P%-age score, the Principled score, is the primary goal of the DIT. Rest, for his purposes, has



found the P%-age score to be of more value than Kohlberg's stage scoring.

Time Frame of Administration of DIT  
to Selected Subjects

December 16, 1976 -- Pre-test trial on 10 randomly selected students, two from each grade level, plus two others.

January 28, 1977 -- The test, with letter and directions, placed in the mailboxes of teachers at the school, with directions for them to complete and return them no later than February 15, 1977.

February 3, 1977 -- a. The 86 randomly selected students were given the test in three groups of approximately 28 each. The test was administered in a regular classroom by the school counselor. The tests were then completed and handed to the counselor at the end of the 1 hour, 15 minute session.

b. The 86 students, at the end of their testing session, were given a sealed envelope containing the test their mother was to take. They were also given specific instructions concerning the need to take the test to their mother, have her complete it, and then return it to school no later than February 15, 1977.

February 15, 1977 -- All tests were scheduled to have been returned to school.

### Objectives to Be Measured

The four objectives of this study were designed to study the differences among the five groups at the school. Objective one was to study the differences among all five groups, while objective two was designed to compare the influence of the home with the influence of the school, using a correlational analysis. Objective three was designed to compare scores between the Japanese and American mothers. The fourth objective was designed to measure the difference between the two groups of children.

Conditions of all four of the objectives were to be met by analyzing the P-score each subject achieved on the DIT.

### Statement of the Hypotheses and Their Rationale

The rationale for developing these hypotheses was based on observations of fewer Japanese-American students being referred to the school principal for behavior problems than their peers, who were children of American-born mothers. Would the Japanese-American students score higher on a test of moral reasoning than their counterparts?

Further rationale for the hypotheses came from the findings of Kohlberg (1971) and Rest (1974), who found that moral reasoning skills improve as a person grows older. Rest has further theorized (NIMH Report, 1976) that the level of moral reasoning tends to level off at that point in time when a person finishes his formal education. Would the results of this study verify their findings and theories?

Specifically, the following research hypotheses will be tested:

Hypothesis 1: There is no statistically significant difference between the teachers' level of moral reasoning and the mothers' levels of moral reasoning.

Hypothesis 2: There is no statistically significant difference between the mothers' levels of moral reasoning and their children's levels of moral reasoning.

Hypothesis 3: There is no statistically significant difference between the teachers' level of moral reasoning and the students' levels of moral reasoning.

Hypothesis 4: There is no statistically significant difference between the levels of moral reasoning of the mothers born in the United States and the mothers born in Japan.

Hypothesis 5: There is no statistically significant difference between the levels of moral reasoning of the children of American-born mothers and the children of Japanese-born mothers.

### Summary

The Defining Issues Test, developed by Rest at the University of Minnesota since the early 1970's, was the instrument used to measure moral development of teachers, students, and mothers at the selected middle school. These scores, which represented moral development of the 204 selected subjects, will be analyzed in the next chapter.

The teachers were given the test to take home and complete independently. The students were given the test in three groups in three separate sittings at the school by the school counselor, who is a man highly trained in the administration of tests. The students were given, at the end of their testing session, a sealed envelope to take home to their mothers, which contained the test

and the necessary instructions. Both teachers and mothers were requested to return the completed questionnaires to the school by February 15, 1977.

The test, validated on people from the ages of about 12 to adult who spoke English as their first language, was given to students aged 10 to 14, including Japanese-American students aged 10 to 14 as well as Japanese mothers whose first language was not English. One of the reasons for including groups on which the test had not been validated was to extend the validation of the instrument to a somewhat broader segment of the population. Rest had outlined a procedure of identifying consistency and discrimination, which he called purging. When the tests from these segments of the population were corrected, it was believed that it would be easy to determine whether or not the procedures used with those subjects were valid. Both purged and unpurged samples will be analyzed.

## CHAPTER IV

### ANALYSIS AND DISCUSSION OF THE DATA

The purpose of this chapter is to present, analyze, and discuss the data relevant to each hypothesis. A simple one-way analysis of variance has been used to determine the magnitude of the differences among the five groups in the study.

A population of 26 middle school teachers (T) was studied. Factors relevant to this study included their educational and age levels, and their resulting scores on the test instrument. Both male and female subjects were included in the study.

A sample of 65 mothers and 78 middle school students of both sexes from the selected school's population of 336 was used. The larger group of mothers was divided into groups of 48 American-born mothers (M1) and 17 Japanese-born mothers (M2). The larger group of students was divided into groups of 55 children (S1) of American-born mothers and 23 children of Japanese-born mothers (S2).

All findings were based on the P-score (Principled score) results of the Defining Issues Test (DIT), which was developed and validated by James Rest of the University of Minnesota, and upon P-score transformations into Kohlberg's six stages of moral development.

The analysis of variance procedure was conducted to determine the magnitude of the differences among the group mean scores, with

the results being significant at  $p < .01$ . The degrees of freedom used ( $df = 4, 164$ ) were based upon the individual scores because of the random selection, which used a table of random numbers to select the mother and student groups. The null hypothesis was rejected, because the results were significant at the  $p < .01$  level. The null hypothesis was that the means were equal in the five groups. The F-ratio for this overall test was found to be  $F = 26.614$ , with  $df = 4, 164$ . Because the null hypothesis was rejected in the omnibus one-way analysis of variance, it was decided to conduct a series of contrasts between different groups in the study. The results of this one-way ANOVA are delineated in Table 4.1A and a report of the means for all groups is reported in Table 4.1B. In addition, Tables 4.1C and 4.1D identify the overall Kohlberg stage equivalents by percentages at each stage, and the number of subjects at each stage.

Appendix C consists of three tables which will be discussed under the section of Related Information, found at the end of this chapter.

The following hypotheses stated in null terms were tested:

Hypothesis 1: There is no statistically significant difference between the teachers' level of moral reasoning and the mothers' levels of moral reasoning.

The research question underlying this hypothesis was: Will the teachers score on a higher level of moral reasoning than the mothers?

Table 4.1A.--Overall analysis of variance for P-score.

Score	Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
<u>Raw Score</u>						
Unpurged	Between Groups	4	4390.6503	1097.6627	26.614	.000
	Within Groups	164	6763.9414	41.2435		
	Total	168	11154.5917	...		
Purged	Between Groups	4	3925.8381	981.4595	23.757	.000
	Within Groups	138	5701.0011	41.3116		
	Total	142	9626.8392	...		
<u>Percent Score</u>						
Unpurged	Between Groups	4	1.2225	.3056	26.506	.000
	Within Groups	164	1.8911	.0115		
	Total	168	3.1136	...		
Purged	Between Groups	4	1.0921	.2730	23.645	.000
	Within Groups	138	1.5934	.0115		
	Total	142	2.6855	...		

Table 4.1B.--Report of means for P-score differences.

Group	Count	Mean	S.D.	S.E.	Range	95% Conf. Int. for Mean
<u>Raw Score</u>						
1 Unpurged	26	25.5769	6.0012	1.1769	16-41	23.1530-28.0008
1 Purged	26	25.5769	6.0012	1.1769	16-41	23.1530-28.0008
2 Unpurged	48	19.8542	8.5701	1.2370	7-43	17.3657-22.3427
2 Purged	42	20.8571	8.4610	1.3056	7-43	18.2205-23.4938
3 Unpurged	17	16.8824	7.2014	1.7466	7-34	13.1797-20.5850
3 Purged	15	17.2667	7.1361	1.8425	8-34	13.3148-21.2185
4 Unpurged	55	11.0182	4.4409	.5988	2-21	9.8176-12.2187
4 Purged	39	11.0769	4.1192	.6596	3-19	9.7416-12.4122
5 Unpurged	23	14.6957	4.8471	1.0107	7-30	12.5996-16.7917
5 Purged	21	14.7619	5.0389	1.0996	7-30	12.4682-17.0556
<u>Percent Score</u>						
1 Unpurged	26	.4265	.1002	.0197	.2700-.6800	.3861-.4670
1 Purged	26	.4265	.1002	.0197	.2700-.6800	.3861-.4670
2 Unpurged	48	.3315	.1433	.0207	.1200-.7200	.2898-.3731
2 Purged	42	.3483	.1414	.0218	.1200-.7200	.3043-.3924
3 Unpurged	17	.2800	.1206	.0292	.1200-.5700	.2180-.3420
3 Purged	15	.2860	.1200	.0310	.1300-.5700	.2196-.3524
4 Unpurged	55	.1838	.0744	.0100	.0300-.3500	.1637-.2039
4 Purged	39	.1851	.0690	.0111	.0500-.3200	.1628-.2075
5 Unpurged	23	.2448	.0804	.0168	.1200-.5000	.2100-.2796
5 Purged	21	.2457	.0836	.0182	.1200-.5000	.2077-.2838



Table 4.1C.--Overall stage comparison by percentage.

Subjects		Stages						Total
		2	3	4	5	6	Other	
Teachers	U	4	0	38	12	15	31	100%
	P	4	0	38	12	15	31	100%
American-born mothers	U	2	8	65	4	10	11	100%
	P	0	7	64	5	12	12	100%
Japanese-born mothers	U	12	6	65	0	6	11	100%
	P	13	7	60	0	7	13	100%
American-born students	U	15	45	27	0	0	13	100%
	P	15	46	26	0	0	13	100%
Japanese-American students	U	22	26	39	0	4	9	100%
	P	24	29	38	0	5	4	100%

Note: U = unpurged score, P = purged score.

Table 4.1D.--Overall stage comparison by number of subjects/stage.

Subjects		Stages						Total
		2	3	4	5	6	Other	
Teachers	U	1	0	10	3	4	8	26
	P	1	0	10	3	4	8	26
American-born mothers	U	1	4	31	2	5	5	48
	P	0	3	27	2	5	5	42
Japanese-born mothers	U	2	1	11	0	1	2	17
	P	2	1	9	0	1	2	15
American-born students	U	8	25	15	0	0	7	55
	P	6	18	10	0	0	5	39
Japanese-American students	U	5	6	9	0	1	2	23
	P	5	6	8	0	1	1	21

Note: U = unpurged score, P = purged score.

The analysis of the data for this hypothesis revealed a significant difference at the  $p < .05$  overall level using the Scheffé post hoc procedure. Tables 4.2A and 4.2B delineate the mean scores, the standard deviations, ranges, and confidence intervals for the P-score comparison, as well as the stage equivalents for the differences between the teachers and the mothers. The mean difference was 5.72 for the unpurged scores and 4.72 for the purged scores.

On Kohlberg's stage equivalent comparison, the teachers scored predominantly (65 percent) in Stages 4, 5, and 6, while both groups of mothers scored predominantly (75 percent) in Stages 2, 3, and 4.

The analyses suggest that teachers reason on a significantly higher level of moral reasoning than either group of mothers. The data indicate that teachers score, on the average, one or two stage levels above the mothers when the P-score is transformed into Kohlberg's six stages of moral development. The finding that teachers score higher than parents was not unexpected, in that moral reasoning as measured by the DIT is positively correlated with educational level.

Hypothesis 2: There is no statistically significant difference between the mothers' levels of moral reasoning and their children's levels of moral reasoning.

To test this hypothesis, a Scheffé post hoc procedure was used and the mean score differences, standard deviations, ranges, and confidence intervals were computed using an overall  $p < .05$  level. The null hypothesis of no difference is rejected for both

Table 4.2A.--P-score comparison between teachers and mothers (M1 + M2).

Group	Count	Mean	S.D.	S.E.	Range	95% of Conf. Int. for Mean
<b>1. Mean of Raw Score</b>						
Group 1						
Unpurged	26	25.5769	6.0012	1.1769	16-41	23.1530-28.0008
Purged	26	25.5769	6.0012	1.1769	16-41	23.1530-28.0008
Group 2						
Unpurged	48	19.8542	8.5701	1.2370	7-43	17.3647-22.3427
Purged	42	20.8571	8.4610	1.3056	7-43	18.2205-23.4938
Group 3						
Unpurged	17	16.8824	7.2014	1.7466	7-34	13.1797-20.5850
Purged	15	17.2667	7.1361	1.8425	8-34	13.3148-21.3185
<b>2. Analysis of Variance</b>						
		Value	Separate Variance Estimate			
Unpurged		7.2087	S.E.	T Value	D.F.	T. Prob.
Purged		6.5150	1.5907	4.532	50.3	.000
			1.6310	3.995	43.3	.000
<b>3. Mean of % Score</b>						
Group 1						
Unpurged	26	.4265	.1002	.0197	.2700-.6800	.3861-.4670
Purged	26	.4265	.1002	.0197	.2700-.6800	.3861-.4670
Group 2						
Unpurged	48	.3315	.1433	.0207	.1200-.7200	.2898-.3731
Purged	42	.3483	.1414	.0218	.1200-.7200	.3043-.3924
Group 3						
Unpurged	17	.2800	.1206	.0292	.1200-.5700	.2180-.3420
Purged	15	.2860	.1200	.0130	.1300-.5700	.2196-.3524
<b>4. Analysis of Variance of % Score</b>						
		Value	Separate Variance Estimate			
Unpurged		.1208	S.E.	T Value	D.F.	T. Prob.
Purged		.1094	.0266	4.543	50.2	.000
			.0273	4.006	43.0	.000

Table 4.2B.--Stage comparison between teachers and mothers by percentage.

Subjects		Stages						Total
		2	3	4	5	6	Other	
Teachers	U	4	0	37	12	15	31	100%
	P	4	0	38	12	15	31	100%
American-born mothers	U	2	8	65	4	10	11	100%
	P	0	7	64	5	12	12	100%
Japanese-born mothers	U	12	6	65	0	6	11	100%
	P	13	7	60	0	7	13	100%

Note: U = unpurged scores, P = purged scores.

comparisons since the mean score differences were significant. The mean score difference between the American-born mothers and their children was 8.84 unpurged and 9.78 for the purged. The mean score difference between the Japanese-born mothers and their children was 2.19 unpurged and 2.50 purged. Tables 4.3A and 4.3B delineate the mean scores, standard deviations, ranges, and confidence intervals for these intervals.

Oh Kohlberg's stage equivalent comparisons (Tables 4.3C and 4.3D), American-born mothers scored predominantly (65 percent) at Stage 4 while their children scored predominantly (45 percent) at Stage 3, with 27 percent scoring at Stage 4. The Japanese-born mothers scored predominantly (65 percent) at Stage 4, while their children scored in Stages 2 (24 percent), 3 (29 percent), and 4 (38 percent).

Table 4.3A.--P-score comparison between American-born mothers and their children.

Group	Count	Mean	S.D.	S.E.	Range	95% of Conf. Int. for Mean
<u>1. Mean of Raw Score</u>						
Mothers (M1)						
Unpurged	48	19.8542	8.5701	1.2370	7-43	17.3657-22.3427
Purged	42	20.8571	8.4610	1.3056	7-43	18.2205-23.4938
Children (S1)						
Unpurged	55	11.0182	4.4409	.5988	2-21	9.8176-12.2187
Purged	39	11.0769	4.1192	.6596	3-19	9.7416-12.4122
<u>2. Analysis of Variance</u>						
		<u>Value</u>	Separate Variance Estimate			
Unpurged		30.8723	S.E.	T Value	D.F.	T. Prob.
Purged		31.9341	1.3743	22.464	68.3	.000
			1.4627	21.832	60.4	.000
<u>3. Mean of % Score</u>						
Mothers (M1)						
Unpurged	48	.3315	.1433	.0207	.1200-.7200	.2898- .3731
Purged	42	.3483	.1414	.0218	.1200-.7200	.3043- .3924
Children (S1)						
Unpurged	55	.1838	.0744	.0100	.0200-.2500	.1637- .2039
Purged	39	.1851	.0690	.0111	.0500-.3200	.1628- .2075
<u>4. Analysis of Variance</u>						
		<u>Value</u>	Separate Variance Estimate			
Unpurged		.5153	S.E.	T Value	D.F.	T. Prob.
Purged		.5335	.0230	22.407	68.4	.000
			.0245	21.809	60.4	.000

**Table 4.3B.--P-score comparison between Japanese-born mothers and their children.**

Group	Count	Mean	S.D.	S.E.	Range	95% of Conf. Int. for Mean
<b>1. <u>Mean of Raw Score</u></b>						
Mothers (M2)						
Unpurged	17	16.8824	7.2014	1.7466	7-34	13.1787-20.5850
Purged	15	17.2667	7.1361	1.8425	8-34	13.3148-21.2185
Children (S2)						
Unpurged	23	14.6957	4.8471	1.0107	7-30	12.5996-16.7916
Purged	21	14.7619	5.0389	1.0996	7-30	12.4682-17.0556
<b>2. <u>Analysis of Variance</u></b>						
		<u>Value</u>	Separate Variance Estimate			
Unpurged		31.5780	S.E.	T Value	D.F.	T. Prob.
Purged		32.0286	2.0179	15.649	26.4	.000
			2.1457	14.927	23.6	.000
<b>3. <u>Mean of % Score</u></b>						
Mothers (M2)						
Unpurged	17	.2800	.1206	.0292	.1200-.5700	.2180-.3420
Purged	15	.2860	.1200	.0310	.1300-.5700	.2196-.3524
Children (S2)						
Unpurged	23	.2441	.0804	.0168	.1200-.5000	.2100-.2796
Purged	21	.2357	.0836	.0182	.1200-.5000	.2077-.2838
<b>4. <u>Analysis of Variance</u></b>						
		<u>Value</u>	Separate Variance Estimate			
Unpurged		.5248	S.E.	T Value	D.F.	T. Prob.
Purged		.5317	.0337	15.567	26.2	.000
			.0360	14.790	23.4	.000

Table 4.3C.--Stage comparison between American-born mothers and their children.

Subjects		Stages						Total
		2	3	4	5	6	Other	
Mothers	U	2	8	65	4	10	11	100%
	P	0	7	64	5	12	12	100%
Students	U	15	45	27	0	0	13	100%
	P	15	46	26	0	0	13	100%

Note: U = unpurged scores, P = purged scores.

Table 4.3D.--Stage comparison between Japanese-born mothers and their children.

Subjects		Stages						Total
		2	3	4	5	6	Other	
Mothers	U	12	6	65	0	6	11	100%
	P	13	7	60	0	7	13	100%
Students	U	22	26	39	0	4	9	100%
	P	24	29	38	0	5	4	100%

Note: U = unpurged scores, P = purged scores.

An analysis of these two comparisons suggests that there is a highly significant difference between the American-born mothers and their children, with the implied danger that the mothers may find it difficult to communicate their moral messages on a level that their children can understand. On the other hand, the comparison between the Japanese-born mothers and their children suggests that, although there is a significant difference between

their average mean scores, the two scores are markedly closer to each other than the American-born mothers and their children. One possible explanation of why Japanese-American children scored on higher levels of moral reasoning than their American counterparts may be because there is a smaller gap between the two levels of moral reasoning. It may also be implying that the Japanese mothers could not understand the language on the test as well as the American-born mothers. The finding that mothers score higher than children was not unexpected, in that moral reasoning as measured by the DIT is positively correlated with educational level and age.

Hypothesis 3: There is no statistically significant difference between the teachers' level of moral reasoning and the students' levels of moral reasoning.

In analyzing the difference between the mean score of the teachers and the mean scores of the students, it must be kept in mind that the research indicated that the greatest differences in levels of moral reasoning are expected to be between the teachers and the students. The differences were expected to be great because of the age gap, but also because of the great difference between the educational levels of the two groups (Rest, 1974).

These differences were analyzed using the Scheffé post hoc procedure for contrasts setting the overall  $p < .05$  level of significance. The null hypothesis that there is no significant difference is rejected.



In Table 4.4A it can be seen that there were highly significant differences between the two groups, with the greatest difference coming between the teachers and the American-born students. The average mean score difference between the teachers and the American-born students was 14.56 unpurged and 14.50 purged. The average mean score difference between the teachers and the Japanese-American students was 10.88 unpurged and 10.82 purged.

On Kohlberg's stage equivalent comparison, teachers scored predominantly (65 percent) in Stages 4, 5, and 6, while the students scored predominantly (88 percent average) in Stages 2, 3, and 4 (see Table 4.4B).

These data suggest that teachers would be well advised to make special efforts to reduce their moral messages to the students to a level which the students can comprehend. It is imperative that this match be as closely aligned as possible since the teachers have such a great deal of influence over the students when they discipline and direct their learning activities daily. It is possible that the American-born children cause more discipline problems in the school because the teachers have higher expectations and a lower tolerance level with them, when compared to the Japanese-American students. On the other hand, the teachers' mean scores were more closely matched with the Japanese-American students than with the children of American-born mothers, suggesting that they are more likely to understand the moral messages of the teachers than their American counterparts. The finding that teachers score higher than children



was not unexpected, in that moral reasoning as measured by the DIT is positively correlated with educational level and age.

Table 4.4B.--Stage comparison between teachers and students by percentage.

Subjects		Stages						Total
		2	3	4	5	6	Other	
Teachers	U	4	0	38	12	15	31	100%
	P	4	0	38	12	15	31	100%
American-born students	U	15	45	27	0	0	13	100%
	P	15	46	26	0	0	13	100%
Japanese-American students	U	22	26	39	0	4	9	100%
	P	24	29	38	0	5	4	100%

Note: U = unpurged scores, P = purged scores.

Hypothesis 4: There is no statistically significant difference between the levels of moral reasoning of the mothers born in the United States and the mothers born in Japan.

To test this hypothesis, a Scheffé post hoc comparison was conducted, setting the overall  $p < .05$  level of significance. Mean scores, standard deviations, ranges, and confidence intervals were computed and are recorded in Table 4.5A.

There was a significant difference at the  $p < .05$  level and the null hypothesis that there is no difference is rejected.

Analysis of the data for this hypothesis revealed a mean score difference of 3.32 unpurged and 3.59 purged between the American-born mothers and the Japanese-born mothers.

Oh Kohlberg's stage equivalent comparison, the American-born mothers and the Japanese-born mothers both scored predominantly

Table 4.5A.--P-score comparison between groups of mothers.

Group	Count	Mean	S.D.	S.E.	Range	95% of Conf. Int. for Mean
<u>1. Mean of Raw Score</u>						
Group 2						
Unpurged	48	19.8542	8.5701	1.2370	7-43	17.3657-22.3427
Purged	42	20.8571	8.4610	1.3056	7-43	18.2205-22.4938
Group 3						
Unpurged	17	16.8824	7.2014	1.7466	7-34	13.1797-20.5850
Purged	15	17.2667	7.1361	1.8425	8-34	13.3148-21.2185
<u>2. Analysis of Variance</u>						
Unpurged		Value			S.E.	Separate Variance Estimate
Purged		36.7365			T Value	D.F.
		38.1238			2.1403	17.164
					2.2582	16.882
						33.2
						29.1
						.000
						.001
<u>3. Mean of % Score</u>						
Group 2						
Unpurged	48	.3315	.1433	.0207	.1200-.7200	.2898-.3731
Purged	42	.3483	.1414	.0218	.1200-.7200	.3043-.3924
Group 3						
Unpurged	17	.2800	.1206	.0292	.1200-.5700	.2180-.3420
Purged	15	.2860	.1200	.0310	.1300-.5200	.2196-.3524
<u>4. Analysis of Variance</u>						
Unpurged		Value			S.E.	Separate Variance Estimate
Purged		.6115			T Value	D.F.
		.6313			.0358	17.069
					.0379	16.739
						33.2
						28.9
						.000
						.000

in Stage 4 (approximately 64 percent) with nearly twice as many other American-born mothers scoring in Stages 5 and 6 as the Japanese-born mothers (Table 4.5B).

Table 4.5B.--Stage comparison between groups of mothers by percentage.

Subjects		Stages						Total
		2	3	4	5	6	Other	
American-born mothers	U	2	8	65	4	10	11	100%
	P	0	7	64	5	12	12	100%
Japanese-born mothers	U	12	6	65	0	6	11	100%
	P	13	7	60	0	7	13	100%

Note: U = unpurged scores, P = purged scores.

Interpretation of these data indicates that, although there is a statistically significant difference, their average mean score differences, i.e., between the two groups of mothers, were relatively close together. It is possible that the Japanese mothers did not score as well because their facility in the English language was not as great as their American-born counterparts.

Hypothesis 5: There is no statistically significant difference between the levels of moral reasoning of the children of American-born mothers and the children of Japanese-born mothers.

Analysis of these data revealed a significant difference between the mean scores of the two groups at the overall  $p < .05$  level using the Scheffé post hoc procedure for comparisons. The null hypothesis of no difference is rejected since the mean score differences between the Japanese-American students and the children

Table 4.6A.--P-score comparison between groups of students.

Group	Count	Mean	S.D.	S.E.	Range	95% of Conf. Int. for Mean
<b>1. Mean of Raw Score</b>						
Group 4						
Unpurged	55	11.0182	4.4409	.5988	2-21	9.8176-12.2187
Purged	39	11.0769	4.1192	.6596	3-19	9.7416-12.4122
Group 5						
Unpurged	23	14.6957	4.8471	1.0107	7-30	12.5996-16.7916
Purged	21	14.7619	5.0389	1.0996	7-30	12.4682-17.0556
<b>2. Analysis of Variance</b>						
		Value			Separate Variance Estimate	
Unpurged		25.7138			S.E. T Value D.F. T. Prob.	
Purged		25.8388			1.1748 21.889 38.2 .000	
					1.2822 20.551 34.6 .000	
<b>3. Mean of % Score</b>						
Group 4						
Unpurged	55	.1838	.0744	.0100	.0300-.3500	.1637-.2039
Purged	39	.1851	.0690	.0111	.0500-.3200	.1628-.2075
Group 5						
Unpurged	23	.2441	.0804	.0168	.1200-.5000	.2100-.2796
Purged	21	.2451	.0836	.0182	.1200-.5000	.2077-.2838
<b>4. Analysis of Variance</b>						
		Value			Separate Variance Estimate	
Unpurged		.4286			S.E. T Value D.F. T. Prob.	
Purged		.4308			.0195 21.927 38.6 .000	
					.0213 20.203 34.9 .000	

of American-born mothers was found to be 3.68 unpurged and 3.69 purged (Table 4.6A).

On Kohlberg's stage equivalent comparison a higher percentage of Japanese-American students scored in Stage 4 than their counterparts (39 percent and 27 percent, respectively), while markedly more children of American-born mothers scored in Stage 3 than the Japanese-American children (45 percent and 26 percent, respectively). See Table 4.6B.

Table 4.6B.--Stage comparison between groups of students by percentage.

Subjects		Stages						Total
		2	3	4	5	6	Other	
American-born students	U	15	45	27	0	0	13	100%
	P	15	46	26	0	0	13	100%
Japanese-American students	U	22	26	39	0	4	9	100%
	P	24	29	38	0	5	4	100%

Note: U = unpurged scores, P = purged scores.

The data imply that the Japanese-American students are reasoning on a higher level of moral maturity at this age than their counterparts. The data also revealed that a much higher percentage of Japanese-American students passed the two tests of purging (consistency and discrimination), showing that 91 percent of the Japanese-American students passed the tests of purging while only 71 percent of the other group managed to pass the purging tests.

These data suggest that the Japanese-American students are operating at a higher level of moral reasoning at the middle school age than their American counterparts are. In addition, these Japanese-American students are not as fluent in the English language as their American peers, perhaps implying that the real differences between the two groups might be greater than those found in the present study.

A further implication seems to be that this researcher's impression that fewer discipline cases are sent to the office from among the Japanese-American students might suggest that moral reasoning is directly related to moral behavior, at least among third-culture youth. The implication is that the Japanese-American students think on a higher level of moral reasoning, and their actions at school reflect their thinking.

#### Limitations of the Study

1. Parents, teachers, and students are living in an overseas environment.
2. The community is a military community located in a large metropolitan area in a highly industrialized country.
3. The composition of the community is such that approximately 250 of the 350 families have come from as many as 100 different United States school systems.
4. Approximately one-third of the student body are bilingual students and a majority of them have lived their entire lives in the community.



5. The study will be limited to the mothers in the community, their children, and the teachers at the school.

6. All of the mothers have a connection to the United States Navy, either because their husbands are in the Navy or their husbands work for the Navy. These ladies may be considered atypical American wives inasmuch as they have learned to develop an unusual sense of independence because of the nature of their husbands' responsibilities and their absence from the home. Therefore the children will reflect more maternal influence than is normally found in American homes.

7. The subjects of this study have been selected because of their connection to this particular community.

8. The appropriateness of the test for the Japanese mothers is in question, especially since they were not involved in the piloting of the test, as their children were.

9. Of the 204 subjects chosen for the study, 169 of them completed the questionnaire, which constituted an 83 percent return.

#### Related Information

This research study has been developed with the intent of determining levels of moral reasoning of five groups of subjects within a selected community. From these data, it is possible for the most part to deduce the important findings and conclusions the study was designed to determine. However, there are further data that have been drawn from the study which can help to give insight



into areas surrounding the study. These data are recorded in Tables 4.7, 4.8A, and 4.8B.

In Table 4.7, a summary of the transformed stage breakdown by stages and groups has been derived from the available data. It can be seen, e.g., that there were 11 subjects who scored in Stage 6, of whom 4 were teachers, 6 were mothers, and the remaining 1 was a student. The percentage breakdown and the range of subjects in each group who scored at that level are recorded, as well as the total number of subjects, total percentage of each the unpurged and purged groups, and the total range for that stage. The table delineates this breakdown for all groups at each of the five stages (2-6), as well as a summary of those subjects who scored in the A, M, and No Stage categories. All of these have been recorded under a single category entitled "Other."

The purpose in recording Table 4.7 is to assist the reader in determining easily how many subjects from each group scored at each level.

These data suggest that nearly one-half of all subjects scored at the Stage 4 level of moral development. The data also indicate, to reiterate a finding found earlier in this chapter, that two-thirds of the mothers scored at Stage 4 (65 percent), while just over one-third of all teachers and just under one-third of all students scored at Stage 4. At the same time, 55 percent of all students scored in Stages 2 and 3, implying that students scored predominantly one to two stages below the teachers, and about one stage below the mothers. This would suggest that teachers

Table 4.7.--P-score (raw) and transformed stage equivalents.

Subjects	Unpurged (N=169)			Purged (N=143)		
	#	%	Range	#	%	Range
<u>Stage 6</u>						
Teachers	4	15	27-33	4	15	27-33
Mothers (M1)	5	10	24-43	5	10	24-43
Mothers (M2)	1	6	36	1	6	36
Students (S1)	0	0	N/A	0	0	N/A
Students (S2)	1	4	14	1	4	14
TOTALS	11	7%	14-33	11	13%	14-33
<u>Stage 5</u>						
Teachers	3	12	26-41	3	12	26-41
Mothers (M1)	2	4	31-36	2	5	31-36
Mothers (M2)	0	0	N/A	0	0	N/A
Students (S1)	0	0	N/A	0	0	N/A
Students (S2)	0	0	N/A	0	0	N/A
TOTALS	5	3%	26-41	5	3%	26-41
<u>Stage 4</u>						
Teachers	10	38	16-28	10	38	16-28
Mothers (M1)	31	65	7-32	27	64	7-32
Mothers (M2)	11	65	7-23	9	60	9-23
Students (S1)	15	27	6-18	10	26	6-18
Students (S2)	9	39	10-21	8	38	10-21
TOTALS	76	45%	6-32	64	45%	6-32
<u>Stage 3</u>						
Teachers	0	0	N/A	0	0	N/A
Mothers (M1)	4	8	7-10	3	7	7-10
Mothers (M2)	1	6	8	1	7	8
Students (S1)	25	45	2-21	18	46	7-16
Students (S2)	6	26	7-18	6	29	7-18
TOTALS	36	21%	2-21	28	20%	7-18
<u>Stage 2</u>						
Teachers	1	4	21	1	4	21
Mothers (M1)	1	2	24	0	0	N/A
Mothers (M2)	2	12	12-14	2	6	12-14
Students (S1)	8	15	3-19	6	15	3-19
Students (S2)	5	22	8-30	5	24	8-30
TOTALS	17	10%	3-30	14	10%	3-30
<u>Other (A, M, and No Stage)</u>						
Teachers	8	31	17-33	8	31	17-33
Mothers (M1)	5	10	24-31	5	12	24-31
Mothers (M2)	2	12	14-30	2	13	14-30
Students (S1)	7	13	5-18	5	13	7-16
Students (S2)	2	9	16-20	1	5	20
TOTALS	24	14%	5-33	21	15%	7-33

need to be careful in presenting their moral messages to the students.

Tables 4.8A and 4.8B are included here for the purpose of delineating any differences between and among different subgroups of students.

There were three F-tests conducted to determine significance levels:

1. Between the groups (S1 and S2)
2. Among the grades (fifth, sixth, seventh, and eighth)
3. Between the sexes (male and female)

As recorded in the charts, there was a significance found between the two groups at the  $p < .011$  level for the unpurged part, and  $p < .016$  for the purged group. This finding supports the findings in the Scheffé post hoc procedure following the one-way ANOVA as recorded earlier in this chapter. However, there was a significant relationship found among the grade levels and between the two sexes. It appeared, under the unpurged column, that there was no significant relationship between the mean scores of the two sexes ( $p < .012$ ). Under the purged sample, however, the apparent difference disappeared when the significance level came out to be  $p < .176$ , indicating a relationship instead of a difference. It is concluded, therefore, that there is no difference between the scores the girls achieved on the DIT and the scores the boys achieved on the DIT.

In Appendix C, a further breakdown of which subjects scored at which stage is delineated. The intent is to record the P-scores

Table 4.8A.---Analysis of students by group, grade, and sex (raw score only).

Source of Variation	Unpurged (78 Students)					Purged (60 Students)				
	Sum of Squares	DF	Mean Square	F	Signif. of F	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects										
Group	413.233	5	82.647	4.102	.003	304.031	5	60.806	3.015	.020
Grade	140.012	1	140.012	6.950	.011	126.099	1	126.099	6.252	.016
Sex	52.610	3	17.537	.870	.461	62.230	3	20.743	1.028	.389
2-Way Interactions	133.530	1	133.530	6.628	.012	38.059	1	39.059	1.887	.176
Group Grade	108.736	7	15.534	.771	.614	94.105	7	13.444	.667	.699
Group Sex	39.994	3	13.331	.662	.579	34.178	3	11.393	.565	.641
Grade Sex	7.829	1	7.829	.389	.535	.973	1	.973	.048	.827
3-Way Interactions	47.735	3	15.912	.790	.504	48.382	3	16.127	.800	.501
Group Grade Sex	9.982	2	4.991	.248	.781	32.180	2	16.090	.798	.457
Explained	9.982	2	4.991	.248	.781	32.180	2	16.090	.798	.457
Residual	531.951	14	37.996	1.886	.045	430.317	14	30.737	1.524	.141
Total	1269.229	63	20.146			907.617	45	20.169		
	1801.179	77	23.392			1337.933	59	22.677		
Unpurged (78 Students) Grand Mean = 12.10										
Variable & Category	Unadjusted			Adjusted for Ind.		Purged (60 Students) Grand Mean = 12.37				
	N	DEV#N	ETA	DEV#N	BETA	N	Unadjusted DEV#N	ETA	Adjusted DEV#N	BETA
Group 4	55	-1.08		-.89		39	-1.29		-1.13	
5	23	2.59	.35	2.39	.29	21	2.40	.37	2.11	.33
Grade 5	19	-.89		-.85		11	-1.37		-1.54	
6	25	-.66		-.61		20	-.87		-.62	
7	18	1.18		.78		14	1.42		.88	
8	16	.77	.18	1.08	.17	15	.83	.24	1.13	.22
Sex Male	34	-1.93		-1.54		27	-1.63		-.94	
Female	44	1.49	.35	1.19	.28	33	1.33	.31	.77	.18
Multiple R Squared					.229					.227
Multiple R					.479					.477

Table 4.8B.--Analysis of students by group, grade, and sex (percentage score only)

Source of Variation	Unpurged (78 Students)				Purged (60 Students)			
	Sum of Squares	DF	Mean Square	Signif. of F	Sum of Squares	DF	Mean Square	Signif. of F
Main Effects	.116	5	.023	4.117	.084	5	.017	2.989
Group	.038	1	.028	6.786	.033	1	.033	5.939
Grade	.015	3	.005	.893	.017	3	.006	1.031
Sex	.038	1	.038	6.753	.011	1	.011	1.998
2-Way Interactions	.030	7	.004	.754	.026	7	.004	.651
Group Grade	.011	3	.004	.671	.010	3	.003	.581
Group Sex	.002	1	.002	.387	.000	1	.000	.054
Grade Sex	.012	3	.004	.711	.013	3	.004	.758
3-Way Interactions	.003	2	.001	.239	.008	2	.004	.701
Group Grade Sex	.003	2	.001	.239	.008	2	.004	.701
Explained	.148	14	.011	1.882	.118	14	.008	1.493
Residual	.354	63	.006		.253	45	.006	
Total	.502	77	.007		.371	59	.006	

Variable & Category	Unpurged (78 Students)				Purged (60 Students)			
	N	Unadjusted DEV#N	Adjusted DEV#N	Adjusted for Ind. BETA	N	Unadjusted DEV#N	Adjusted DEV#N	Adjusted for Ind. BETA
Group 4	55	-.02	-.01		39	-.02	-.02	
5	23	-.04	.04	.28	21	.04	.03	.32
Grade 5	19	-.01	-.01		11	-.02	-.03	
6	25	-.01	-.01		20	-.01	-.01	
7	18	.02	.01		14	.02	.02	
8	16	.01	.02		15	.01	.02	
Sex Male	34	-.03	-.03	.17	27	-.03	-.02	.22
Female	44	.03	.02		33	.02	.01	
Multiple R Squared				.28				.19
Multiple R				.280				.227
				.480				.476

from high to low, within each group, and then to record that subject's transformed stage level. Therefore, the stage levels show up anywhere within the indicated range of scores. As an example, the students who scored at Stage 6 had a P-score of 14, while one of the mothers scored in Stage 6 and had a P-score of 43. C-1 is an overall comparison of subjects' raw scores to the transformed stage level. C-2 records the scores and conversions for the unpurged groups and C-3 records the purged scores and their stage equivalents.

#### Summary

In this chapter, the analysis of the data was presented. Obtained results for the overall one-way ANOVA and the five hypotheses, using the Scheffé post hoc procedure at  $p < .05$ , revealed differences in comparisons of scores on a test of moral reasoning among the five groups in the study.

In Chapter V, the summary, conclusions, and implications for further research are presented.



## CHAPTER V

### SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR FURTHER STUDY

A summary of the research is presented at the beginning of this chapter followed by the conclusions, implications of the study, and suggestions for further research.

#### Summary

This research was conceived and designed to explore the differences of mean scores on a test of moral reasoning between five groups of people in one selected community for the purpose of identifying differences between and among the groups and the relationship of these differences to the impact of the moral education program at the school.

The population of the 26 teachers employed by the school was measured as well as the sampled population from a group of 65 mothers, broken into two groups, and 78 middle school students, ages 10 to 14. These children, also divided into two groups, were the children of the mothers in the study.

The instrument used to collect the data was the Defining Issues Test (DIT), which was a questionnaire of five social dilemmas on which the subjects were to rate each of 12 questions for each dilemma, using a Likert scale to determine the levels of moral

reasoning of each group. In addition, these scores, called the P-scores (for Principled Reasoning), were transformed into Kohlberg's six stages of moral reasoning for the purpose of relating this study to the literature of Kohlberg.

The data collected for this research utilized a one-way analysis of variance for the overall omnibus test, to determine whether there was a difference among the mean scores for the groups. This was followed by six comparisons using the Scheffé post hoc procedure. The statistical significance was established at the  $p < .01$  level of significance for the omnibus test, and an overall  $p < .05$  level of significance for the six post hoc comparisons.

Specifically, the following research hypotheses were tested:

Hypothesis 1: There is no statistically significant difference between the teachers' level of moral reasoning and the mothers' levels of moral reasoning.

Hypothesis 2: There is no statistically significant difference between the mothers' levels of moral reasoning and their children's levels of moral reasoning.

Hypothesis 3: There is no statistically significant difference between the teachers' level of moral reasoning and the students' levels of moral reasoning.

Hypothesis 4: There is no statistically significant difference between the levels of moral reasoning of the mothers born in the United States and the mothers born in Japan.

Hypothesis 5: There is no statistically significant difference between the levels of moral reasoning of the children of American-born mothers and the children of Japanese-born mothers.

After determining that the omnibus test was significant at the  $p < .01$  level, it was decided to conduct the post hoc comparisons. The Scheffé post hoc comparisons revealed a significant difference of means on all of the tests.

### Conclusions

The following conclusions can be drawn from the analysis of data:

1. Teachers scored significantly higher on the DIT, a test determining levels of moral reasoning, than the mothers in the study did. However, the teachers' and mothers' levels were still significantly higher than the students' levels. The Japanese-born mothers' level was more closely aligned with their children's level of moral reasoning, suggesting that they would be more likely to communicate their moral messages to their children better than the American-born mothers would to their children.

2. The teachers scored significantly higher in their level of moral reasoning than the students. When the P-scores of the DIT were transformed into Kohlberg's six stages of moral development, the teachers were revealed to be operating, in general, two or more levels above the moral reasoning of the students.

3. The American-born mothers scored significantly higher on the DIT than their children did.

4. The Japanese-born mothers scored on a significantly higher level of moral reasoning than their children did.

5. The Japanese-American students scored on significantly higher levels of moral reasoning than their American-born counterparts.

6. The American-born mothers scored on a significantly higher level of moral reasoning than the Japanese-born mothers. Both of these groups, however, had two-thirds of their groups

operating on Kohlberg's stage-equivalent Stage 4 level. This, in general, was one stage above a majority of the students.

7. In general, teachers were revealed, when their P-scores were converted to Kohlberg's stage-equivalents, to be reasoning in Stages 4, 5, and 6. Mothers were found to be functioning at Stage 4 and students were functioning in Stages 2 and 3.

### Discussion of Conclusions

This study was designed to determine several things. This section will delineate what this study was designed to explore.

1. Was the match between the teachers and mothers found to be on compatible levels so that the model they formed provided a consistent atmosphere in which students could develop their levels of moral reasoning?

It was revealed that the match between two of the three adult groups formed a consistent model on which the students could develop their levels of moral reasoning, although the gap may be difficult for them to bridge. The Japanese-born mothers had a narrower gap to bridge. The research (Rest 1974; Kohlberg & Selman, 1972) had led this researcher to believe that adults should be expected to score on significantly higher levels of moral reasoning than middle school students, so that this finding is consistent with the literature.

Rest (NIMH, 1976) has theorized that people continue to develop their moral reasoning skills as long as they continue to be involved in formal education. Their levels of moral reasoning have a tendency to level off at the point at which they stop their formal

education program, and will, even many years later, be found to be functioning at approximately the same level.

The results of this study verify Rest's theory inasmuch as the teacher group was revealed to be functioning on a significantly higher level of moral reasoning than the mothers, even though their age levels were approximately the same. The difference could be explained by the different educational levels.

2. Were the students functioning on the same levels of moral reasoning?

It was believed, based upon the observations of this researcher, that the Japanese-American students would be found to be functioning on a higher level of moral reasoning. This was because the Japanese-American students seemed to be referred to the school principal for discipline less often than their student counterparts. The question revolved around whether the results on a test of moral reasoning would verify that the apparent better behavior of the Japanese-American students was based upon a higher level of moral reasoning skills.

The data lead this researcher to conclude that the Japanese-American students were functioning on a higher moral reasoning level than their peers who were children of American-born mothers. This conclusion has vast implications for the rate at which people in different cultures progress through Kohlberg's stages of moral development.

Piaget (1932) believed that children at about the age of 12 would be functioning at the third level of his three stages.

Kohlberg and Selman (1972) believed that very few people have developed to such a high level at that age and that only about 25 percent of all people ever function above Stage 4. This study found one student, aged 12, who was functioning on Kohlberg's Stage 6-equivalent. All other students were functioning below stage 5; i.e., they were developed and functioning in Stages 2, 3, and 4. Both of these findings lead this researcher to conclude that people predominantly function in Stage 4 or below, although some people do develop their levels of moral reasoning to Stages 5 and 6.

3. Would the mothers of the children in the student groups be functioning at the same levels of moral development?

The data verify that the two groups of mothers were functioning on about the same levels of moral reasoning, although the American-born mothers were revealed to be significantly higher than their Japanese-born counterparts.

The results of this finding, when compared to the findings of the student comparisons, however, shed new insight into the patterns of moral reasoning development in the Japanese and American cultures. Even though the moral reasoning level of the American-born mothers was higher than the Japanese-born mothers, the reverse was true between the two student groups. In this case, the Japanese-American students' level of moral reasoning was found to be significantly higher than their student counterparts.

Based on these findings, it is concluded that the Japanese mothers had in some way helped their children develop their moral

reasoning levels to a higher level than their American-born counterparts had helped their children.

4. Was the DIT applicable to children below the age of 12 and to third-culture children?

The results of this study lead this researcher to conclude that the DIT is applicable to the third-culture students in the Department of Defense schools in Japan. Of the 23 students in this sample, 21 of them were able to pass the tests of purging of consistency and discrimination. This compared to 39 of the 55 children of American-born mothers who passed the tests of purging and 42 of the 48 of the American-born mothers. Fifteen of the 17 Japanese-born mothers passed the tests of purging and all of the 26 teachers in the study passed the purging tests.

The results of the test indicated that the test was valid for the children of American-born mothers (77 percent of the students passed the purging tests) but that 10 year olds in this category found the DIT difficult since only 40 percent of these students passed the tests of purging.

5. Did the data indicate whether the school or the home had the most influence over the development of moral reasoning levels of the students?

The data were inconclusive on this question. The data did reveal that the teachers scored at the highest level of moral reasoning of the groups, and that the group of American-born mothers, although significantly lower than the teachers, was second highest, followed closely by the Japanese-born mothers. The data

also indicated a close match between the Japanese-born mothers and their children, but a wide gap between the American-born mothers and their children.

### Implications of the Study to Education

Within the past seven years, since about 1970, moral development as it relates to moral education has become a focal point in our education programs. This came as the result of the problems this country had faced during the 1960's, which appeared to be true moral dilemmas as epitomized in the Watergate and Korean scandals, as well as the level of vandalism and disciplinary problems the schools were encountering. During the past seven years, professional educators have become interested in the problems caused by an apparent moral value breakdown in the United States. The disintegration of the family structure seemed to be proliferating and the divorce rate went up at an alarming rate.

The subjects in this study were found to be functioning on different levels of moral reasoning, as identified in the P-scores on the DIT and on a derived stage-equivalent of Kohlberg's six levels of moral development. Since the teachers scored on the highest level of moral reasoning, it is implied that they should become the leaders in the school to set the moral development model for the students. Since the mothers scored on a comparable but somewhat lower level than the teachers, they should be assisting the teachers to develop a consistent program of moral education. It is believed that only in this way, i.e., with the teachers and mothers



working together, will the students be able to learn to develop their moral reasoning skills in an environment that is conducive to this development.

One finding of this study deserves special attention. The fact that the Japanese-American students scored on a significantly higher level of moral reasoning than their peers in the study, who were children of American-born mothers, needs to be carefully and thoroughly analyzed to determine the impact that this fact implies. An immediate study to determine the factors that are present in one segment of this society and not in the other needs to be conducted to identify what impact they have on the development of the moral reasoning skills of the students. The Japanese-American students need to be intermingled in every class in school. They also should be placed in positions of responsibility and they need to be encouraged to assist their peers in developing their levels of moral development.

A further implication of this significant finding is as it affects the inservice program for the teachers, for at least two reasons:

1. Teachers need to be made cognizant of the results of this study, i.e., that the Japanese-American students can be expected to be functioning on a higher level of moral reasoning than their peers. By being aware of this fact, teachers can encourage classroom discussions on moral dilemmas of the school, as well as the larger moral dilemmas society faces. This will bring out the higher level of moral reasoning of the Japanese-American students and will

cause discussions on how to go about resolving these moral dilemmas, at the same time it will give the Japanese-American students a chance to interact in this vital arena.

2. One great implication for inservice training for the teachers would be that it would make the teachers aware of the fact that their own levels of moral development are significantly higher than the levels of the students. This makes it imperative that teachers make special efforts to phrase their moral messages on a level which the students can understand. The teachers must be made aware that their scores are much higher as measured by the DIT, but also their stages, as measured on the stage-equivalent levels of Kohlberg. The impact of this knowledge should give the teachers reason to make the necessary adjustments in their vocabulary levels as well as in their behavior levels. It is crucial that the faculty develop a system of consistent rules for students to follow. It is also crucial for students to become involved in the process of developing behavior standards and for helping to enforce them. This involvement in decisions that affect them will assure the students of the fairness of the rules that are set.

The implications for the Department of Defense schools in Japan are vast, for it has been determined that approximately 40 percent of all students in these 16 schools have a Japanese-American heritage. There are further implications of the great need for further study in areas linking behavior with levels of moral reasoning, with linking academic achievement with levels of moral reasoning and comparing the results to those found in the culture

of the American-born children, and finally, with linking intelligence with levels of moral reasoning found in both cultures.

In particular, the implications of this study make it imperative that the Japanese-born mothers need to become involved in school affairs because they have much to contribute to the development of the moral and academic program of the schools. Schools need to make special efforts to involve these mothers as teacher aides and in other ways within the teaching-learning situation. The language difficulty should be bridged by the school by making certain that all school newsletters and school-related activities are translated into the Japanese language.

One further implication of the results of this study has as its foundation Rest's theory (NIMH Report, 1976) that moral reasoning tends to continue to develop as long as an individual continues with a formal education program. The data in this study have revealed support for this theory inasmuch as the teachers scored the highest on the DIT, the mothers scored below them but above the level of the students, and the students scored at the lowest of the three levels in their levels of moral reasoning. There is a great implication for the need for lifelong learning. The schools could and should make students aware of this need for developing a theory and a plan for lifelong learning, and should give them assistance in developing their own plans. If, as Kohlberg says (1971), to be functioning on the highest levels of moral reasoning is a more mature way of reasoning, then the implications for making students aware of the need for continuing their own education program, for personal or professional

reasons, make it necessary for the schools to assist them and encourage them to develop their own lifelong education programs. The schools should also encourage parents, by organizing and creating opportunities for them to participate in their formal schooling. Involving the parents in their children's educational process will assure the schools the opportunity of creating programs which will assist the parents to continue their own personal and professional educational programs.

#### Suggestions for Further Research

A major goal of educational research is to provide empirical data to assist in the identification of cultural heritage differences which will aid in determining the types of educational programs the schools should develop.

Through the process of this study, several questions arose. These questions are included as suggestions for further research.

1. Replication studies in other Department of Defense Schools in Japan, as well as in other countries where the schools are located, e.g., Korea, Okinawa, and the Philippine Islands, would yield additional data on the identification of cultural differences.

2. Since this study has found that there appear to be factors in the Japanese society which assist their children to develop their moral reasoning skills at a rate faster than the children in the American society, a study should be conducted to identify those factors in the Japanese society that foster this growth.

3. It has been observed by this researcher that the honor societies of the Department of Defense high schools in Japan consist

of approximately 90 percent Japanese-American students. A study linking levels of moral reasoning to academic achievement should be conducted to identify the correlation between these two areas and to make a further comparison between the Japanese-American students and the children of parents who are American born.

4. A replication study in the United States in any community with multiple cultural heritages may yield data which would provide insight into these cultural differences. It may also provide data that are useful to the development of the educational program.

5. A study linking moral reasoning skills to intelligence may yield information which would assist schools in determining the types of moral education programs that would be of practical importance to their students, as well as to the school, the community, and to society in general.

6. Since Dewey (1909), Piaget (1932), and Kohlberg (1971) have stated that they believed that moral development is basic to the foundations of the educational program, a study could be conducted to determine the extent to which schools in the United States, and in other countries, have developed their own moral education programs. If schools are finding that their moral education programs are having an impact on the academic programs, the programs with the most potential should be made available to others who are interested in developing similar programs. Of specific interest would be what schools do to develop the moral reasoning skills of their students.

7. A study comparing the influence the school has on the moral reasoning development of the student with the influence of the home may yield important data concerning the attitudes of these two segments of society which could provide insight into the divergence of thinking about this area of vital concern to all of every society.

### Reflections

This researcher has enjoyed the rich experiences found in conducting this study because of the personal and professional stimulation it has provided for him. It is recognized that a study of this kind, with its limited scope, is no more than an introduction into the field of educational research.

This researcher has found an area in educational research that contains few studies, although the implications for the need for these studies are great. The type of training each society gives to its young in the field of moral development, and the resulting moral education programs, is an area with great potential impact on our societies. Kohlberg and his associates have conducted research projects in moral development in the United States, as well as a large number of studies in foreign countries, to determine whether or not stages of moral development are the same in every culture. They have concluded that the stages appear to be the same in every culture, although the content of the stages may vary from culture to culture. This researcher believes it is important to add

another dimension to these studies by comparing the types of training each culture gives its children in moral reasoning development.

If, as Kohlberg says, and as the results of this study support, moral reasoning is connected to moral behavior, a study of comparisons of moral reasoning and moral behavior among all cultures, as well as within each culture, would give considerable insight into some of the problems involving moral behavior in our world today. The United States has had its Watergate scandal, and Japan has had its Lockheed scandal. Korea has had its bribery of American congressmen scandal and countries in the Middle East have had problems with terrorists. In addition, all rational people in the world are concerned about the possibility of nuclear war. It would be of great value if professional educators team up with moral philosophers to study the impact moral reasoning training has on all cultures and observe how schools in different countries deal with the issue called moral development, especially as it relates to the moral education programs in our schools.

## APPENDICES



## APPENDIX A

### PERIODS AND STAGES OF PIAGET, KOHLBERG, AND REST

## APPENDIX A

### PERIODS AND STAGES OF PIAGET, KOHLBERG, AND REST

#### Piaget's Periods of Cognitive Development (Stewart, 1973)

##### 1. Sensorimotor

General age range: Birth to approximately 18 months to 2-1/2 years. Perceptions and movements or actions constitute the child's intellectual instruments, which is the reason for the name of this stage.

Child is born with basic, minimal reflexes (sucking, crying, grasping, gross motor movements, etc.) which become action structures (schemes).

Prerepresentational--the child does not mentally represent objects or actions.

Preverbal--no language until the latter part of this stage.

Egocentrism total at first, gradually lessens, but remains dominant throughout. Operates as though self is whole world and causes all events.

Intelligence in the infant is displayed in his actions. Direct action upon reality.

No object permanence at first; begins to develop around four months.

At first: no concept of space; no concept of cause and effect relationships; no concept of time (before and after). Only gradually do these concepts develop with experience.

Six substance in this broad stage: (ages general and approximate)

- a. Reflex (Birth to 1 month)--Exercises ready-made schemas.
- b. First differentiations (1 to 4 months)--Primary circular reactions; i.e., coordination of motor habits and perceptions.
- c. Reproduction (4 to 8 months)--Secondary circular reactions; i.e., coordination of the primary circular reactions to form intentional acts.

- d. Coordination of schemas (8 to 12 months)--Applies familiar schemes to new situations.
- e. Experimentation (12 to 18 months)--Tertiary circular reactions; i.e., discovery of new means through experimentation.
- f. Representation (18 months to 24 months)--Invents new means through mental combinations. Begins symbolic representation language.

## 2. Preoperational

General age range: 2 or 3 years to 7 or 8 years.

Preconceptual period in which child can symbolize (thought, representation), but cannot perform operations. That is, he can differentiate signifiers (words and images) from what is signified (the objects or events to which the thoughts, images, representations refer). But he cannot integrate his thoughts into networks of thoughts in which he can reverse his thinking (reversibility is necessary for true operational thought, according to Piaget).

Actions are internalized and, therefore, represented, but thought is not liberated from perceptions. Thus the child in this perception-bound state will make decisions based on perceptual clues when confronted with a conflict between cognitions and perceptions.

Child cannot reason simultaneously about a part of the whole and the whole itself (class inclusion).

Begins to acquire language--first symbols, then concepts--this is the most important development in this stage.

Begins to develop imagery, but imperfectly--images are a product of and not a cause of mental activity.

Thought is not organized into rules and concepts.

Does not mentally represent a series of actions.

Gradually becomes less dependent on direct sensorimotor actions.

Speech goes through two major developmental periods:

- a. Egocentric speech (2 years to 4 or 5 years)--no communication or intent to communicate in the adult sense. Speaks in the presence of others, but without intention that others should hear his words. Speaks "according to

himself" but not "for himself." When he says he speaks for others he actually speaks from his own point of view. Piaget calls nonconversations of this type collective monologues. In many cases it is the thinking of actions out loud.

2. Socialized speech (by ages 5, 6, 7)--begins to actually communicate and exchange ideas, and intends that others should hear him and listen. Since cooperation depends on socialized speech, and for other reasons, this development has important implications for values development education.

Definitions are functional and not abstract; e.g., a hole is to dig, a fork is to eat with, Mommy is for taking care of me.

Ability to take social perspective is limited; e.g., does not understand that he or she is a brother or sister to his or her own siblings.

It is helpful to think of the Preoperational Stage as consisting of two substances: (1) the preconceptual, and (2) the intuitive. The two substances and their characteristics are:

a. Preconceptual Substance of Preoperational Thought:

Age range: 18 months to 2 years to about 4-1/2 years.

Lacks ability to develop true concepts.

Language is acquired slowly, and thinking is still considerably tied to action.

Imitation is largely unconscious. Child reproduces and simulates movements and ideas of others without realizing he does. This form of egocentrism is responsible for the child's indignation when accused of copying from another child; he believes he actually invented or rediscovered what he first saw in or by another.

Preconceptual thinking involves the following significant characteristics:

Transduction--reasons from particular to particular, not from general to particular (deduction), or particular to general (induction); e.g., thinks sun and moon are alive because they move by themselves.

Syncretism--link together things which are unrelated, and see relationships in terms of global perceptions. Tendency to connect everything with everything else.

Realism--belief that one's point of view is the only point of view, and therefore everyone's point of view.

Artificialism--belief that all things and events are caused by people.

Animism--belief that inanimate objects are alive.

b. Intuitive Substance of Preoperational Thought:

Age range: 4-1/2 years to about 7 or 8 years.

Thinking has progressed to point where child can give reasons for beliefs and actions; can form some concepts.

Still cannot make mental comparisons, must build them up with actions.

Perception is centered--i.e., child can only perceive one area, or one feature of something at a time, and he tends to assume that is the dominant or controlling aspect.

Unable to keep in mind more than one relation at a time.

Thinking is more advanced than preconceptual, but is still impressionable and unsystematic.

The entire preoperational stage, although an enormous step forward from the sensorimotor stage, is still limited in many ways. The limitations, which stand out in comparison to more mature forms of thought, especially adult thought, revolve around several major factors that influence the child's cognitive development at this stage. They are primarily concerned with the following:

1. Egocentrism
2. Irreversibility
3. Transductive reasoning
4. Centering
5. Inability to focus on transformations

3. Concrete Operations

General age range: 7 or 8 years to 11 or 12

The dominant mental activity of the child now shifts to intellectual operations for the first time.

Develops logical operations--i.e., the child's reasoning becomes logical--he can use logical thought processes (operations) that can be applied to concrete problems.

A concrete operation involves underlying systems of thought; e.g., classification, seriation, numbering, combining, separating, repeating, dividing, and substituting--but, these can be applied only to objects considered real (concrete), and not to hypothetical objects; i.e., the internal manipulations of objects that are, or have been, perceived.

No longer perception-bound--can make cognitive and logical decisions rather than perceptual decisions.

Decenters.

Gains reversibility.

Attends to transformations.

No longer dominated by egocentrism--is now aware that others can come to conclusions different than his own; begins to seek validation of his ideas through interaction with others. Can take the view of others.

Child can now truly speak "for himself" and not just "according to himself."

Child for the first time becomes truly social with nonegocentric speech, and can cooperate in a truly reciprocal way.

One of the most important developments of this period is the achievement of conservation, or the ability to conserve. This is the ability to hold constant certain features, dimensions, qualities, and characteristics of an object or situation when another aspect changes. (For example, if you change the shape of a clay ball right in front of the child's eyes, he will believe that you have also changed its weight, mass, etc., if he is still preoperational.) Conservation is a very significant and complex aspect of intelligence, and it is not achieved in all ways at the same time. The structures permitting conservation are usually developed for particular categories at the following ages:

number	5-6
substance (mass)	7-8
area	7-8
weight	9-10
volume	11-12

Thus it can be seen that, except for number, the child does not conserve until the beginning of concrete operations, then gradually acquires the other structures. Notice that the ability to conserve volume does not typically develop until the latter part of the period of concrete operations, and frequently not until the transition to formal operations, and sometimes not until the early part of formal operations.

This ability is extremely important for social development, and is, therefore, of major importance for values development. Human relationships depend on the ability to hold the relationship constant in the face of numerous changes.

#### 4. Formal Operations

General age range: Generally begins about 11 or 12 and may be well developed by 15 or 16, but this is not well established.

Final stage of intellectual development, or adult thought. Prior to this stage, the child has been able to deal with actions, objects, and images but has not been able to deal with ideas not linked to these other things.

Abstract and formal thought now possible with which the person can perform operations upon operations.

The internal manipulation of concepts, relations, and propositions.

The name of the stage derives from its major characteristic: the ability to consider the form of an argument rather than only its content; the abstract rather than the concrete.

This makes possible what is known as hypothetico-deductive reasoning; e.g., the person can reason about hypotheses, or possibilities, and draw conclusions about the outcome. Therefore, can deal with the possible as well as the existing and real. "If-then" type of thinking. Scientific reasoning.

Can subordinate reality to possibility.

Can deal with all classes of a problem: present, past, future, verbal, nonverbal, real, imaginary, etc.

Operations are coordinated and not dealt with in isolation.

True understanding of causations.

Issues and principles become important--can see things as they "ought" to be rather than only what "is."

Can operate reflectively.

Egocentrism usually increases when development proceeds to a new stage, and the person must cope with new and untried fields, operations, and ideas. It subsides as the person masters the new with experience. This phenomenon is especially noticeable with entry into formal operations, and manifests itself in the rebellion and social criticism of the young adolescent who is severely critical of things as they are because he sees how they

could be and should be. But, of course, he sees them largely from his own perspective without the more mature outlook that may come with experience. Therefore, this early stage takes the form of naive idealism characterized by omnipotence of thoughts.

Formal operations is critically important for values development in many, but especially because it is a necessary condition for mature human relationships that depend on reciprocity, conservation, reversibility, perspectivism, and other aspects of human intelligence that do not become fully present and operational until this period of cognitive development. One of the most important prerequisites for moral judgment, for example, is the ability to take social perspective and see things the way others see them, imagine the consequences and implications of several lines of action, and apply principles. This involves a complex process called mutual simultaneous reciprocity, or the ability to know that you are aware of x, that the other person is aware of x, that you are aware of the other person's awareness of x, and his awareness of your awareness of his awareness, and so on ad infinitum to an infinite regress, and the ability to do these things simultaneously. Another major formal operational logical principle, the inverse of the reciprocal, is required for complex social relationships.

This period of development does not take place all of a piece, and probably proceeds through at least three substages.



Kohlberg's Stages of Moral Development  
(Kohlberg & Selman, 1972)

Definition of Moral Stages

Stage 0: Premoral Level

The child neither understands rules nor judges good or bad in terms of rules and authority. Good is what is pleasant or exciting, bad is what is painful or fearful. He has no idea of "obligation," "should," or "have to," even in terms of external authority, but is guided only by "can do" and "want to do."

Stages 1 and 2: Preconventional Level

At this level the child is responsive to cultural rules and labels of good and bad, right and wrong, but he interprets these labels either in terms of the physical and the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. The level is divided into two stages, Stage 1 and Stage 2.

Stage 1--Punishment and Obedience Orientation

Stage 1 is defined as punishment and obedience orientation. The physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences. Avoidance of punishment and unquestioning deference to power are an underlying moral order supported by punishment and authority (the latter being Stage 4).

Stage 2--Instrumental Relativist Orientation

Stage 2 is instrumental relativist orientation. Right action consists of that which instrumentally satisfies one's own needs and occasionally the needs of others. Human relations are viewed in terms of those of the market place. Elements of fairness, reciprocity, and equal sharing are present, but they are always interpreted in a physical or pragmatic way. Reciprocity is a matter of "you scratch my back and I'll scratch yours," not of loyalty, gratitude, or justice.

Stages 3 and 4: Conventional Level

At this level, maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. The attitude is not only one of conformity to personal expectations and social order but of being loyal to, actively maintaining, supporting, and justifying the order and identifying with the persons or group involved in it. At this level are Stage 3 and Stage 4.



### Stage 3--"Good Boy-Nice Girl" Orientation

Stage 3 is defined as interpersonal concordance or "good boy-nice girl" orientation. Good behavior is that which pleases or helps others and is approved by them. There is much conformity to stereotypical images of what is the behavior of the majority of "natural" behavior. Behavior is frequently judged by intention: "he means well" becomes important for the first time. One earns approval by being "nice."

### Stage 4--Law and Order Orientation

Stage 4 is law and order orientation. There is orientation toward authority, fixed rules, and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority, and maintaining the given social order for its own sake.

### Stages 5 and 6: Post-Conventional, Autonomous, or Principled Level

At this level there is a clear effort to define moral values and principles which have validity and applications apart from the authority of the groups or persons holding these principles and apart from the individual's own identification with these groups. This level also has two stages: Stage 5 and Stage 6.

### Stage 5--Social-Contract Legalistic Orientation

Stage 5 is defined as social-contract legalistic orientation, generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights and in terms of standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinion and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal values and opinion. The result is an emphasis upon the legal point of view, but with an emphasis upon the possibility of changing the law in terms of rational considerations of social utility (rather than rigidly maintaining it in terms of Stage 4 law and order). Outside the legal realm, free agreement and contract is the binding element of obligation. This is the "official morality of the American government and Constitution."

### Stage 6--Universal Ethical Principle Orientation

Stage 6 is the universal ethical principle orientation. Right is defined by the decision of conscience in accord with self-chosen ethical principles which appeal to logical comprehensiveness,

universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative) and are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons.

# Rest's Stages of Moral Judgment (Rest, Analysis, 1976)

Stage	How Expectations About Each Other's Actions Are Coordinated (How Rules Are Knowable and Sharable)	Schemes of Social Cooperation (How an Equilibrium of Interests Is Achieved)	Central Concept for Determining Moral Rights and Responsibilities
Stage 1	The caretaker makes known certain demands on the child's behavior.	The child does not share in making rules, but understands that obedience will bring freedom from punishment.	The morality of obedience: "Do what you're told."
Stage 2	Although each person is understood to have his own interests, an exchange of favors might be mutually decided upon.	If each party sees something to gain in an exchange, then both want to reciprocate.	The morality of instrumental egoism and simple exchange: "Let's make a deal."
Stage 3	Through reciprocal role taking, individuals attain a mutual understanding about each other and the on-going pattern of their interactions	Friendship relationships establish a stabilized and enduring scheme of cooperation. Each party anticipates the feelings, needs, and wants of the other and acts in the other's welfare.	The morality of personal concordance: "Be considerate, nice and kind, and you'll get along with people."

Rest's Stages of Moral Judgment (cont'd)

Stage	How Expectations About Each Other's Actions Are Coordinated (How Rules Are Knowable and Sharable)	Schemes of Social Cooperation (How an Equilibrium of Interests Is Achieved)	Central Concept for Determining Moral Rights and Responsibilities
Stage 4	All members of society know what is expected of them through public, institutional law.	Unless a society-wide system of cooperation is established and stabilized, no individual can really make plans. Each person should follow the law and do his particular job, anticipating that other people will also fulfill their responsibilities.	The morality of law and duty to the social order: "Everyone in society is obligated and protected by the law."
Stage 5	Formal procedures are institutionalized for making laws, which one anticipates rational people would accept.	Law-making procedures are devised so that they reflect the general will of the people, but at the same time insuring certain basic rights to all. With each person having a say in the decision process, each will see that his interests are probabilistically being maximized while at the same time having a basis for making claims on other people.	The morality of societal consensus: "What laws the people want to make is what ought to be."

Rest's Stages of Moral Judgment (cont'd)

Stage	How Expectations About Each Other's Actions Are Coordinated (How Rules Are Knowable and Sharable)	Schemes of Social Cooperation (How an Equilibrium of Interests Is Achieved)	Central Concept for Determining Moral Rights and Responsibilities
Stage 6	The logical requirements of nonarbitrary cooperation among rational, equal, and impartial people are taken as ideal criteria for social organization which one anticipates rational people would accept.	A scheme of cooperation which negates or neutralizes all arbitrary distribution of rights and responsibilities is the most equilibrated, for such a system is maximizing the simultaneous benefit to each member such that any deviation from these rules would advantage some members at the expense of others.	The morality of nonarbitrary social cooperation: "How rational and impartial people would organize cooperation is moral.:

## **APPENDIX B**

### **TEST INSTRUMENT AND RELATED INFORMATION**



APPENDIX B

TEST INSTRUMENT AND RELATED INFORMATION

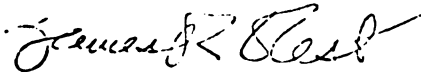
UNIVERSITY OF MINNESOTA

Dear Colleague:

I am pleased to give you permission to use the Defining Issues Test for your project. Please include the following credit lines on the front page of all copies of the test when you are duplicating them: Copyright James Rest, 1972, all rights reserved.

Best wishes for success in your work. I do appreciate hearing of your progress and please send me a copy of your report.

Sincerely,

A handwritten signature in cursive script, appearing to read "James R. Rest".

James R. Rest  
Associate Professor

JRR:ph

Dear Colleague:

Thank you for your interest in the Defining Issues Test of moral judgment. Due to the number of requests for information, I am resorting to this form letter which covers many of the questions usually asked.

The Defining Issues Test is easily group administered and a typical class period (50-60 minutes) is usually ample time. The scoring is completely objective either by using scoring keys or by computer. Subjects who are randomly checking responses or who do not understand directions can be detected by an internal consistency check. I have used the test with groups as young as the ninth grade (13-14 years). Other researchers have reported successfully using it with 7th graders and some have used it in a one-to-one interview format but still scoring it objectively. The test yields scores for Stages 2, 3, 4, 4 1/2, 5A, 5B, and 6, however the most useful index has been a combination of Stages 5 and 6, a "principled" morality score ("P" score).

A brief sampling of findings from recent studies includes the following:

1. The test powerfully discriminates these groups:  
junior high school students, senior high school, college  
and graduate students (one way ANOVA  $F = 48.5$ ).
2. It correlates in the .60's with moral comprehension.
3. It correlates in the .60's with stances on current  
political-moral controversies.
4. It correlates .68 with Kohlberg's test.
5. It has a two week test-retest stability of .81.
6. The correlation over two years is .57.
7. It shows significant pre-post test gains in response to  
some educational experiences (i.e., ethics course, a  
Deliberate Psychological Education program) but not to  
other courses (art, logic, religion).
8. In a two year longitudinal study, subjects show significant  
upward movement ( $p \leq .001$ ) with college students showing  
twice as much progress as non-college subjects.
9. With directions to fake low, subjects can depress their  
scores, but with directions to fake high, scores do not  
increase.

Currently many studies are underway including correlating the D.I.T. with various personality, attitude and developmental variables, using the test in project evaluations, and further development of the test itself by item analyses, new scaling techniques, and the development of shorter, more accurate versions with two forms.

Several disclaimers should be mentioned at this point. The test is inappropriate for subjects not fluent with English or who do not have roughly an 8th grade level. Also, test scores should not be used to make inferences about the moral worth, honesty or loyalty of persons but rather is a test of moral thinking, as is the case with all moral judgment measures. I still consider the test as a research and experimental measure, and its properties are still under investigation--although it seems to compare very well with other existing measures of its type. Hopefully, further research will result in revisions and improvements of the current D.I.T.

As with all psychological tests, the D.I.T. is vulnerable to misuse. We can all imagine misrepresentations about someone's "morality" inferred from the D.I.T. scores. An easily scorable test of moral judgment is probably more vulnerable to abuse than many psychological tests. With this in mind I have the test copyrighted and want to exercise control over its use. I am trying to protect legitimate research and educational uses of the test by being prepared to take legal action against any misusers. I ask that each use of the test be cleared through me by providing in a letter the following information:

1. name, address and phone number of investigator(s)
2. institutional affiliation
3. characteristics of the sample
4. purpose of using the test

I hope that this extra step will not hamper use of the test--there are no fees or charges for using the test and all professional and student researchers affiliated with recognized institutions are encouraged to use it.

If you are interested in using the test, please send me the above information. If you do complete a study I would like a report of your findings and also a copy of the raw D.I.T. data to use in item analyses and further instrument development.

If you would like further information about the Defining Issues Test, the following package of materials is available:

1. Test administration suggestions
2. Directions for calculations;
  - a) Stage scores (Stages 2, 3, 4, 4 1/2, 5A, 5B, 6 and 7)
  - b) Checking for subject reliability (consistency check)
  - c) Stage typing a subject

3. Model computer programs for calculations above and the standard layout for computer card punching
4. Theoretical discussion of stage characteristics presupposed in the D.I.T. (40 pages)
5. Reprint: Rest, et. al. Judging the important issues in moral dilemmas--an objective measure of development, Developmental Psyc, 1974, 10 (4), 491-501.
6. Reprint: Rest, Longitudinal study of the defining issues test of moral judgment. Dev. Psyc, 1975, 11, (6), 738-748.

Since I cannot ask my department to bear all of these duplication and mailing costs, if you want this package of materials send a check for \$10.00 made out to "Minnesota Moral Research Projects."

Other references are published and available from the publishers:

Rest, New approaches in the assessment of moral judgment. In T. Lickert (Ed.), Moral Development and Behavior: Theory, Research and Social Issues, New York: Holt, Rinehart and Winston, 1976, 198-228.

Rest, The validity of tests of moral judgment. In Meyer, Burnham and Cholvat (Eds.), Values Education: Theory, Practice, Problems, Projects. Waterloo, Ontario: Wilfred Laurier U. Press, 1975, 105-116.

Rest, Recent research on an objective test of moral judgment: How the important issues of a moral dilemma are defined. In Moral Development: Current Theory and Research, De Palma and Foley (Eds.). Potomac, Maryland: Lawrence Erlbaum Assoc., 1975, 75-94.

Yours truly,



James R. Rest  
Associate Professor

JRR:ke

## 1. ADMINISTERING THE QUESTIONNAIRE

### Administration and Timing

The D.I.T. can be group administered and usually a class period (50-60 minutes) is ample time for the 6-story version. There is a shorter version (see Section 7) consisting of 3 stories which has almost the same characteristics as the longer version. The D.I.T. is not intended to be a speeded test and every subject should finish the entire questionnaire--some subjects may want to linger over answers but should be encouraged to finish within an hour. In some cases the D.I.T. has been given to subjects to take home and complete without monitoring. With such use the experimenter should have assurance that subjects are motivated to take the test seriously, that they do understand directions, and that their answers are solely their own. In other cases the D.I.T. has been administered one-to-one, with the examiner reading through the questionnaire with the subject, and helping the subject with the directions--this mode may be appropriate with less motivated subjects, or those unfamiliar with objective test formats.

The present forms of the D.I.T. have subjects put check marks and numbers directly on the questionnaire booklet, but with subjects accustomed to objective tests, the use of machine-scored answer sheets could save time in data processing. (We hope to have answer sheets and a service for machine scoring available soon.)

### Instructions to Subjects

I think that the important points in giving instructions are the following:

(1) We are interested in the subject's own opinions about controversial social issues. Different people have different opinions.

(2) The time allowed to complete the questionnaire is usually ample for everyone to finish it. Subjects should consider every item carefully but also should pace themselves so that they finish in about an hour.

(3) Every story has 12 issues. The first task after reading the story is to read each item by itself and to rate it in importance. After rating each item individually, then the subject considers the set of 12 items and chooses the four most important items. I usually introduce a sample story (Frank Jones deciding about buying a car) to illustrate the task of rating and ranking issues in terms of their importance in making a decision. With subjects unfamiliar with objective tests (and routinely with junior high subjects) I suggest reading through the Frank Jones sample case aloud in the group and going through the sample case with the subjects, seeing if they understand the task and answering questions about procedures --then after the sample case, subjects are on their own.

(4) Note that the sample case illustrates items which may not be comprehended (Item 4) or which sound like gibberish (Item 6). Subjects are instructed to mark such items as "no importance". Throughout the test there are items which are meaningless nonsense items ("M" items--see Sections 2 and 4) and subjects should have the test taking set at the beginning to rate these items low.

(5) If during the testing a subject does not understand a word in a story, it is permissible to give him a dictionary definition of the

word. If a subject does not understand a word in an item, do not interpret it for him or send him to the dictionary. Ask him to make his best judgment about it.

I have used several versions of instructions. In addition to the instructions contained in the form of the D.I.T. sent to you, you might want to consider the following expansions of instructions if you think they would be helpful to your subjects.

In making a decision about social problems, what should be the most important questions a person asks himself? On what general basis would you want people to determine what is crucial in these problems?

On the next page is a list of questions that a person might ask himself when he is trying to make a decision. Read one question at a time and check in the left hand margin (of each one) how important you think it is.

There are five places to put a check.

Great importance--Check here if the question concerns something that makes a big, crucial difference one way or the other in making a decision about the problem.

Much Importance--Check here if the question concerns something that a person should clearly be aware of in making a decision, and one way or the other, it would make a difference in your decision, but not a big, crucial difference.

Some importance--Check here if the question concerns something you generally care about, but something that is not of crucial importance in deciding about this problem.

Little importance--Check here if the question concerns something that is not sufficiently important to consider in this case.

No importance--Check here if the question is about something that has no importance in making a decision, and that you'd be wasting your time in thinking about this when trying to make a difficult decision. Some of the questions are apt to seem foolish or make no sense--Check here on those questions.

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. On the next page 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 of the next page 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.)

- | GREAT importance | MUCH importance | SOME importance | LITTLE importance | NO importance |   |
|------------------|-----------------|-----------------|-------------------|---------------|---|
| —                | —               | —               | —                 | ✓             | 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 <u>used</u> car be more economical in the long run than a <u>new</u> 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.")  |



GREAT importance  
 MUCH importance  
 SOME importance  
 LITTLE importance  
 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 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 important	<u>5</u>
Second most important	<u>2</u>
Third most important	<u>3</u>
Fourth most important	<u>1</u>

DIRECTIONS FOR TEST

January 26, 1977

1. You should allow yourself approximately an hour to take the test.
2. Please check to be certain that there are six sections of the test.
3. You should know that you will not be identified in the final analysis and that we are only interested in your opinions.
4. Thirty (30) teachers are being requested to complete this questionnaire. Eighty-six (86) students in grades five, six, seven and eight have been randomly selected to answer the questionnaires, as well as their mothers.
5. Since mothers are selected because their child was selected, and the comparisons will be analyzed, it is important not to talk about the test until everyone has completed the opinionnaire, or until after February 15, 1977.
6. Some of the answers may seem vague or difficult. If you believe a statement is vague, it is because the authors of the test deliberately included these statements. You should rate these nonsense statements low.
7. At the bottom of each section there is a place for you to list the numbers you consider most important. These must correspond to the order you placed them in above. Please review sample on front page.
8. Please be sure to complete all parts of the opinionnaire.
9. Each story has 12 issues which you must rate in your order of priority. Place a check mark in the correct column.
10. For reference purposes only, you are asked to complete the front section.

# OPINIONS ABOUT SOCIAL PROBLEMS

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:

Name \_\_\_\_\_ ☐ female

Age \_\_\_\_\_ Class and period \_\_\_\_\_ ☐ male

School \_\_\_\_\_

\* \* \* \* \*

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 <u>used</u> car be more economical in the <u>long run</u> than a <u>new</u> 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 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 \_\_\_\_\_

## 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 \_\_\_\_\_

## 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 \_\_\_\_\_

## 2. SCORING THE D.I.T.

Stage Scores, Including the "P" Score

If you are hand scoring your questionnaires, follow these steps:

1. Prepare data sheets for each S as follows:

<u>Story</u>	Stage 2	3	4	5A	5B	6	A	M	P
Heinz									
Students									
Prisoner									
Doctor									
Webster									
Newspaper									
Totals									

2. Only look at first four rankings at bottom of test page.

3. For the "question" marked as most important (Rank #1) consult the chart below to find out what stage the item exemplifies. For instance, if a subject's first rank on the Heinz story was question 6, this would be a stage 4 choice.

<u>Story</u>	Item 1	2	3	4	5	6	7	8	9	10	11	12
Heinz	4	3	2	M	3	4	M	6	A	5A	3	5A
Stu.	3	4	2	5A	5A	3	6	4	3	A	5B	4
Pris.	3	4	A	4	6	M	3	4	3	4	5A	5A
Doc.	3	4	A	2	5A	M	3	6	4	5B	4	5A
Web.	4	4	3	2	6	A	5A	5A	5B	3	4	3
Newsp.	4	4	2	4	M	5A	3	3	5B	5A	4	3

4. After finding the item's stage, weight the choices by giving a weight of 4 to the first choice, 3 to the second choice, 2 to the third choice, and 1 to the fourth choice.

5. For each 1st, 2nd, 3rd, and 4th choice in the 6 stories, enter the appropriate weight in the stage column on the subject's DATA SHEET. For instance, in the example above where the first choice was a stage 4 item, enter a weight of 4 on the data sheet under stage 4 across the Heinz story.

6. The completed table on the DATA SHEET will have 4 entries for every story and 24 entries altogether. (There may be more than one entry in a box, e.g., a first and second choice on the Heinz story of a stage 4 item.)

7. On the subject's DATA SHEET, total each stage column (e.g., for stage 2 column, add numbers by Heinz story, Student story, Prisoner, etc.).

8. To get the "Principled" morality score ("P"), add the sub-totals together from stages 5A, 5B, and 6. This is interpreted as "the relative importance attributed to principled moral considerations" in making a moral decision.

9. You may want to express the totals in terms of percentages, in which case divide the raw score by 60. Note that the P score (as a percentage) can range from 0 to 95 instead of 100 due to the fact that on 3 stories there is no fourth possible Principled item to choose.

APPENDIX C

P-SCORE TABLES

## APPENDIX C

### P-SCORE TABLES

**Table C.1.--Comparison between subjects' P-score (raw) and their transformed stage-equivalent: A summary.**

Stage	Unpurged		Purged	
	# Subjects	Range	# Subjects	Range
6	11	14-43	11	14-43
5	5	26-41	5	26-41
4	76	6-32	64	6-32
3	36	7-21	28	7-18
2	17	3-30	14	3-30
A	9	5-33	7	17-33
M	7	7-31	6	7-31
No stage	8	18-30	8	18-30
Totals	169	3-43	143	3-43

Table C-2.--P-score (raw) and stage-equivalent (unpurged).

Teachers	Mothers		Students	
T	M1	M2	S1	S2
41-1-5A*	43-1-6	34-1-6	21-1-3	30-1-2
34-1-5A	36-1-5A	30-1-NS	19-1-2	21-1-4
33-3-6 <sup>2</sup> ,A	34-1-6	23-1-4	18-5-3,4 <sup>2</sup> ,A,NS	20-1-NS
30-1-6	32-1-4	21-1-4	17-1-3	18-2-2,3
29-1-A	31-3-4,5A,M	20-1-4	16-4-3,4,A,M	17-1
28-1-4	29-1-6	18-1-4	15-1-3	16-2-4,M
27-3-4,6,A	28-1-4	17-2-4 <sup>2</sup>	14-2-3,4	15-2-2,4
26-2-5A,M	27-2-2NS	15-1-4	13-4-2 <sup>2</sup> ,3,4	14-4-3,4 <sup>2</sup> ,6
25-1-NS	25-4-4 <sup>2</sup> ,6,NS	14-4-2,4 <sup>2</sup> ,M	12-3-2,3 <sup>2</sup>	13-2-3,4
24-3-4 <sup>2</sup> ,A	24-3-2,6,NS	12-1-2	11-6-3 <sup>4</sup> ,4,M	12-2-3,4
21-2-2,A	23-1-4	9-1-4	10-4-3,4 <sup>3</sup>	11-1-4
20-4-4 <sup>4</sup>	21-2-4 <sup>2</sup>	8-1-3	9-4-2,3 <sup>3</sup>	10-2-2,4
19-1-4	20-1-4	7-1-4	8-5-2,3 <sup>4</sup>	8-1-2
17-1-A	19-3-4 <sup>3</sup>	n3 = 17	7-6-3 <sup>3</sup> ,4 <sup>2</sup> ,M	7-1-3
16-1-4	18-2-4 <sup>2</sup>		6-5-2,4 <sup>4</sup>	n5 = 23
n1 = 26	17-3-4 <sup>3</sup>		5-1-A	
	16-1-4		3-1-2	
	15-2-4 <sup>2</sup>		2-1-3	
	14-3-4 <sup>3</sup>			
	13-2-4 <sup>2</sup>			
	12-1-4			
	10-2-3,4			
	9-3-3 <sup>2</sup> ,4			
	8-2-4 <sup>2</sup>			
	7-2-3,4			
	n2 = 48			
			n4 = 55	

\*Key: In the number 41-1-5A, 41 = score, 1 = number, 5A = stage.



Table C-3.--P-score (raw) and stage-equivalent (purged).

Teachers	Mothers		Students	
T	M1	M2	S1	S2
41-1-5A	43-1-6	34-1-6	19-1-2	30-1-2
34-1-5A	36-1-5A	30-1-NS	18-4-4 <sup>2</sup> ,A,NS	21-1-4
33-3-6 <sup>2</sup> ,A	34-1-6	23-1-4	16-3-3,4,M	20-1-NS
30-1-6	32-1-4	20-1-4	15-1-3	18-2-2,3
29-1-A	31-3-4,5A,M	18-1-4	14-1-4	17-1-3
28-1-4	29-1-6	17-2-4 <sup>2</sup>	13-3-2,3,4	16-1-4
27-3-4,6,A	28-1-4	15-1-4	12-3-3 <sup>3</sup>	15-2-2,4
26-2-5A,M	27-2-NS <sup>2</sup>	14-4-2,4 <sup>2</sup> ,M	11-4-3 <sup>3</sup> ,M	14-4-4 <sup>2</sup> ,3,6
25-1-NS	25-4-4 <sup>2</sup> ,6,NS	12-1-2	10-3-3,4 <sup>2</sup>	13-2-4,3
24-3-4 <sup>2</sup> ,A	24-2-6,NS	9-1-4	9-3-2,3 <sup>2</sup>	12-1-3
21-2-2,A	23-1-4	8-1-3	8-4-2,3 <sup>3</sup>	11-1-4
20-4-4 <sup>4</sup>	21-2-4 <sup>2</sup>	n3 = 15	7-5-3 <sup>3</sup>	10-2-4,2
19-1-4	20-1-4		6-3-2,4 <sup>2</sup>	8-1-2
17-1-A	19-3-4 <sup>3</sup>		3-1-2	7-1-3
16-1-4	18-2-4 <sup>2</sup>		n4 = 39	n5 = 21
n1 = 26	17-3-4 <sup>3</sup>			
	16-1-4			
	15-2-4 <sup>2</sup>			
	14-2-4 <sup>2</sup>			
	13-1-4			
	12-1-4			
	10-2-3,4			
	9-1-3			
	8-1-4			
	7-2-3,4			
	n2 = 42			

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