The relationship of empathy to moral reasoning, sex, and mode of story presentation: A thesis presented to the faculty of California State College

Donald W. Higgins

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THE RELATIONSHIP OF EMPATHY TO MORAL REASONING,
SEX, AND MODE OF STORY PRESENTATION

A Thesis
Presented to the
Faculty of
California State College
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Psychology

by
Donald W. Higgins
October 1975
THE RELATIONSHIP OF EMPATHY TO MORAL REASONING, SEX, AND MODE OF STORY PRESENTATION

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Approved by:

Chairperson

Date

11-10-75
ABSTRACT

This experiment was conducted to investigate (a) the effect of sex of subject and mode of moral dilemma story presentation on the empathy of subjects toward the characters in the stories, and (b) the relationship between empathy and Kohlberg's moral judgment stages. Sixty-four high school students (32 males and 32 females) were divided into two groups matched on the scores of an empathy questionnaire. One group read two moral dilemma stories while the other group was exposed to a dramatized tape-recorded version of the stories. A second empathy scale, related to the moral dilemma stories, was then given to both groups. The results indicate that (a) females showed more empathy than males, (b) subjects who heard the stories showed more empathy than subjects who read the stories, and (c) moral judgment stage is related to degree of empathy. The results were interpreted as confirming the importance of the role of empathy in moral judgment.
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ACKNOWLEDGEMENTS

I wish to express my appreciation to Dr. Steve Morin for his excellent presentation of Kohlberg's studies in moral development which provided the basis for this investigation.

I especially wish to thank Dr. Steve Olmedo for his encouragement, technical assistance, and editorial comments.

I also wish to thank Dr. Mike Maskin for his helpful suggestions in the area of helping behavior.

I am also indebted to a fellow graduate student, Sid Goodman, for his assistance in the scoring and evaluation of moral judgment stages.
INTRODUCTION

Historical Background of Problem

A brief historical overview of the concept of morality will indicate the complex nature of this subject. Prior to the twentieth century, the subject of morality fell within the field of philosophic ethics. Little, if any, scientific research was carried out to determine the antecedents of moral behavior. It wasn't until Freud's time that morality became of research interest to the field of psychology. Through many case studies such as "The Analysis of a Phobia in a Five Year Old Boy," Freud (1909) believed that the acquisition of morality was internal; that is, learned through an agency in the child's personality which he called the superego and was responsible for issuing declarations of the "thou shalt" and "thou shalt not" variety. Freud emphasized feelings of guilt imposed by the superego as a controller in the moralization of the child. The way in which the child acquired his/her morality was through a process called identification with his/her parents. Most often, however, moralization would occur because of parental displeasure or disapproval resulting in the feelings of the child with a sense of shame or guilt. Thus, Freud's approach was subjective and concentrated on the client's feelings to explain moral judgment.
In the late 1920s an objective approach in the investigation of morality was undertaken by Hartshorne and May (1928-30). This was the monumental American study called "The Character Education Inquiry" (CEI). Thousands of children were used in the investigation of moral knowledge and moral conduct. Moral conduct was studied by giving children opportunities to lie, steal, and cheat in circumstances such that they could believe themselves safe from being discovered. Paper and pencil tests to infer moral knowledge contained statements such as, "Good marks are chiefly a matter of luck," which would be marked true or false. A parallel study was conducted on moral opinion in which statements such as, "It is your duty to report another student if you see him cheating," were answered with true or false responses.

Hartshorne and May had anticipated that their study would reveal a consistency of moral character. The results of the CEI were most surprising. They showed a marked specificity of moral behavior. Correlations between one experimental setting and another were low. For example, the child that cheated on an arithmetic test as often as not failed to cheat on a spelling test. In the final analysis of some 11,000 children, the results revealed little correlation between moral knowledge and moral conduct and, further, that moral conduct was a function of the situation instead of the generalized morality that was hypothesized.
At about the same time of the CEI and in contrast to the Hartshorne and May study, Piaget (1932) investigated morality in children with respect to the forms of understanding moral knowledge, a cognitive approach. To investigate their understanding of moral concepts, Piaget described two story situations and asked the children to determine which of the two described the "naughtier" action. The test stories differed only in the moral intentions of the characters in the stories and the amount or size of resulting damage. The results of the children's answers revealed two moralities for Piaget, which he labeled heteronomous, meaning "subject to another's law" and autonomous, meaning "subject to one's own law." For example, in the test stories involving the characters' moral actions, children of eight years old and younger thought the subject in the first story to be the "naughtier" child for the reason that she had done the greater damage; the child's moral conception is objective and absolute and conduct is ruled by adult authority. Older children, above eight years, thought the subject in the second story to be the "naughtier" because her intentions were not as good as the subject in the first story; the older child's moral conception is subjective and relative and conduct is ruled by mutual group agreement.

A number of studies have substantiated Piaget's theory of a two-step moral development. Nearly 40 years after
Piaget's initial research, Buchanan (1973) conducted an experiment very similar to Piaget's, except that Buchanan incorporated in his procedure the opportunity for the subjects to weigh damage and intent simultaneously when making a moral judgment. He asked 48 six-to-ten year olds to make moral judgments about characters in stories when levels of damage and intent differed systematically. The results of this study supports Piaget's earlier findings that damage was more important for younger children and that intent was more important for older children.

Due to the disappointing results of the CEI of 1930, the subject of morality fell into a period of quiescence until the late 1950s when Kohlberg (1958) began to investigate a cognitive-developmental approach to the moralization of the child. Kohlberg's view was an elaboration of Piaget's position, holding that moral knowledge develops in stages and sequences in a hierarchical order.

Kohlberg asked children to judge the morality of conduct reflected in stories which he invented. The children's answers were evaluated by a number of judges from their subjective reports and quantified into scores. At the time of the 1958 paper, there were six stages composed of 23 aspects of moral judgment. The results of these early studies confirmed Kohlberg's belief that children learn morality in sequential stages. His cognitive-developmental theory suggests that moral reasoning in the child is
developed according to structural changes occurring with cognitive reorganizations; that is, thinking and reasoning abilities about rules and regulations. These structural changes in thinking and reasoning are brought about by changes in "cognitive maps" as proposed in Tolman's sign learning theory (Hilgard & Bower, 1966). "The learner is following signs to a goal, is learning his way about, is following a sort of map—in other words, is learning not movements, but meanings" (p. 195).

Although Kohlberg believed that meanings involve motives and the affects, the development of the motives and affects are subordinate to changes in thought patterns. According to Kohlberg (1969), "Even the affect component of attitudes is largely shaped by the cognitive organization of these attitudes" (pp. 372-73).

The results of subsequent research by Kohlberg and his followers have suggested that social behavior and socialization should be defined in terms of developmental sequence rather than static traits.

Rest (1973) made a study to assess the comprehension and preference for Kohlberg's stages of moral development in 47 high school students. Subjects were asked to summarize typical statements of Kohlberg's six stages and correct paraphrasing of the statement was used as evidence that subjects could comprehend that stage of moral reasoning. Preference for each stage was measured by having the
subjects rate and rank the prototypic statements. About half of the subjects showed comprehension of the statements at the stage of which they were assessed, although a majority of students showed preference for a higher stage statement. Rest's study tends to support Kohlberg's cognitive-developmental theory in that the subjects showed a difficulty in understanding higher stages even though there was a preference for the higher stages.

Brown (1965) studied socialization of morality and devoted a chapter of his book, Acquisition of Morality, to a critical analysis of moral learning. Brown's basic disagreement with Kohlberg and Piaget is in their implication that moral acquisition is primarily cognitive, involving the formulation and restructuring of rules by the intellect. Brown also questions the developmental nature of morality. Other investigators have indicated that a developmental theory is unnecessary to account for a child's level of morality. For example, modeling would be one way in which the child has learned to make discriminations. Schleifer and Douglas (1973) conducted an experiment in which children shifted their moral orientation after relatively brief training periods indicating that the role-taking process opposes a stage and sequence explanation of moral acquisition.

In Brown's review, he proposed that moralization of the individual proceeds in three dimensions: knowledge,
conduct, and feeling. These three main parameters are curtailed or enhanced by a number of learning principles such as operant conditioning, imitation/modeling, cognitive restructuring of experiences, and classical conditioning of emotional responses. He cites an experiment conducted by Bandura and McDonald (1963) in which they found "experimental treatments produced substantial changes in the children's moral judgment responses. Conditions utilizing modeling cues proved to be more effective than the operant conditioning procedure" (p. 274).

Brown does not believe there is any order or preference to the dimensions of morality. The type of learning a person utilizes at any given time would vary according to the situation. He points out that for this reason, it is not surprising to see why morality is so inconsistent as shown by the results of the CEI. Brown believes that moral knowledge and feeling are independent agencies in the mind and they are acquired in quite different ways. He believes that feeling is a major dimension of morality because it is an internalization of the self. Feeling guilty about lying and, conversely, feeling virtuous about telling the truth are elements of the self-concept which reflect the individual's value judgments just as much as his intellectual understanding of the rules.

According to Brown, acquisition of moral knowledge, conduct, and feeling may proceed at an uneven rate. If
moralization is a matter of incorporating several kinds of learning, depending on the moral dimension involved, then inconsistent behavior is expected to occur. Moral conduct would be situation-specific.

Hogan's (1973) paper re-evaluates morality and places moral conduct and moral character in a new perspective. He reasserts the belief that moral conduct can be explained and that moral character can be described. Moral knowledge, socialization, empathy, autonomy, and moral judgment are the basic dimensions which would be required to adequately explain moral conduct, he believes. These five concepts were derived from previous experimentation in which he investigated human behavior from a view of man as a rule-formulating and rule-following animal. This is the first attempt to include a dimension of the affect (empathy) in the study of moral behavior.

Hogan's conclusions suggest that morality is the result of a continuous task of adjusting internal conditions of the organism to the external demands of the environment. Hogan does not believe that moral behavior is learned in step-wise fashion according to stages as proposed by Kohlberg, but that the variation in levels of moral character result because of each person's unique character structure developed according to rules of conduct of the situation and his internal feeling level.

In a previous study by Hogan and Dickstein (1972),
they investigated the personological correlates of moral judgment and found that persons whose moral judgments were rated as mature tended to be sensitive to injustice, well socialized, empathetic, autonomous, and they based their judgments on an intuitive understanding of morality rather than on a rational basis.

Tracy and Cross (1973) used Kohlberg's interview techniques for moral stages and matched 76 seventh graders. One group received no treatment while the experimental group was exposed to moral reasoning one stage above their initial level. Posttesting showed no difference in the control group, but showed a significant difference in the experimental group. The parameters tested were social desirability, role-taking, intelligence, stage mixture, and socioeconomic status. Only social desirability was associated with a change in moral stages. This study supports the notion that affect might be as influential as cognition in moral development.

Although Aronfreed (1969) believes that the specific quality of an affective state is determined by its cognitive (housing), he emphasizes the importance of the affective state in the social development of the child. He says, "The establishment of empathic and vicarious dispositions may be thought of as a kind of internalization process since it enables the child's behavior to become somewhat independent of the control of its direct experience of
social reward and punishment" (p. 293).

Since socialization practices include functions of role-taking with a dimension of empathic feelings, it would appear that empathy could be a major determinant of a person's morality.

Statement of the Problem

The purpose of the preceding historical review of the literature has been to point out the diverging points of view of those investigating the subject of morality. With the exception of Freud and Brown, the majority of research has centered around the cognitive aspects of moral judgment and conduct. The majority of writers have assumed that thinking and reasoning are major influences on moral judgment.

Little attention has been given to the emotional side of morality. The implication that cognitive maps of moral knowledge and social rules are sufficient to explain the complexity of moral judgment has been questioned recently. Bandura (1969) says, "The findings revealed that exposing children to adult models, who expressed moral judgments that ran counter to the children's dominant evaluative orientations, was effective in modifying their judgmental behavior in the direction of the social influence" (p. 275).

Of primary interest in this investigation is the assumption that moral judgment is determined primarily by
cognition with little influence attributable to the affective state. According to Kohlberg (1969), motives and the affective components of attitudes are largely shaped and changed by the cognitive organization of these attitudes. The basis and argument for this approach claims that social development is cognitive because any description of shape or patterns of a structure of social responses necessarily entails some cognitive structure. In this way the cognitive maps of moral judgment are firmly established through maturation of the person and, therefore, affective components do not have the influence or power to change the existing structure. This would suggest that a person's feelings and emotions, regardless of how strong the attitudes may be, would not alter a person's moral decision making because of prior cognitive organization of attitudes.

The above view has been questioned by Tracy and Cross (1973) who found influences of affect with respect to Kohlberg's stages of moral reasoning. In their study of socialization, a dimension of empathic feelings as a function of role-taking was definitely associated with moral judgment decision making.

Hogan and Dickstein (1972) found in a study of morality and personological correlates that persons whose moral judgments were rated as mature tended to be empathic.

Although both studies above suggest the possibility of higher levels of cognitive organization, how much influence
the affective components have is still in question. It would seem plausible that empathy could provide the basis for any cognitive reorganization and, therefore, would become instrumental in shaping moral reasoning abilities.

Since empathy has received considerable attention in prior morality research, and assuming that it is a strong affective state, this parameter, then, may have an effect on Kohlberg's stages of moral reasoning. Hearing about a dilemma as compared to reading about the same moral dilemma should not alter a person's moral judgment according to Kohlberg's cognitive approach. However, if hearing a moral dilemma which is presented dramatically instead of reading the same moral dilemma does alter a person's moral decision making, it would suggest that feelings are as important to moral decision making as thinking and reasoning. Further, if empathy contributes to moral judgment development, then it would seem plausible that higher empathy would be associated with higher moral stages. In their research on empathy, Mehrabian and Epstein (1973) created an empathy scale within the framework that empathic persons can better understand another's problems since their judgment is at the feeling level of maturity. The person's empathic feelings would enhance his cognitive structure. This would give the person a wider moral base in his judgment of interpersonal problems.

The results of Mehrabian and Epstein's (1973) paper
indicated a significant difference in empathy between male and female subjects. Therefore, including the difference in empathy between male and female, it would be of research value to investigate the following problem areas.

1. Is there a difference in empathy between male and female subjects?

2. Is there a difference in empathy between reading and hearing/discussing moral dilemma stories?

3. Is there a relationship between moral judgment and empathy?

Statement of Research Hypothesis

The following research hypotheses were advanced.

1. Research hypothesis: There will be a difference in empathy as a function of reading or hearing/discussing a moral dilemma story.

2. Research hypothesis: There will be a difference in empathy as a function of sex of subject (male, female).

3. Research hypothesis: There will be a significant relationship between degree of empathy and stage of moral reasoning.

The null forms of the research hypotheses will be evaluated at the .05 level of significance.
METHOD

Subjects

Two social science classes of 16 female and 16 male students each were selected from a local high school upon the recommendation of the high school instructor. The age range of the students varied between 16 and 18. The male and female students were divided into two experimental groups of 16 male and 16 female each.

Apparatus

Mehrabian and Epstein's Empathy Scale was used to assign subjects to matched groups. The scale was developed around two areas of emotional responsiveness, aggression and helping behavior. The common element in their instrument was found to be the heightened responsiveness to another's emotional experience. The reliability and validity of this 33-item questionnaire is discussed as part of an earlier research paper on helping behavior (Mehrabian and Epstein, 1972). (See Appendix A.)

The second empathy scale was constructed specifically for use in this study. The scale consisted of a 16-item paper and pencil questionnaire using items from the Mehrabian and Epstein scale but with emphasis directed to the characters in the moral dilemma stories (see Appendix B).
All responses to the moral dilemma stories were hand-written on a standard size paper form.

A cassette tape recorder was used to record and play back the dramatized version of each moral dilemma story (see Appendix D and Appendix E).

The "read only" moral dilemma stories were typewritten on a standard size paper (see Appendix C).

**Procedure**

The experiment was accomplished in six one-hour sessions. After all subjects were given the first empathy scale (33 items) to establish a hierarchical order of matching of subjects by two according to high/low degree of empathy, then the male and female subjects were separated and members of each matched pair were randomly assigned to two groups, "read only" and "hear only."

In the second session, the "read only" groups of 16 male and 16 female subjects were given the Heinz and Joe stories to read in silence. Each subject was asked to write his/her decision and the reason why for both of the moral dilemma stories.

In the third session, the "read only" groups of male and female subjects were asked to complete the 16-item empathy questionnaire (Appendix B).

The fourth session consisted of the "hear only" groups. Sixteen male and 16 female subjects listened to the Heinz
and Joe dramatized moral dilemma stories played on a tape recorder. Immediately after the story playback, discussion was allowed and encouraged. In a prior pilot study it was found that discussion was needed to help the subjects understand the tape recorded stories. Discussion was not required for the "read only" groups. After a ten-minute discussion period each subject was asked to write his/her response and the reason why for both of the moral dilemma stories.

In the fifth session, the "hear only" groups of male and female subjects were asked to complete the 16-item empathy questionnaire (see Appendix B).

The sixth session consisted of debriefing the subjects. Each student was given a paper showing his/her moral judgment stage score and empathy score relative to the other subjects in the study. All students were informed of the results of the experiment.

**Design**

A SPF-2.2 design (Kirk, 1968) was used to analyze the data. The between-subject treatment had two levels, male and female. The matched-subjects treatment consisted of two levels of story presentation: "read only" and "hear only." Subjects within groups were matched on the 33-item empathy questionnaire before being subjected to the "read only" and "hear only" sessions during which the moral dilemma stories were presented (see Table 1).
Table 1

Empathy Matched Subjects Design, SPF-2.2

<table>
<thead>
<tr>
<th></th>
<th>bl</th>
<th>b2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1</td>
<td>s1</td>
<td>s1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>s16</td>
<td>s16</td>
</tr>
<tr>
<td>a2</td>
<td>s17</td>
<td>s17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>s32</td>
<td>s32</td>
</tr>
</tbody>
</table>

- b1 = Read stories
- b2 = Hear stories
- a1 = Male subjects
- a2 = Female subjects

1Design layout format is from Kirk (1968).

A chi-square test was used to determine whether the variables of empathy and moral judgment stage were independent.
RESULTS

Differences in Empathy with Respect to Male and Female Subjects

Table 2 presents the results of the analysis of variance concerning differences of empathy between male and female subjects. Source A is significant at the .05 level as shown by an $F$ of 5.82. Means and standard deviations for male and female subjects for the 16-item empathy questionnaire are shown in Table 3. As shown by a mean score of 24.4 for female subjects and 15.4 for male subjects, the female subjects scored higher in empathy in both modes of story presentation.

Effects of Mode of Story Presentation on Empathy

Table 2 presents the results of the analysis of variance concerning differences of empathy between modes of story presentation: "read only" and "hear only" of moral dilemma stories. Source B is significant at the .05 level as shown by an $F$ of 4.33. Both male and female subjects scored higher in the "hear only" mode as compared to the "read only" presentation. It must be noted that the "hear only" groups discussed the stories after presentation whereas the "read only" groups did not, which could have accounted for some portion of the higher "hear only" scores. The added element
of discussion was required to help the "hear only" subjects understand the tape recorded versions. However, the experimental interest was not intended to find a difference between "read only" and "hear only" but rather to find a difference in emotional responsiveness between straight reading and a dramatized version of moral dilemma stories, which would elicit emotional responsiveness.

Relationship between Empathy and Moral Judgment Stage

Table 4 presents the results of the relationship between empathy and moral judgment stage. As shown by the chi-square significance test scores, empathy and moral judgment stage are not independent for either males, females, or both sexes combined.

An examination of Table 4 indicates that subjects who score higher on empathy also tend to be at a higher moral stage. Conversely, subjects who score low on empathy also tend to be at a lower moral stage.

The median was used as the dividing line between low and high of both empathy scores and moral judgment stage scores. The median was used rather than the means because of the large variability of empathy scores and because the full range of scores for moral judgment stage comprised only one through six. Most of the subject's scores of moral judgment stage fell in the twos and threes. There were no sixes and only a few ones.
Table 2

Analysis of Variance of Empathy Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Between subjects</td>
<td>7908</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Male/female subjects (A)</td>
<td>1287</td>
<td>1</td>
<td>1287</td>
<td>(2/3) 5.82*</td>
</tr>
<tr>
<td>3. Subj. w. groups</td>
<td>6621</td>
<td>30</td>
<td>221</td>
<td></td>
</tr>
<tr>
<td>4. Within subjects</td>
<td>7638</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mode of story presentation (B)</td>
<td>953</td>
<td>1</td>
<td>953</td>
<td>(5/7) 4.33*</td>
</tr>
<tr>
<td>6. AB</td>
<td>98</td>
<td>1</td>
<td>98</td>
<td>(6/7) .45 NS</td>
</tr>
<tr>
<td>7. B x subj. w. groups</td>
<td>6587</td>
<td>30</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>8. Total</td>
<td>15546</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P < .05.
### Table 3

Means and Standard Deviations for the 16-Item Empathy Questionnaire

<table>
<thead>
<tr>
<th>Mode of Story Presentation</th>
<th>Sex of Subject</th>
<th>Read</th>
<th>Hear</th>
<th>Read and Hear Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>M</td>
<td>S.D.</td>
<td>N 16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.3</td>
<td>6.6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.5</td>
<td>13.8</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.4</td>
<td>11.8</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>M</td>
<td>S.D.</td>
<td>N 16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21.8</td>
<td>20.1</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.0</td>
<td>15.6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24.4</td>
<td>17.9</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Male and Female</td>
<td>M</td>
<td>S.D.</td>
<td>N 32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16.0</td>
<td>15.8</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23.8</td>
<td>14.8</td>
<td>32</td>
</tr>
</tbody>
</table>
Two raters were used for the interrater reliability in scoring of both moral dilemmas for each response for all 64 subjects. The interrater reliability of scoring the Heinz story with an $r$ of .59 was considerably higher than an $r$ of .20 for the Joe story.

Table 5 presents the means and standard deviations of male and female subjects on the matching 33-item empathy questionnaire and Mehrabian and Epstein's 33-item empathy questionnaire.
Table 4  
Chi-square Frequency Distribution;  
Moral Judgment/Empathy

<table>
<thead>
<tr>
<th>Moral Stage</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Male</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjects</th>
<th>N</th>
<th>Chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32</td>
<td>6.30*</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>4.77*</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>12.60*</td>
</tr>
</tbody>
</table>

*p < .05.
### Table 5
Means and Standard Deviations for the 33-Item Empathy Questionnaires

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>33-Item Empathy Questionnaire (matching)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34.9</td>
<td>19.9</td>
</tr>
<tr>
<td>Female</td>
<td>50.3</td>
<td>22.3</td>
</tr>
<tr>
<td>33-Item Empathy Questionnaire (Mehrabian and Epstein)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Female</td>
<td>56.0</td>
<td>21.0</td>
</tr>
</tbody>
</table>
DISCUSSION

Differences in Empathy with Respect to Male and Female Subjects

The results of this experimental study confirm research hypothesis 2; there was a difference in empathy as a function of sex of subject. Higher empathy was evidenced by female subjects in both the "read only" and "hear only" groups. It was anticipated that female subjects would score higher on empathy than male subjects based on the results of the Mehrabian and Epstein 33-item empathy questionnaire. This proved to be the case in both the 33-item matching and the 16-item empathy questionnaires used in the study (see Table 5).

Even though the 16-item empathy questionnaire was a derivative of the 33-item Mehrabian and Epstein instrument, the same ratio of difference between male and female subjects was demonstrated. The higher scoring of empathy of female over male subjects leads to the assumption that females have a greater empathic understanding of interpersonal conflict situations of moral dilemmas than do males. This finding coincides with the conclusion of Mehrabian and Epstein's research.

Effects of Story Presentation on Empathy

The results of this experimental study confirm research hypothesis 1; there was a difference in empathy as a function
of reading or hearing a moral dilemma story. Higher empathy was evidenced when a dramatized tape recording of the Heinz and Joe story was heard as compared to the same moral dilemma stories read. Both male and female empathy scores were higher in the hearing mode presentation. It was speculated that differences in response of "read only" and "hear only" story presentations would exist because the subjects would exhibit more feeling in their response to a moral dilemma when the stories were presented dramatically.

When the conflict situation was presented on paper ("read only") and the subject was asked to make a response in writing, it was assumed that he/she would respond intellectually, primarily using his/her thinking and reasoning powers. On the other hand, when the conflict situation was presented dramatically, it was assumed that the subject would respond with an emotional base, primarily using his/her empathic understanding. Apparently, this was the case in this experiment because higher empathy was associated with the "hear only" dramatized tape-recorded moral dilemmas instead of the "read only" moral dilemmas.

A question arises whether or not the dramatized tape-recorded version of the moral dilemma stories was the same as the "read only" presentation. It is obvious that any difference in the basic story theme between the two modes of presentation could account for differences in empathy between the two groups of subjects. Every effort was made
to duplicate the recorded version as closely as possible to the "read only" version of Kohlberg's moral dilemma stories of Heinz and Joe.

A procedural difference did occur between the "read only" and "hear only" groups which was not incorporated into the original design. Discussion of the moral dilemmas by the "hear only" subjects was allowed because it was felt that it would amplify the differences between the two groups in emotional responsiveness to the moral dilemma stories. Also, in a pilot study it was found that discussion of the stories after presentation was needed to enhance and clarify the tape-recorded version.

**Relationship between Empathy and Moral Judgment Stage**

The results of this experimental study confirm research hypothesis 3; there was a relationship between degree of empathy and moral judgment stage. As shown by Table 4, of the combined total scores of 32 male and 32 female subjects for a total of 64, 28 had high moral stage and high empathy as compared to 5 with low moral stage and high empathy. It was anticipated that subjects who scored high on moral judgment (Kohlberg's stages) would also score high on empathy. Conversely, those who scored low on moral judgment stage would also score low on empathy.

The median for moral judgment scores was established at 2.8; two and below was considered as low moral stage and
three and above was counted as high moral stage. Even though the median seems to be the best method of determining central tendency for this application of the chi-square distribution, it is felt that a more accurate way of determining high scores and low scores is needed.

One of the problems of this investigation was determining moral judgment stage according to Kohlberg's standard scoring form. Since the Heinz story had many more examples of typical responses than did the Joe story, greater reliability of interrater judging of the Heinz story was possible. Interrater reliability of two judges was significantly better for the Heinz story than for the Joe story. It would appear that a wider range of scoring for the moral judgment stages is needed so that a more accurate dispersion of high scores and low scores can be computed.
CONCLUSIONS

In summary, this study investigated the relationship of empathy to moral reasoning, sex, and mode of story presentation. A sample size of 64 high school students was used in the experiment. Based on the data from this study, it is concluded that:

1. Female subjects scored higher on empathy than did male subjects regardless of mode of story presentation.

2. Both male and female subjects scored higher on empathy when hearing moral dilemma stories followed by discussion as compared to reading moral dilemma stories.

3. A relationship between empathy and level of moral reasoning was evidenced. High empathy and high moral judgment stage occurred more frequently than did high empathy and low moral judgment stage. Conversely, low empathy and low moral judgment stage occurred more often than did low empathy and high moral judgment stage.
APPENDIX A

33 Item Empathy Questionnaire

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Disagree</th>
<th>+</th>
<th>+</th>
<th>+</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It makes me sad to see a lonely stranger in a group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>People make too much of the feelings &amp; sensitivity of animals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I often find public displays of affection annoying.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I am annoyed by unhappy people who are just sorry for themselves.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I become nervous if others around me seem to be nervous.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I find it silly for people to cry out of happiness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I tend to get emotionally involved with a friend's problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Sometimes the words of a love song can move me deeply.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I tend to lose control when I am bringing bad news to people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The people around me have a great influence on my moods.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Most foreigners I have met seemed cool &amp; unemotional.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I would rather be a social worker than work in a job training center.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I don't get upset just because a friend is acting upset.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I like to watch people open presents.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Lonely people are probably unfriendly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Seeing people cry upsets me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Some songs make me happy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I really get involved with the feelings of the characters in a novel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30
19. I get very angry when I see someone being ill-treated.
20. I am able to remain calm even though those around me worry.
21. When a friend starts to talk about his problems, I try to steer the conversation to something else.
22. Another's laughter is not catching for me.
23. Sometimes at the movies I am amused by the amount of crying & sniffing around me.
24. I am able to make decisions without being influenced by people's feelings.
25. I cannot continue to feel OK if people around me are depressed.
26. It is hard for me to see how some things upset people so much.
27. I am very upset when I see an animal in pain.
28. Becoming involved in books or movies is a little silly.
29. It upsets me to see helpless old people.
30. I become more irritated than sympathetic when I see someone's tears.
31. I become very involved when I watch a movie.
32. I often find that I can remain cool in spite of the excitement around me.
33. Little children sometimes cry for no apparent reason.
## APPENDIX B

### 16 Item Empathy Questionnaire

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   | Disagree | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 1. | It makes me sad to think of Heinz in his dilemma. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2. | People make too much of the feelings & Sensitivity of people like Heinz. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 3. | I would have a tendency to get emotionally involved with Joe's problem. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4. | There are times when Heinz problems could move me very deeply. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5. | Being around Joe with his problem would have a great influence on my moods. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 6. | Most foreigners I have met like Heinz seemed cool & unemotional. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 7. | It doesn't upset me to hear that Joe has a problem. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8. | Seeing Heinz cry would upset me. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 9. | I get very angry when I see someone like Joe being ill-treated. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 10. | I would be able to make decisions without being influenced by Joe's problem. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 11. | It is difficult for me to feel all right when I think about Heinz problem. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 12. | It is difficult for me to understand how Joe's story could upset people so much. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 13. | Becoming involved in Joe's problems is a little silly. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 14. | It upsets me to think of Heinz poor wife; helpless & dying. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 15. | I become more irritated than sympathetic when someone like Joe worries about his problem. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 16. | With problems like Heinz, I often find that I can remain cool in spite of the excitement around me. |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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32
APPENDIX C

Moral Dilemma Stories

HEINZ: In Europe, a woman was near death from cancer. One drug might save her life, 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 only get together 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?

JOE: Joe is a fourteen-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the $40.00 it cost to go to camp and a little more besides. But just before camp was going to start, his father changed his mind. Some of his (father's) friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money he had saved from the paper route. Joe didn't want to give up going to camp, so he
thought of refusing to give his father the money. Should Joe refuse to give his father the money?
APPENDIX D

Heinz Script

SCRIPT IS TO BE READ DRAMATIC

NARRATOR: "The following brief dramatic presentation is the story of one man's solution to a moral dilemma.

PAUSE

NARRATOR: "One day in a small European town, a young lady hailed an older man as he walked up the street."

PAUSE

YOUNG LADY: "Oh, Heinz - wait! I must speak with you!"

HEINZ: "Hello, my friend. What is it?"

YOUNG LADY: "Good news for you, I hope. I have heard that the druggist here in town recently discovered a new drug, a form of Radium that can cure your wife's cancer!"

HEINZ: "Oh, I hope so --- because it is our last chance. She will surely die unless she can be treated soon."

YOUNG LADY: "But Heinz, he is charging $2,000 for it, ten times what the drug cost him to make!"

HEINZ: "I will try to borrow the money and then speak with him. Thank you!"

PAUSE

NARRATOR: "Hours later, Heinz and the druggist are talking at the druggist's store. The druggist is speaking to Heinz."

PAUSE
DRUGGIST: "Yes, I have the drug that you want right here in this cabinet and I will sell some to you for $2,000 - cash only!"

HEINZ: "But, I do not have that much money. All that I can borrow is $1,000. Please --- sell the drug to me cheaper or let me pay later. I beg of you --- my wife will die if she does not have the drug soon!"

DRUGGIST: "My answer to you is NO! I must have the full $2,000 now!"

NARRATOR: "Later - the same night, Heinz returned to the store of the druggist, broke in and stole the drug for his wife."
APPENDIX E

Joe Script

SCRIPT TO BE READ DRAMATIC

NARRATOR: "The scene takes place at the home of Joe, a 14 year old boy who is talking with his father."

JOE: "I really want to go to camp this summer, Dad! Last year I didn't get to go, remember?"

FATHER: "Yes, I remember. This time I promise! You can go if you save the money for it yourself."

NARRATOR: "For the next three months, Joe worked at extra jobs besides his paper route and was able to save $40.00 for camp plus a little extra for spending money. The day before he was to leave for camp, his father asked to speak with him."

FATHER: "Joe, I've changed my mind about letting you go to camp. I know I promised, but I need the 40 dollars you've saved."

JOE: "But you promised I could go if I saved the money!"

FATHER: "I know. But there is a special fishing trip that my friends and I have decided to go on and I need your $40.00. --- Well?"

JOE: "I really feel like not giving you the money!"
REFERENCES


